

Subject Index

- AACC-AOAC methods.** *see also* **AOAC-AACC methods**
 aflatoxins in corn, **Ch 49**, p 15
 aflatoxins in food and feeds, **Ch 49**, pp 5–6
 alpha-amylase in flour, meal, and malted cereals, **Ch 32**, p 22
 β-D-glucan in oats, **Ch 32**, pp 64–66
 niacin and niacinamide in foods, drugs, and feeds, **Ch 45**, pp 20–21
 riboflavin in foods and vitamin preparations, **Ch 45**, pp 16–17
 starch in cereals, **Ch 32**, p 55
 zearalenone in corn, **Ch 32**, p 54; **Ch 49**, pp 82–83
- Abbé Refractometer**
 index of refraction of oils and fats, **Ch 41**, pp 3–4
- Acenocoumarol**
 in drugs, **Ch 19**, pp 20–22
- Acephate**
 in fruits and vegetables, **Ch 10**, pp 10–12
 in technical material and soluble powder pesticide formulations, **Ch 7**, pp 129–130
- Acetaldehyde**
 in frozen vegetables, **Ch 42**, pp 12–13
- Acetaminophen**
 in drug tablets, **Ch 19**, p 8
 in drugs, **Ch 19**, pp 7–9
- Acetanilid**
 in drugs, **Ch 20**, pp 4, 7, 16; **Ch 19**, pp 9–10
- Acetic acid**
 in aspirin, **Ch 19**, p 11
 in bread, **Ch 32**, pp 67–69
 in cake, **Ch 32**, p 72
 critical temperature for dissolution of fat, **Ch 31**, p 11
 in seafood, **Ch 35**, pp 14–15
- Acetic serum method**
 water (added) in milk, **Ch 33**, p 30
- Acetone**
 in distilled liquors, **Ch 26**, p 14
 in drugs, **Ch 18**, p 2
- Acetone extract**
 in fish meal, **Ch 4**, p 41
- Acetone extraction method**
 fat in fish meal, **Ch 35**, p 12
- Acetone peroxides**
 in baking premixes, **Ch 47**, pp 44–45
- Acetonitrile extraction**
 pesticide residues in foods, **Ch 10**, pp 17–26
- Acetonitrile partitioning**
 organochlorine and organophosphorus pesticide residues, **Ch 10**, pp 6–7
- Acetyl value**
 of oils and fats, **Ch 41**, p 5
- 2-Acetylamino-5-nitrothiazole**
 in feeds, **Ch 5**, pp 1–2
- Acetylation methods**
 2,5-diaminotoluene in hair preparations, **Ch 15**, p 13
 hydroxyl value of oils and fats, **Ch 41**, p 6
 paraphenylenediamine in hair preparations, **Ch 15**, p 13
 phenylephrine hydrochloride in drugs, **Ch 18**, p 22
- Acetylcarbromal**
 in drugs, **Ch 19**, p 13
- Acid detergent fiber**
 in animal feed, **Ch 4**, pp 48–49
 in forages, **Ch 4**, pp 32–33
- Acid-forming qualities**
 of fertilizers, **Ch 2**, p 41
- Acid fuchsin D color additive**, **Ch 46**, p 9
- Acid hydrolysis methods**
 amino acids in feeds, **Ch 4**, pp 9–19
 copper-reducing substances in spices, **Ch 43**, p 2
 fat in bread, **Ch 32**, p 70
 fat in cereal products, **Ch 32**, pp 45–49
 fat in eggs, **Ch 34**, p 3
 fat in macaroni products, **Ch 32**, p 73
 fat in seafood, **Ch 35**, p 11
 fat in wheat flour, **Ch 32**, p 5
 filth in baked goods with fruit and nut tissues, **Ch 16**, p 26
 filth in corn flour, **Ch 16**, p 25
 phenacetin and phenyl salicylate in drugs, **Ch 19**, p 11
 starch in animal feed, **Ch 4**, p 57
 starch in baking powders, **Ch 25**, pp 3–4
 starch in cacao products, **Ch 31**, p 15
- Acid-insoluble matter**
 in salt, **Ch 11**, p 32
- Acid-insoluble residue method**
 soil in frozen spinach, **Ch 16**, p 42
- Acid value**
 of butterfat, **Ch 33**, p 77
- Acidic drugs**, **Ch 19**, pp 1–2
- Acidified foods**
 pH of, **Ch 42**, pp 2–3
- Acidity.** *see also* **Fat acidity**
 of animal feed, (water-soluble), **Ch 4**, p 60
 of beer, **Ch 27**, pp 6–7
 of brewing sugars and syrups, **Ch 27**, pp 37–38
 of cheese, **Ch 33**, p 86
 of cordials and liqueurs, **Ch 26**, p 21
 of corn syrups and sugars, **Ch 44**, p 51
 of ether extract of eggs, **Ch 34**, p 7
 of food dressings, **Ch 43**, p 9
 of fruit products, **Ch 37**, pp 10–11
 in gelatin dessert powders, **Ch 38**, p 2
 of honey, **Ch 44**, p 37
 of milk, **Ch 33**, p 7
 in nonalcoholic beverages, **Ch 29**, pp 1–2
 of prepared mustard, **Ch 43**, p 7
 of roasted coffee, **Ch 30**, p 2
 of tragacanth drugs, **Ch 20**, p 33
 of water, **Ch 11**, pp 2–3
 of wines, **Ch 28**, pp 9–11
 of wort, **Ch 27**, p 39
- Acids.** *see also* **Fatty acids**
 in beer, **Ch 27**, p 7
 in bread, **Ch 32**, pp 68–69
 in butter, **Ch 33**, p 80
 in canned vegetables, **Ch 42**, p 8
 in cordials and liqueurs, **Ch 26**, p 21
 in cream, **Ch 33**, pp 65–66
 in distilled liquors, **Ch 26**, p 9
 free, in color additives, **Ch 46**, p 26
 in hops, **Ch 27**, p 35
 insoluble, in oils and fats, **Ch 41**, p 12
 in nonalcoholic beverages, **Ch 29**, p 1
 polyunsaturated, in oils and fats, **Ch 41**, pp 16–19
 soluble, in oils and fats, **Ch 41**, p 12
 in vinegars, **Ch 43**, p 12
 volatile, in oils and fats, **Ch 41**, pp 14–15
- Aconitine**
 in aconite root, **Ch 20**, p 25
- Aconitum alkaloids**
 in dietary supplements and raw botanical materials, **Ch 51**, pp 7–10
- Acrylamide disc electrophoresis method**
 identification of fish species, **Ch 35**, pp 28–29
- Acrylonitrile**
 in food, **Ch 48**, pp 6–7
- Adamkiewicz test**
 protein in animal feed, **Ch 4**, p 24
- Additives.** *see also* **Color additives**
 in animal feed, **Ch 4**, pp 73–77
- Additives, flavoring**
 in vanilla extract, **Ch 36**, pp 10–11
- Adenosine 5'-monophosphate**
 in infant formula and adult nutritional formula, **Ch 50**, pp 84–86
- Adipose tissue**
 hexachlorobenzene and mirex pesticide residues in, **Ch 10**, p 84

Adrenocortico steroids, Ch 21, pp 8–14

Adsorption indicator method

quaternary ammonium compounds,
Ch 7, p 134

Adult nutritional formula

chromium, selenium, and molybdenum
in, Ch 50, pp 80–82

folate in, Ch 50, pp 38–44

5'-mononucleotides in, Ch 50,
pp 82–84

myo-inositol (free and bound as
phosphatidylinositol) in, Ch 50,
pp 77–80

nucleotides in, Ch 50, pp 84–86

vitamin A in, Ch 50, pp 44–48, 72–74

vitamin B₁₂ in, Ch 50, pp 48–57, 72–74

vitamin D in, Ch 50, pp 57–59

vitamin D₂ and vitamin D₃ in, Ch 50,
pp 59–65

Adulterants

beef and poultry adulteration of meat
products, Ch 39, pp 23–24

in spices, Ch 43, pp 5–6

Aerobic plate counts

bacteria in chilled, frozen, precooked,
or prepared foods, Ch 17, pp 4–5

bacteria in nut meats, Ch 17, pp 4–5

bacterial and coliform counts in dairy
products, Ch 17, pp 27–29

bacterial and coliform counts in milk,
Ch 17, pp 27–28

dry rehydratable film method, Ch 17,
p 12

microorganisms in foods, Ch 17,
pp 9–12

pectin gel method, Ch 17, p 11

SimPlate Total Plate Count-Color
Indicator method, Ch 17, pp 12–16

**Affinity liquid chromatographic
methods**

bovine immunoglobulin G analysis in
bovine colostrum, milk powders,
and dietary supplements of bovine
origin, Ch 33, pp 62–64

Affinity quantitative determinations

beta-lactam antibiotics in milk, Ch 33,
pp 46–47

Afla-20 Cup test

aflatoxins in corn, Ch 49, p 14

Aflatest method

aflatoxins in corn, raw peanuts, and
peanut butter, Ch 49, pp 21–23

Aflatoxin B₁

in baby food, Ch 49, pp 37–40

in cattle feed, Ch 49, pp 40–43

in corn, Ch 49, pp 14–24, 19–23

in corn, cottonseed, peanuts, and
peanut butter, Ch 49, pp 7–9

in cottonseed products, Ch 49, p 28

in eggs, Ch 49, pp 28–30

in fig paste, Ch 49, pp 34–37

in foods and feeds, Ch 49, pp 5–6

in ginseng and ginger, Ch 49, pp 43–47

identification of, Ch 49, pp 31–34

in liver, Ch 49, pp 48–50

in mixed feed, Ch 49, p 28

in paprika powder, Ch 49, pp 34–37

in peanut butter, Ch 49, pp 7–9, 19–24,
34–37

in peanuts, Ch 49, pp 7–9, 15–19,
21–24

in pistachio paste, Ch 49, pp 34–37
toxicity of, Ch 49, p 34

Aflatoxin B₂

in corn, Ch 49, pp 14–17, 19–23

in corn, cottonseed, peanuts, and
peanut butter, Ch 49, pp 7–9

in fig paste, Ch 49, pp 34–37

in foods and feeds, Ch 49, pp 5–6

in ginseng and ginger, Ch 49, pp 43–47

in paprika powder, Ch 49, pp 34–37

in peanut butter, Ch 49, pp 7–9, 19–24,
34–37

in peanuts, Ch 49, pp 7–9, 15–19,
21–24

in pistachio paste, Ch 49, pp 34–37

Aflatoxin G₁

in corn, Ch 49, pp 14–17, 19–23

in corn, cottonseed, peanuts, and
peanut butter, Ch 49, pp 7–9

in fig paste, Ch 49, pp 34–37

in foods and feeds, Ch 49, pp 5–6

in ginseng and ginger, Ch 49, pp 43–47

in paprika powder, Ch 49, pp 34–37

in peanut butter, Ch 49, pp 7–9, 19–24,
34–37

in peanuts, Ch 49, pp 7–9, 15–19,
21–24

in pistachio paste, Ch 49, pp 34–37

Aflatoxin G₂

in corn, Ch 49, pp 15–17, 19–23

in fig paste, Ch 49, pp 34–37

in foods and feeds, Ch 49, pp 5–6

in ginseng and ginger, Ch 49, pp 43–47

in paprika powder, Ch 49, pp 34–37

in peanut butter, Ch 49, pp 7–9, 19–24,
34–37

in peanuts, Ch 49, pp 7–9, 15–19,
21–24

in pistachio paste, Ch 49, pp 34–37

Aflatoxin M₁

in cheese, Ch 49, pp 47–48

in dairy products, Ch 49, p 47

in fluid milk, Ch 49, pp 51–54

in liver, Ch 49, pp 49–51

in milk and cheese, Ch 49, pp 47–48

in milk and powdered milk, Ch 33, p 38

Aflatoxin M₂

in fluid milk, Ch 49, pp 51–52

Aflatoxins

in almonds, Ch 49, pp 26–28

in baby food, Ch 49, pp 37–40

in brazil nuts, Ch 49, pp 26–28

in cattle feed, Ch 49, pp 40–43

in cocoa beans, Ch 49, p 13

in coconut, copra, and copra meal,
Ch 49, p 13

in corn, Ch 49, pp 6–9, 14–24, 26–28

in cottonseed and cottonseed products,
Ch 49, pp 7–9, 24–26, 28

in dairy products, Ch 49, p 47

in eggs, Ch 49, pp 28–30

in fig paste, Ch 49, pp 34–37

in fluid milk, Ch 49, pp 51–54

in food and feeds, Ch 49, pp 5–6

in ginseng and ginger, Ch 49, pp 43–47

in green coffee, Ch 49, p 30

identification of, Ch 49, pp 5, 31–34

in liver, Ch 49, pp 48–51

in milk and cheese, Ch 49, pp 47–48

in mixed feed, Ch 49, p 28

in paprika powder, Ch 49, pp 34–37

in peanut butter, Ch 49, pp 7–9, 11, 13,
19–24, 34–37

in peanuts and peanut products, Ch 49,
pp 6–13, 15–19, 21–24, 26–28

in pistachio nuts, Ch 49, pp 26–28, 30

in pistachio paste, Ch 49, pp 34–37

sampling of, Ch 49, pp 2–3

in soybeans, Ch 49, p 30

standards preparation, Ch 49, pp 3–5

toxicity of, Ch 49, p 34

Agar

in meat, Ch 39, p 21

Agar diffusion assay

neomycin in feeds, Ch 5, pp 74–75

Agglutination test method

S. aureus isolated from foods, Ch 17,
pp 98–99

Agri-Screen method

aflatoxin B₁ in corn and roasted
peanuts, Ch 49, pp 17–19

zearalenone in corn, wheat, and feed,
Ch 49, pp 84–86

Agricultural liming materials. see

Liming materials

Air capacity

of peat, Ch 2, pp 55–56

Air drying methods

moisture in meat, Ch 39, p 1

Air oven methods

moisture in cereal adjuncts, Ch 27,
p 32

solids and moisture in macaroni
products, Ch 32, p 73

solids and moisture in wheat flour,
Ch 32, p 1

solids in dried yeast, Ch 27, p 41

solids in milk, Ch 33, pp 39–40

Air volume. see Volume

Aklomide

in feeds, Ch 5, pp 2–3

Alachlor

in finished drinking water, Ch 10,
pp 41–47

in pesticide formulations, Ch 7,
pp 69–70

in soft drinks and sports drinks, Ch 10,
pp 116–124

Alanine

in feeds, Ch 4, pp 9–19

Alaska King Crab Marketing and

Control Board-AOAC method
drained weight of frozen crabmeat,
Ch 35, p 7

Alba red color additive, Ch 46, p 9

Albumin

in evaporated milk, Ch 33, p 70

in liquid eggs, Ch 34, p 2

in milk, Ch 33, p 16

- Albuminoid nitrogen**
in feeds, **Ch 4**, p 37
- Alcohol.** *see also Ethyl alcohol*
in almond extract, **Ch 36**, p 22
in anise and nutmeg extracts, **Ch 36**, p 25
in beer, **Ch 27**, p 4
in cassia, cinnamon, and clove extracts, **Ch 36**, p 24
in cordials and liqueurs, **Ch 26**, p 19
in distilled liquors, **Ch 26**, pp 2–6
in drugs, **Ch 18**, p 2
extract of spices, **Ch 43**, p 2
in flavor extracts and toilet preparations, **Ch 36**, p 25
in flavors, **Ch 36**, p 1
in fruit products, **Ch 37**, p 4
in ginger extract, **Ch 36**, p 24
in lemon, orange, and lime extracts, **Ch 36**, p 16
in nonalcoholic beverages, **Ch 29**, p 1
in peppermint, spearmint, and wintergreen extracts, **Ch 36**, p 24
precipitate in fruit products, **Ch 37**, pp 9–10
in syrups used in confectionery, **Ch 44**, p 25
in vanilla extract, **Ch 36**, p 1
in vinegars, **Ch 43**, p 13
by volume in liqueurs and alcoholic dairy products, **Ch 26**, pp 19–20
in wines, **Ch 28**, pp 1–3
- Alcohol method**
solids (total) in yeast, **Ch 27**, p 40
- Alcoholic beverages.** *see also Beer; Cordials and liqueurs; Distilled liquors; Malt beverages and brewing materials; Wines*
ethyl carbamate in, **Ch 28**, pp 15–17
- Alcoholic products**
denaturants (volatile) in, **Ch 8**, p 1
- Alcohols, higher**
in distilled liquors, **Ch 26**, pp 12–14
- Aldehydes**
as acetaldehyde in frozen vegetables, **Ch 42**, pp 12–13
in cordials and liqueurs, **Ch 26**, p 20
in distilled liquors, **Ch 26**, pp 9–11
in lemon, orange, and lime extracts, **Ch 36**, pp 18–19
in lemon and orange oils, **Ch 36**, pp 20–21
in wines, **Ch 28**, p 13
- Aldicarb**
in finished drinking water, **Ch 10**, pp 52–55
in grapes and potatoes, **Ch 10**, pp 55–58
in pesticide formulations, **Ch 7**, p 25
- Aldicarb sulfone**
in finished drinking water, **Ch 10**, pp 52–55
in grapes and potatoes, **Ch 10**, pp 55–58
- Aldicarb sulfoxide**
in finished drinking water, **Ch 10**, pp 52–55
- Aldrin**
multiresidue methods, **Ch 10**, pp 1–10
in pesticide formulations, **Ch 7**, pp 72–73
in soft drinks and sports drinks, **Ch 10**, pp 125–136
in water, **Ch 10**, pp 27–32
- Alfalfa leaves**
filth in, **Ch 16**, pp 44–47
- Alginates**
in chocolate beverages, **Ch 29**, p 6
in chocolate frozen desserts, **Ch 33**, p 98
in chocolate products, **Ch 31**, p 16
in food dressings, **Ch 43**, p 11
- Alimentary pastes**
filth in, **Ch 16**, pp 27–28
- Alizarin cyanine green F color additive,** **Ch 46**, p 7
- Alizurin purple SS color additive,** **Ch 46**, pp 9–10
- Alkalimeter, Knorr**
carbon dioxide in liming materials, **Ch 1**, p 3
- Alkalimetric ammonium molybdophosphate method**
phosphorus in animal feed, **Ch 4**, p 65
- Alkalimetric methods**
quinolinium molybdophosphate, phosphorus (available) in fertilizers, **Ch 2**, p 11
quinolinium molybdophosphate, phosphorus (citrate-insoluble) in fertilizers, **Ch 2**, p 10
quinolinium molybdophosphate, phosphorus (total) in fertilizers, **Ch 2**, p 7
quinolinium molybdophosphate, phosphorus (water-soluble) in fertilizers, **Ch 2**, p 9
- Alkaline hydrolysis method**
phenacetin and phenyl salicylate in drugs, **Ch 19**, p 11
- Alkaline phosphatase activity**
in fluid dairy products, **Ch 33**, pp 45–46
- Alkaline phosphatase test**
mammalian feces, **Ch 16**, pp 65–68
- Alkalinity**
of ash of cacao products, **Ch 31**, p 2
of ash of canned vegetables, **Ch 42**, p 6
of ash of confectionery, **Ch 44**, p 24
of ash of dry skim milk, **Ch 33**, p 72
of ash of maple products, **Ch 44**, p 38
of ash of sugars and syrups, **Ch 44**, p 3
of ash of vinegar, **Ch 43**, p 12
of ash of wines, **Ch 28**, p 6
of water, **Ch 11**, p 3
- Alkaloid drugs.** *see also specific drugs*
chinchona, **Ch 20**, pp 16–18
ephedra, **Ch 20**, pp 9–11
ergot, **Ch 20**, pp 11–14
ippecac, **Ch 20**, pp 8–9
opium, **Ch 20**, pp 1–6
physostigmine, **Ch 20**, pp 14–16
rauwolfia, **Ch 20**, pp 18–25
titration factors, **Ch 20**, p 1
- tropane, **Ch 20**, pp 6–7
xanthine, **Ch 18**, p 53; **Ch 20**, pp 7–8
- Alkaloids**
in drugs, microchemical tests, **Ch 18**, pp 44–47
sabadilla, in pesticide formulations, **Ch 7**, p 69
in tobacco, **Ch 3**, pp 35–37
- Alkanolamines**
norepinephrine in preparations of epinephrine, **Ch 18**, pp 21–22
phenylalkanolamine salts in elixirs and syrups, **Ch 18**, p 26
phenylephrine hydrochloride in drugs, **Ch 18**, pp 22–25
phenylpropanolamine hydrochloride in drugs, **Ch 18**, pp 25–26
- Alkoxy groups**
microchemical determination, **Ch 12**, pp 12–14
- Allergenic extracts**
in drugs, **Ch 20**, pp 33–34
- Allethrin**
d-trans-, in pesticide formulations, **Ch 7**, pp 57–58
technical and pesticide formulations, **Ch 7**, pp 56–57
- Allopurinol**
in drug tablets, **Ch 19**, pp 32–33
- Allspice**
essential oil in extract, **Ch 36**, p 25
filth in, **Ch 16**, pp 44–47
tannin in, **Ch 43**, p 3
- Almond extract**
alcohol in, **Ch 36**, p 22
benzaldehyde in, **Ch 36**, pp 22–23
benzoic acid in, **Ch 36**, p 23
hydrocyanic acid in, **Ch 36**, pp 23–24
nitrobenzene in, **Ch 36**, p 24
- Almonds**
aflatoxins in, **Ch 49**, pp 26–28
- Aloin**
in drugs, **Ch 20**, p 31
- Alphazurine FG color additive,** **Ch 46**, p 6
- Alternating current spark excitation method**
metals in plants, **Ch 3**, pp 4–5
- Alumina column chromatographic method**
hydrocarbons (saturated) in glycerides, **Ch 41**, p 56
vitamin D in mixed feeds, premixes, and pet foods, **Ch 45**, pp 34–35
- Aluminum**
in aluminum sulfate-type soil acidifiers, **Ch 2**, p 42
in baking powders, **Ch 25**, pp 4–5
in deodorants, **Ch 15**, pp 6–7
in face powders, (total), **Ch 15**, p 13
in liming materials, **Ch 1**, p 7
in plants, **Ch 3**, pp 2–4, 5, 7
in solid wastes, **Ch 9**, pp 46–50
in water, **Ch 11**, pp 14–15
in waters and wastewaters, **Ch 9**, pp 50–60

- Aluminum oxide**
in face powders, (total), **Ch 15**, p 13
in liming materials, **Ch 1**, p 5
- Aluminum sulfate-type soil acidifiers**
aluminum in, **Ch 2**, p 42
- Amaranth color additive**
in foods, **Ch 46**, pp 1–2
- American Association of Cereal Chemists.** *see* **AACC-AOAC methods; AOAC-AACC methods**
- American Conference of Governmental Industrial Hygienists—AOAC method**
antimony in foods, **Ch 9**, p 22
- American Oil Chemists Society.** *see* **AOAC-AOCS methods; AOCS-AOAC methods; IUPAC-AOCS-AOAC methods**
- American Society of Enologists-AOAC method**
acidity (titratable) of wines, **Ch 28**, pp 9–10
- American Spice Trade Association-AOAC method**
piperine in pepper preparations, **Ch 43**, pp 6–7
- American Water Works Association method.** *see* **AOAC-American Water Works Association method**
- Ametryn**
in finished drinking water, **Ch 10**, pp 41–47
in pesticide formulations, **Ch 7**, p 51
- Amido nitrogen**
in feeds, **Ch 4**, p 38
- Amines**
in color additives, **Ch 46**, p 14
in drugs, microchemical tests, **Ch 18**, pp 44–47
- Amino acids.** *see also* **individual amino acids**
feed grade, lysine, methionine, and threonine in, **Ch 4**, pp 20–24
in feeds, **Ch 4**, pp 9–24
in lemon juice, **Ch 37**, pp 20–21
sulfur, in food, feed ingredients, and processed foods, **Ch 45**, p 88
in vitamin preparations, **Ch 45**, pp 64–66
- Aminobenzoate drugs, Ch 18**, pp 28–32
- p-Aminobenzoic acid**
in feeds, **Ch 5**, pp 3–4
- Aminocarb**
technical and pesticide formulations, **Ch 7**, pp 25–26
- Aminomethylphosphonic acid**
in crops, **Ch 10**, pp 78–83
in environmental water, **Ch 10**, pp 77–78
- 2-Amino-5-nitrothiazole**
in feeds, **Ch 5**, p 4
- Aminophylline**
in drugs, **Ch 19**, p 15
- Aminopyrine**
in drugs, **Ch 19**, p 7; **Ch 20**, pp 11–12
- p-Aminosalicylic acid**
in drugs, **Ch 19**, pp 2–3
- Amitriptyline**
in tablets and injectables, **Ch 18**, p 33
- Amitrole**
in pesticide formulations, **Ch 7**, pp 44–46
- Ammonia**
anhydrous, sampling of, **Ch 2**, p 3
in baking powders, **Ch 25**, p 5
in crabmeat, **Ch 35**, pp 8–9
in water, **Ch 11**, p 10
- Ammonia ion selective electrode method**
volatile bases in fish, **Ch 35**, pp 34–36
- Ammoniacal nitrogen**
in animal feed, **Ch 4**, pp 36–37
- Ammoniacal solutions**
sampling of, **Ch 2**, pp 2–3
- Ammonium bromide**
elixir of, **Ch 18**, p 9
- Ammonium compounds.** *see* **Quaternary ammonium compounds**
- Ammonium glycyrrhizinate**
in flavor extracts, **Ch 36**, pp 27–28
- Ammonium thiocyanates**
standard solutions, **App A**, p 1
- Amobarbital sodium**
in drugs, **Ch 19**, p 14
- AMPA.** *see* **Aminomethylphosphonic acid**
- Amperometric detection**
pulsed, carbohydrates in soluble (instant) coffee, **Ch 30**, pp 5–10
- Amphetamines**
with antihistamines and barbiturates in drugs, **Ch 18**, p 27
in drugs, **Ch 18**, pp 27–28
enantiomers in bulk drugs, syrups, and capsules, **Ch 22**, pp 1–2
microchemical tests, **Ch 18**, p 52
- Ampicillin**
in milk, **Ch 23**, pp 21–22
- Amplified ELISA system**
detection of botulinal neurotoxins A, B, E, and F, **Ch 17**, pp 121–123
- Amprolium**
in feeds, **Ch 5**, pp 4–5
- Amyl alcohol**
in distilled liquors, **Ch 26**, pp 13–14
- Amyl p-dimethylaminobenzoate**
in suntan preparations, **Ch 15**, p 15
- alpha-Amylase**
in flour, meal, and malted cereals, **Ch 32**, p 22
in malt, **Ch 27**, pp 30–31
in white wheat flour, milled malt, and microbial enzyme preparations, **Ch 32**, pp 23–25
- Amyloglucosidase- α -amylase method**
starch in cereal products, **Ch 32**, pp 55–58
- Analgesic drugs, Ch 19**, pp 7–12
- Anhydrous ammonia**
sampling of, **Ch 2**, p 3
- Anilazine**
in pesticide formulations, **Ch 7**, pp 26–27
- Animal excretions**
bird excrement on food and containers, **Ch 16**, pp 69–70
in brewer's grits, **Ch 16**, pp 21–22
in condiment seeds, **Ch 16**, p 49
in corn flour, **Ch 16**, p 25
in eggs and egg products, **Ch 16**, p 30
in grain products, **Ch 16**, p 22
insect excrement in flour, **Ch 16**, pp 24, 70–71
insect excrement on food and containers, **Ch 16**, p 70
mammalian feces, alkaline phosphatase test, **Ch 16**, pp 65–66
mammalian feces, thin layer chromatographic method for coprostanol, **Ch 16**, p 69
mammalian feces in corn meal, **Ch 16**, p 66
mammalian feces in grain products, **Ch 16**, pp 67–68
mammalian feces in ground black pepper, **Ch 16**, p 68
in peanut butter, **Ch 16**, p 19
urine on grain, **Ch 16**, p 63
urine stains on foods and containers, **Ch 16**, pp 61–65
- Animal fats**
cis- and *trans*-octadecenoic isomers and general fatty acid composition in, **Ch 41**, pp 33–37
organochlorine pesticide residues in, **Ch 10**, p 27
in vegetable fats and oils, **Ch 41**, pp 50–52
- Animal feeds.** *see* **Drugs in feeds; Feeds**
- Animal meal**
Salmonella in, **Ch 17**, pp 164–166
- Animal remedies.** *see* **Feeds**
- Animal tissues.** *see also* **Drugs and feed additives in animal tissues**
in animal feed, microscopy identification of, **Ch 4**, pp 72–73
arsenic in liver, **Ch 14**, p 1
copper in liver, **Ch 14**, pp 1–2
- Anion-exchange method**
carbohydrates in soluble (instant) coffee, **Ch 30**, pp 5–10
phytate in foods, **Ch 32**, p 78
- Anions, inorganic**
in water, **Ch 11**, pp 29–31
- Anise**
filth in, **Ch 16**, pp 44–47
- Anise extract, Ch 36**, p 25
- Annatto**
filth in, **Ch 16**, pp 44–47
in macaroni products, **Ch 32**, pp 75–76
- Anodic stripping voltammetric methods**
cadmium and lead in foods, **Ch 9**, pp 2–5
lead in evaporated milk, **Ch 9**, pp 30–31
lead in fruit juice, **Ch 9**, pp 30–31
- ANOT**
in animal tissues, **Ch 23**, p 1

Anthocyanins

in fruit juices, **Ch 37**, pp 19–20

Antibiotics. see also specific antibiotics

beta-lactam, in milk, **Ch 23**, pp 20–22;
Ch 33, pp 46–50

Antibiotics in feeds

bacitracin in feed supplements, **Ch 5**,
p 64

bacitracin in mixed feeds, **Ch 5**,
pp 64–65

bacitracin in premixes, **Ch 5**, pp 44–45,
63–64

bacitracin-MD in complete feed, **Ch 5**,
pp 65–66

chemical methods, **Ch 5**, pp 44–60

chlortetracycline, **Ch 5**, p 45

chlortetracycline HCl, **Ch 5**, pp 66–68
common and chemical names of, **Ch 5**,
p 88

culture media, **Ch 5**, pp 60–61

erythromycin, **Ch 5**, pp 68–69

griseofulvin, **Ch 5**, p 46

hygromycin B, **Ch 5**, p 69

lasalocid, **Ch 5**, pp 46–47, 57–60,
69–70

lincomycin, **Ch 5**, pp 70–71

microbiological methods, **Ch 5**,
pp 60–63

monensin, **Ch 5**, pp 47–57, 72–73

neomycin, **Ch 5**, pp 73–75

novobiocin, **Ch 5**, p 75

nystatin, **Ch 5**, pp 75–76

oleandomycin, **Ch 5**, p 76

oxytetracycline, **Ch 5**, pp 76–77

potency determination, **Ch 5**, p 63

procaine penicillin, **Ch 5**, p 77

reagents, **Ch 5**, p 61

spectinomycin, **Ch 5**, p 78

standard response line, **Ch 5**, pp 62–63

standards preparation, **Ch 5**, p 62

stock cultures, **Ch 5**, pp 61–62

streptomycin, **Ch 5**, pp 78–79

test apparatus, **Ch 5**, p 61

test organism suspensions, **Ch 5**,
pp 61–62

tylosin, **Ch 5**, p 79

Anticoagulant drugs, Ch 19, pp 20–23**Antifungal drugs, Ch 18**, pp 55–56**Antihistamines**

with amphetamines in drugs, **Ch 18**,
p 27

with aspirin, phenacetin, and caffeine in
drugs, **Ch 18**, pp 20–21

chlorpheniramine maleate in drug
combinations, **Ch 18**, pp 20–21

chlorpheniramine maleate in drug
tablets, **Ch 18**, pp 19–20

codeine with, **Ch 20**, p 2

hydrocodone with, **Ch 20**, p 4

meperidine in drugs, **Ch 18**, p 18

mephentermine sulfate in drugs, **Ch 18**,
pp 18–19

methapyrilene in expectorants, **Ch 18**,
p 19

pseudoephedrine HCl, **Ch 18**, p 21

pyrilamine in cough syrup, **Ch 18**, p 19

selected combinations, **Ch 18**, p 18

triprolidine HCl, **Ch 18**, p 21

Antihypertensive drugs, Ch 18,
pp 57–58**Antimicrobial drugs**

in milk, **Ch 33**, pp 50–52

Antimony

in foods, **Ch 9**, p 22

in solid wastes, **Ch 9**, pp 46–50

in waters and wastewaters, **Ch 9**,
pp 50–60

Antioxidants

activity in foods and beverages, **Ch 47**,
pp 8–11

butylated hydroxyanisole and butylated
hydroxytoluene in cereals, **Ch 47**,
pp 5–6

in corn and rice breakfast cereals,
Ch 32, p 63

estimation of antioxidant capacity,
Ch 47, pp 7–8

in food, **Ch 47**, pp 1–2

phenolic in oils, fats, and butter oil,
Ch 47, pp 2–5

propyl gallate in food, **Ch 47**, pp 6–7

Antiparkinsonian drugs, Ch 18,

pp 56–57

Antiperspirants. see also Deodorants

boric acid in, **Ch 15**, pp 8–9

zirconium (soluble) in aerosols, **Ch 15**,
pp 7–8

Antipyretic drugs, Ch 19, pp 7–12**Antipyrine**

in drugs, **Ch 18**, pp 29–30

Antiseptics

thymol in, **Ch 19**, p 7

AOAC–AACC methods

benzoyl peroxide bleach in wheat flour,
Ch 32, pp 19–20

biuret in fertilizers, **Ch 2**, p 21

carbon dioxide in baking powders,
Ch 32, p 27

deoxynivalenol in wheat, **Ch 32**, p 54;
Ch 49, pp 54–55

microchemical determination of
nitrogen, **Ch 12**, p 7

neutralizing value of baking chemicals,
Ch 32, p 27

nitrogen in wheat flour, **Ch 32**, p 14

nutrients (minor) in fertilizers, **Ch 2**,
pp 29–31

protein (crude) in animal feed, **Ch 32**,
p 14

protein (crude) in animal feed and pet
food, **Ch 4**, p 25

protein in animal feed, **Ch 32**, p 50

starch in cereal products, **Ch 32**,
pp 55–58

total dietary fiber in foods, **Ch 45**,
pp 100–101

AOAC–American Water Works**Association method**

glyphosate and
aminomethylphosphonic acid
in environmental water, **Ch 10**,
pp 77–78

**AOAC–AOCS methods. see also AOCS–
AOAC methods**

fatty acids (total) in oils and fats, **Ch 41**,
pp 13–14

**AOAC–ASBC methods. see also ASBC–
AOAC methods**

aphids in hops, **Ch 16**, p 12

**AOAC–ASTM methods. see also ASTM–
AOAC methods**

cation exchange capacity for peat,
Ch 2, p 56

lead and cadmium in ceramicware,
Ch 9, pp 6–7

**AOAC–CIPAC methods. see also
CIPAC–AOAC methods**

acephate in technical material
and soluble powder pesticide
formulations, **Ch 7**, pp 129–130

alachlor in microencapsulated pesticide
formulations, **Ch 7**, pp 69–70

aminocarb technical and pesticide
formulations, **Ch 7**, pp 25–26

anilazine in pesticide formulations,
Ch 7, pp 26–27

azinphos-methyl in pesticide
formulations, **Ch 7**, pp 105–106

butachlor in pesticide formulations,
Ch 7, p 79

captan in pesticide formulations, **Ch 7**,
pp 79–80

chloramben in pesticide formulations,
Ch 7, p 81

chlordimeform in pesticide formulations,
Ch 7, pp 84–85

dicamba—2,4-D in pesticide
formulations, **Ch 7**, pp 90–91

dicamba—MCPA in pesticide
formulations, **Ch 7**, pp 90–91

diquat in pesticide formulations, **Ch 7**,
p 48

folpet in pesticide formulations, **Ch 7**,
p 97

isofenphos technical in pesticide
formulations, **Ch 7**, pp 117–118

mercury in organic mercurial seed
disinfectants, **Ch 7**, p 23

methiocarb technical and pesticide
formulations, **Ch 7**, p 34

metolachlor in pesticide formulations,
Ch 7, pp 100–101

N-octyl bicycloheptene dicarboximide
in pesticide formulations, **Ch 7**,
pp 65–66

organochlorine pesticide contamination
of pesticide formulations, **Ch 7**,
pp 7–8

oxydemeton-methyl in pesticide
formulations, **Ch 7**, pp 120–121

oxythioquinox in pesticide formulations,
Ch 7, pp 133–134

pireronyl butoxide in pesticide
formulations, **Ch 7**, pp 65–66

propachlor in pesticide formulations,
Ch 7, p 102

propoxur technical and pesticide
formulations, **Ch 7**, pp 35–36

- pyrethrins in pesticide formulations, **Ch 7**, pp 65–66
- triadimefon technical and pesticide formulations, **Ch 7**, pp 40–41
- triazine in pesticide formulations, **Ch 7**, pp 50–52
- AOAC–Codex-Adopted methods.** *see* **Codex-Adopted–AOAC methods**
- AOAC–Food Chemicals Codex method**
neutralizing value of sodium aluminum phosphate, **Ch 25**, p 2
- AOAC–IUPAC–IFJU method**
patulin in apple juice, **Ch 49**, pp 76–78
- AOAC–IUPAC methods**
aflatoxin B₁ in corn and roasted peanuts, **Ch 49**, pp 17–19
- aflatoxins in corn, **Ch 49**, p 14
- aflatoxins in corn, cottonseed, peanuts, and peanut butter, **Ch 49**, pp 7–9
- aflatoxins in corn, raw peanuts, and peanut butter, **Ch 49**, pp 21–23
- aflatoxins in corn and peanut butter, **Ch 49**, pp 19–21
- aflatoxins in cottonseed products and mixed feed, **Ch 49**, p 28
- fatty acids in oils and fats, **Ch 41**, pp 19–20
- fumonisin B₁, B₂, and B₃ in corn, **Ch 49**, pp 56–58
- methyl esters of fatty acids in oils and fats, **Ch 41**, pp 25–26
- AOAC–Office International du Cacao et du Chocolat methods.** *see also* **Office International du Cacao et du Chocolat–AOAC methods**
- alkalinity of ash of cacao products, **Ch 31**, p 2
- ash of cacao products, **Ch 31**, pp 1–2
- nitrogen in cacao products, **Ch 31**, p 2
- pH of cacao products, **Ch 31**, p 2
- AOCS–AOAC methods.** *see also* **AOAC–AOCS methods**
- aflatoxins in peanuts and peanut products, **Ch 49**, pp 11–13
- fatty acids in encapsulated fish oils and fish oil methyl and ethyl esters, **Ch 41**, pp 27–29
- fiber (crude) in animal feed and pet food, **Ch 4**, pp 44–47
- hydrocarbons (saturated) in glycerides, **Ch 41**, p 56
- hydroxyl value of oils and fats, **Ch 41**, p 6
- trans* isomers (isolated) in margarines and shortenings, **Ch 41**, pp 37–39
- 1-monoglycerides in monoglyceride concentrates, **Ch 41**, pp 59–60
- oil in oilseeds, **Ch 41**, pp 68–71
- peroxide value of oils and fats, **Ch 41**, pp 11–12
- polyunsaturated acids in oils and fats, **Ch 41**, pp 16–19
- APC drugs**
codeine in tablets, **Ch 20**, p 3
- in drugs, **Ch 19**, pp 10–11
- Aphids**
in hops, **Ch 16**, p 12; **Ch 27**, p 34
- Apparent weight per unit volume**
of fats and oils, **Ch 41**, pp 2–3
- Apple butter**
filth in, **Ch 16**, p 33
- mold in, **Ch 16**, p 74
- Apple chops**
filth in, **Ch 16**, p 33
- Apple cider vinegar**
carbon stable isotope ratio of, **Ch 37**, pp 25–26
- Apple juice**
carbon stable isotope ratio of, **Ch 37**, pp 21–22
- D-malic acid in, **Ch 37**, pp 17–18
- L-malic and total malic acid ratio, **Ch 37**, pp 15–16
- patulin in, **Ch 49**, pp 75–80
- quinic, malic, and citric acids in, **Ch 37**, p 14
- Apple puree**
patulin in, **Ch 49**, pp 78–80
- Apples**
azinphos-methyl pesticide residues in, **Ch 10**, pp 58–59
- captan pesticide residues in, **Ch 10**, p 63
- carbaryl pesticide residues in, **Ch 10**, p 64
- dodine pesticide residues in, **Ch 10**, p 72
- fluorine on, **Ch 9**, p 24
- glyodin pesticide residues in, **Ch 10**, p 76
- lead on, **Ch 9**, p 29
- methoxychlor residues in, **Ch 10**, p 87
- N*-methylcarbamate insecticide residues in, **Ch 10**, pp 51–52
- naphthyleneacetic acid residues in, **Ch 10**, pp 89–90
- nicotine residues, **Ch 10**, pp 90–91
- organochlorine pesticide residues in, **Ch 10**, pp 32–33
- organophosphorus pesticide residues in, **Ch 10**, pp 35–39
- thiram residues in, **Ch 10**, pp 96–99
- Applesauce**
ethylenethiourea pesticide residues in, **Ch 10**, pp 74–76
- Approximate method**
vanillin in vanilla extract, **Ch 36**, p 5
- Apricots**
azinphos-methyl pesticide residues in, **Ch 10**, pp 58–59
- Arabinose**
in sugars and syrups, **Ch 44**, p 15
- Arachidonic acid**
in oils and fats, **Ch 41**, pp 16–19
- Aramite pesticide residues**
colorimetric method, **Ch 10**, pp 62–63
- Arginine**
in feeds, **Ch 4**, pp 9–19
- Aristolochic acid**
in botanicals and dietary supplements potentially contaminated with aristolochic acid I, **Ch 51**, pp 27–31
- Aroclor 1254**
PCBs in serum, **Ch 10**, pp 33–35
- Aromatic hydrocarbons.** *see* **Polycyclic aromatic hydrocarbons**
- Arprinocid**
in feed premixes, **Ch 5**, p 6
- in feeds, **Ch 5**, pp 5–6
- Arsanilic acid**
in feeds, **Ch 5**, pp 3–4, 6–7
- Arsenic**
in animal tissues, **Ch 23**, p 2
- in baking powders, **Ch 25**, p 5
- in cacodylate injections, **Ch 18**, p 5
- in feeds, (total), **Ch 5**, pp 7–8
- in fertilizers, **Ch 2**, pp 42–43, 51–52
- in foods, **Ch 9**, pp 1–3, 22
- in iron-arsenic tablets, **Ch 18**, p 5
- in iron methylarsenate, **Ch 18**, p 5
- in liver tissue, **Ch 14**, p 1
- in meat, **Ch 39**, p 5
- in pesticide formulations, (total), **Ch 7**, pp 1–2, 8–11, 15–17, 21
- in pesticide formulations, (water-soluble), **Ch 7**, pp 3, 10–11, 16–17
- in plants, **Ch 3**, p 16
- in sodium cacodylate, **Ch 18**, p 5
- in solid wastes, **Ch 9**, pp 46–50
- in water, **Ch 11**, pp 24–25
- in waters and wastewaters, **Ch 9**, pp 50–60
- Arsenious oxide**
in pesticide formulations, (total), **Ch 7**, pp 8–11, 16
- in pesticide formulations, (water-soluble), **Ch 7**, pp 8, 16
- standard solution, **App A**, p 2
- Arsenious oxide titration methods**
chlorine in calcium hypochlorite and bleaching powder, **Ch 7**, p 20
- sodium hypochlorite solution pesticide formulations, **Ch 7**, p 20
- B-Asarone**
in wines, **Ch 28**, p 18
- ASBC–AOAC methods.** *see also* **AOAC–ASBC methods**
- calcium in beer, **Ch 27**, pp 12–13
- diacetyl in beer, **Ch 27**, p 8
- essential oil in hops and hop pellets, **Ch 27**, pp 35–36
- ethanol in beer, **Ch 27**, pp 5–6
- extract of barley for malting, **Ch 27**, pp 23–24
- moisture in malting barley, **Ch 27**, p 23
- nitrogen in beer, wort, and brewing grains, **Ch 27**, p 9
- N*-nitrosodimethylamine in beer, **Ch 27**, pp 17–19
- original gravity content in beer, **Ch 27**, pp 5–6
- potassium in beer, **Ch 27**, p 21
- sodium in beer, **Ch 27**, pp 21–22
- specific gravity of beer and wort, **Ch 27**, p 3
- Ascorbic acid.** *see* **Vitamin C**
- Ash**
of animal feed, **Ch 4**, p 8
- of baked products, **Ch 32**, p 72
- in baking powders, **Ch 25**, p 5
- of beer, **Ch 27**, p 10

- of bread, **Ch 32**, p 69
of brewing sugars and syrups, **Ch 27**, p 38
of butter, **Ch 33**, p 76
of cacao products, **Ch 31**, pp 1–2, 9
of canned vegetables, **Ch 42**, p 6
of cereal adjuncts, **Ch 27**, p 33
of cheese, **Ch 33**, p 82
of confectionery, **Ch 44**, p 24
in cordials and liqueurs, **Ch 26**, p 21
of corn syrups and dextrose products, **Ch 44**, p 50
of cream, **Ch 33**, p 66
of distilled liquors, **Ch 26**, p 6
of dried milk, **Ch 33**, p 72
of evaporated milk, **Ch 33**, p 70
of fertilizers, **Ch 2**, p 4
of fruits and fruit products, **Ch 37**, pp 7, 9
of gelatin, **Ch 38**, p 1
of gelatin dessert powders, **Ch 38**, p 2
of grains, **Ch 32**, p 44
of honey, **Ch 44**, pp 26–27
of infant formula, **Ch 50**, p 18
of lemon, orange, and lime extracts, **Ch 36**, p 19
of macaroni products, **Ch 32**, p 73
of maple products, **Ch 44**, p 38
of meat, **Ch 39**, p 4
of meat extracts and similar products, **Ch 39**, p 24
of milk, **Ch 33**, p 10
of mineral oil-soap emulsions, **Ch 7**, p 22
of molasses, **Ch 44**, p 19
of nonalcoholic beverages, **Ch 29**, p 1
of nuts and nut products, **Ch 40**, p 2
of peat, **Ch 2**, p 54
of plants, **Ch 3**, p 1
of roasted coffee, **Ch 30**, p 2
of seafood, **Ch 35**, p 8
of soybean flour, **Ch 32**, p 63
of spices, **Ch 43**, p 2
of starch dessert powders, **Ch 38**, p 3
of sugars and syrups, **Ch 44**, p 3
sulfated, in color additives, **Ch 46**, p 23
of sweetened condensed milk, **Ch 33**, p 71
of tea, **Ch 30**, p 10
of vanilla extract, **Ch 36**, p 8
of vinegars, **Ch 43**, p 12
of wheat flour, **Ch 32**, p 2
of wines, **Ch 28**, p 6
- Ashing methods**
calcium in animal feed, **Ch 4**, p 61
lead, cadmium, zinc, copper, and iron in foods, **Ch 9**, pp 19–22
- Aspartic acid**
in feeds, **Ch 4**, pp 9–19
- Aspirin.** *see also* **APC drugs**
antihistamines in drugs with, **Ch 18**, pp 20–21
in drugs, **Ch 19** pp 10–12; **Ch 20**, p 7
in tablets, **Ch 19**, p 12
- Assurance GDS**
E. coli O157:H7 in selected foods, **Ch 17**, pp 65–67
- Salmonella* in foods and environmental surfaces, **Ch 17**, pp 216–219
Shigatoxin genes from *E. coli* O157:H7 in selected foods, **Ch 17**, pp 81–83
- Assurance Gold enzyme immunoassay**
Salmonella in foods, **Ch 17**, pp 181–185
- Assurance polyclonal enzyme immunoassay**
L. monocytogenes and related *Listeria* spp. in selected foods, **Ch 17**, pp 241–244
- ASTM–AOAC methods.** *see also* **AOAC–ASTM methods**
extractives from flexible barrier materials, **Ch 48**, pp 4–5
- ASTM–Intersociety Committee–AOAC methods**
fluoride in plants, **Ch 3**, pp 19–23
- ASTM methods.** *see also* **U.S. EPA–ASTM–AOAC methods**
biological agents from nonporous surfaces, bulk sample collection and swab sample collection of visible powders, **Ch 17**, p 278
microbial ranking of porous packaging materials, **Ch 16**, pp 56–61
- Atomic absorption spectrophotometric-flame photometric methods**
calcium, potassium, and sodium in electrolyte replenishers, **Ch 18**, p 8
- Atomic absorption spectrophotometric-liquid chromatographic method**
mercury (methyl) in seafood, **Ch 9**, pp 40–43
- Atomic absorption spectrophotometric methods**
aluminum in aluminum sulfate-type soil acidifiers, **Ch 2**, p 42
aluminum in baking powders, **Ch 25**, pp 4–5
arsenic, selenium, and zinc in foods, **Ch 9**, pp 2–3
biuret in fertilizers, **Ch 2**, pp 21–22
boric acid in food, **Ch 47**, p 18
cadmium in foods, **Ch 9**, pp 16–23
cadmium in water, **Ch 11**, pp 16–17
calcium in cheese, **Ch 33**, pp 82–84
calcium in fertilizers, **Ch 2**, p 33
chromium in water, **Ch 11**, pp 16–17
continuous hydride generation, selenium in feeds and premixes, **Ch 4**, pp 69–71
copper in distilled liquors, **Ch 26**, p 7
copper in fertilizers, **Ch 2**, p 34
copper in foods, **Ch 9**, pp 16–22
copper in liver, **Ch 14**, pp 1–2
copper in serum, **Ch 14**, p 2
copper in tea, **Ch 9**, pp 15–16
copper in water, **Ch 11**, pp 16–17
copper (water-soluble) in water-insoluble copper fungicides, **Ch 7**, p 12
dibutyltin dilaurate in feeds, **Ch 5**, pp 11–12
- direct graphite furnace, copper, iron, and nickel in edible oils and fats, **Ch 9**, pp 14–15
direct graphite furnace, lead in edible oils and fats, **Ch 41**, pp 9–11
flameless, mercury in foods, **Ch 9**, pp 35–36
flameless, mercury in water, **Ch 11**, pp 18–19
graphite furnace, lead and cadmium in ceramic foodware, **Ch 9**, pp 8–14
graphite furnace, lead in sugars and syrups, **Ch 9**, pp 33–35
hot leach, cadmium and lead in cookware, **Ch 9**, pp 5–6
iron (chelated) in iron chelate concentrates, **Ch 2**, pp 35–36
iron in distilled liquors, **Ch 26**, p 8
iron in fertilizers, **Ch 2**, p 35
iron in foods, **Ch 9**, pp 16–22
iron in water, **Ch 11**, pp 16–17
iron in wines, **Ch 28**, p 8
lead and cadmium in ceramicware, **Ch 9**, pp 6–7
lead in evaporated milk, **Ch 9**, pp 29–30
lead in fish, **Ch 9**, p 31
lead in foods, **Ch 9**, pp 16–22, 32–33
lead in paint, **Ch 8**, pp 2–3
lead in water, **Ch 11**, pp 16–17
magnesium (acid-soluble) in fertilizers, **Ch 2**, p 36
magnesium in cheese, **Ch 33**, pp 82–84
magnesium in fertilizers, **Ch 2**, p 36
magnesium in water, **Ch 11**, pp 16–17
manganese in fertilizers, **Ch 2**, pp 38, 39
manganese in water, **Ch 11**, pp 16–17
mercury in mercury-containing drugs, **Ch 18**, pp 14–15
mercury in water, **Ch 11**, pp 18–19
metals in pet foods, **Ch 3**, pp 5–6
metals in plants, **Ch 3**, pp 5–6
minerals in animal feed and pet food, **Ch 4**, pp 60–61
minerals in infant formula, enteral products, and pet foods, **Ch 50**, pp 15–17
nickel in tea, **Ch 9**, pp 15–16, 43
nutrients (minor) in fertilizers, **Ch 2**, pp 29–31
phosphorus in cheese, **Ch 33**, pp 82–84
polydimethylsiloxane in pineapple juice, **Ch 47**, pp 52–53
potassium in beer, **Ch 27**, p 21
potassium in water, **Ch 11**, p 20
roxarsone in feeds, **Ch 5**, pp 32–33
silver in water, **Ch 11**, pp 16–17
sodium in beer, **Ch 27**, pp 21–22
sodium in fertilizers, **Ch 2**, p 39
sodium in water, **Ch 11**, pp 20–21
tin in foods, **Ch 9**, pp 44–45
zinc in fertilizers, **Ch 2**, p 40
zinc in foods, **Ch 9**, pp 16–22, 46
zinc in serum, **Ch 14**, pp 2–3

- zinc in water, **Ch 11**, pp 16–17
- Atomic emission methods**
inductively coupled plasma, metals in solid wastes, **Ch 9**, pp 46–50
- Atraton**
in finished drinking water, **Ch 10**, pp 41–47
- Atrazine**
in finished drinking water, **Ch 10**, pp 41–47
in foods, **Ch 10**, pp 17–26
in pesticide formulations, **Ch 7**, p 51
in soft drinks and sports drinks, **Ch 10**, pp 116–124
in water, **Ch 10**, pp 47–50
- Atropine**
in drug tablets, **Ch 20**, p 6
- Attenuated total reflection-Fourier transform infrared methods**
total isolated *trans* unsaturated fatty acids in fats and oils, **Ch 41**, pp 42–44
- Automated methods**
BAX®, *L. monocytogenes* in foods, **Ch 17**, pp 253–256
BAX®, *Salmonella* in foods, **Ch 17**, pp 205–210
chlorides in water-soluble color additives, **Ch 46**, pp 25–26
chlorpheniramine maleate in drug tablets, **Ch 18**, pp 19–20
conductance method, *Salmonella* in foods, **Ch 17**, pp 169–171
2,4-D in pesticide formulations, **Ch 7**, p 85
digoxin in drugs, **Ch 20**, pp 28–29
dye binding method, in raw and processed meats, **Ch 39**, pp 30–31
fat in milk, **Ch 33**, pp 24–26
ferrous sulfate in drugs, **Ch 18**, pp 12–14
fluorometric methods, reserpine in drugs, **Ch 20**, pp 20–21
Kjeldahl, protein (crude) in animal feed and pet food, **Ch 4**, p 27
lysine in nutritional supplements, **Ch 45**, pp 86–87
methenamine in drugs, **Ch 18**, pp 41–42
methenamine mandelate in drugs, **Ch 18**, pp 41–42
microchemical determination of carbon, hydrogen, and nitrogen, **Ch 12**, pp 5–6
niacin and niacinamide in cereal products, **Ch 45**, pp 18–19
niacin and niacinamide in foods, drugs, and feeds, **Ch 45**, pp 20–21
nitrogen in meat, **Ch 39**, p 7
nitrogen (total) in plants, **Ch 3**, p 29
nitroglycerin in sublingual drug tablets, **Ch 18**, pp 39–40
phenylephrine hydrochloride in drugs, **Ch 18**, pp 23–24
phosphorus in fertilizers, **Ch 2**, pp 8–9
phosphorus in meat, **Ch 39**, p 5
phosphorus in water, **Ch 11**, pp 22–23
- potassium in fertilizers, **Ch 2**, pp 27–28
prednisolone or prednisone in drugs, **Ch 21**, pp 12–13
protein in grains, **Ch 32**, pp 49–50
riboflavin in foods and vitamin preparations, **Ch 45**, pp 16–17
sampling milk, **Ch 33**, pp 2–3
spectrophotometric methods, anticoagulant drugs, **Ch 19**, pp 20–22
TEMPO® EC method, enumeration of *E. coli* in foods, **Ch 17**, pp 86–88
total viable count in food, **Ch 16**, pp 6–8
vitamin C in food, **Ch 45**, pp 24–25
- Azide method**
oxygen (dissolved) in water, **Ch 11**, p 5
- Azinphos-methyl**
in cole-type crops and fruits, **Ch 10**, pp 58–59
in pesticide formulations, **Ch 7**, pp 104–106
- Azoxystrobin**
in foods, **Ch 10**, pp 17–26
- Babcock methods**
essential oil in flavor extracts and toilet preparations, **Ch 36**, p 25
fat in cream, **Ch 33**, pp 67–69
fat in raw milk, **Ch 33**, pp 19–21
fat in seafood, **Ch 35**, p 11
- Babies.** *see* **Infant products**
- Baby food.** *see* **Infant foods; Infant formulas**
- Bacillus anthracis**
biological agents from nonporous surfaces, bulk sample collection and swab sample collection of visible powders, **Ch 17**, p 278
confirmatory method, **Ch 17**, pp 272–274
differentiation from other strains, **Ch 17**, pp 126–127
identification from culture, **Ch 17**, pp 275–277
identification of presumptive isolates, **Ch 17**, pp 272–274
RAMP® anthrax test cartridge, **Ch 17**, pp 274–275
spores on filters and in liquid suspensions derived from surface swabbings, **Ch 17**, p 278
- Bacillus cereus**
differentiation from other strains, **Ch 17**, pp 126–127
in foods, **Ch 17**, pp 124–125
- Bacillus mycoides**
differentiation from other strains, **Ch 17**, pp 126–127
- Bacillus stearothermophilus**
in sugars, **Ch 17**, pp 112–113
- Bacillus stearothermophilus disc methods**
beta-lactam antibiotics in milk, **Ch 23**, pp 20–22; **Ch 33** pp 47–48
- Bacillus subtilis**
liquid sporicide testing against spores of, **Ch 6**, pp 44–47
- Bacillus subtilis qualitative field disc assay**
beta-lactam antibiotics in milk, **Ch 33**, p 50
- Bacillus thuringiensis**
differentiation from other strains, **Ch 17**, pp 126–127
- Bacitracin**
in feed supplements, **Ch 5**, p 64
in mixed feeds, **Ch 5**, pp 64–65
in premix feeds, **Ch 5**, pp 44–45, 63–64
- Bacitracin-MD**
in complete feed, **Ch 5**, pp 65–66
- Bacon**
N-nitrosamines (volatile) in, **Ch 39**, pp 9–11
N-nitrosopyrrolidine in, **Ch 39**, pp 11–12
- Bacteria**
contamination in low-acid canned foods, **Ch 17**, pp 111–112
in cosmetics, **Ch 17**, pp 6–7
in foods, **Ch 17**, pp 6–7
population of maple sap, **Ch 44**, p 42
thermophilic, spores in sugars, **Ch 17**, pp 112–113
- Bacterial counts**
in dairy products, **Ch 17**, pp 27–29
in milk, **Ch 17**, pp 17–18
in raw and pasteurized milk, **Ch 17**, pp 7–9
- Bacteriostatic activity**
of laundry additive disinfectants, **Ch 6**, pp 41–42
- Bagoong sauce**
filth in, **Ch 16**, p 32
- Bailey-Andrew methods**
caffeine in roasted coffee, **Ch 30**, p 2
caffeine in tea, **Ch 30**, p 11
- Baked products**
acetic and propionic acids in cake, **Ch 32**, p 72
alimentary pastes, filth in, **Ch 16**, pp 27–28
ash of, **Ch 32**, p 72
breeding of frozen food products, filth in, **Ch 16**, p 27
extraneous materials in, **Ch 16**, pp 26–28
fat in, **Ch 32**, p 72
fat in fig bars and raisin filled crackers, **Ch 32**, pp 72–73
fiber (crude) in, **Ch 32**, p 72
with fruit and nut tissues, filth in, **Ch 16**, p 26
high bran content breads, filth in, **Ch 16**, p 26
high-fat products, filth in, **Ch 16**, p 27
mineral oil in, **Ch 32**, p 71
moisture in fig bars and raisin filled crackers, **Ch 32**, p 72
pH of, **Ch 32**, p 72
protein in, **Ch 32**, p 72
solids in, **Ch 32**, p 71
sterols in, **Ch 32**, p 72
sugars in, **Ch 32**, p 72
white breads, filth in, **Ch 16**, p 27

Baking chemicals

- neutralizing value of, **Ch 25**, p 2;
Ch 32, p 27
- sample preparation, **Ch 25**, p 1

Baking powders

- aluminum in, **Ch 25**, pp 4–5
- carbon dioxide in, **Ch 25**, pp 1–2;
Ch 32, p 27
- metals and other constituents in,
Ch 25, p 5
- phosphorus in, **Ch 25**, p 6
- sample preparation, **Ch 25**, p 1
- starch in, **Ch 25**, pp 3–4
- tartaric acid in, **Ch 25**, p 3

Baking premixes

- acetone peroxides in, **Ch 47**, pp 44–45

Barban

- in water, **Ch 10**, pp 99–104

Barbiturates

- with amphetamines in drugs, **Ch 18**,
p 27
- in drugs, **Ch 19**, p 14
- in drugs, microchemical tests, **Ch 18**,
pp 47–48

Barbituric acid condensation method

- citral in flavor extracts and toilet
preparations, **Ch 36**, p 26

Barium

- in plants, **Ch 3**, pp 2–3
- in solid wastes, **Ch 9**, pp 46–50
- in water, **Ch 11**, pp 19–20
- in waters and wastewaters, **Ch 9**,
pp 50–60

Barium-140

- in milk and other foods, **Ch 13**, pp 6–8

Barium hydroxide treatment

- acidity (volatile) of wines exclusive of
SO₂, **Ch 28**, p 10

Barium salt

- optical-crystallographic properties of,
Ch 47, pp 21–22

Barium sulfate

- in face powders, **Ch 15**, p 12

Barley

- filth in cereal, **Ch 16**, pp 28–29
- β-D-glucan in, **Ch 32**, pp 58–62
- for malting, **Ch 27**, pp 23–24
- ochratoxins in, **Ch 49**, pp 63–64, 69–73
- piperonyl butoxide pesticide residues
in, **Ch 10**, pp 93–94
- sterigmatocystin in, **Ch 49**, pp 81–82

Barley flour

- alpha-amylase in, **Ch 32**, p 22

Barrier materials, flexible

- extractives from, **Ch 48**, pp 4–5

Basil

- filth in, **Ch 16**, pp 44–47

Batchwise method

- C-4 plant sugars in honey, **Ch 44**,
pp 33–35
- corn and cane sugar products in honey,
Ch 44, p 33

Bathocuproine method

- copper (water-soluble) in water-
insoluble copper fungicides, **Ch 7**,
p 11

BAX® automated system

- L. monocytogenes* in foods, **Ch 17**,
pp 253–256
- Salmonella* in foods, **Ch 17**,
pp 205–210

Bay leaves

- filth in, **Ch 16**, pp 44–47

Baygon. see also Propoxur

- in finished drinking water, **Ch 10**,
pp 52–55

Bean curd (dried)

- filth in, **Ch 16**, pp 39–40

Bean paste

- filth in, **Ch 16**, pp 37–38

Beans. see also Green beans

- hydrocyanic acid in, **Ch 49**, pp 123–124
- weevils in, **Ch 16**, p 37

Beef. see also Meat and meat products

- adulteration of meat products, **Ch 39**,
pp 23–24
- calcium in mechanically separated
meat, **Ch 39**, pp 16–17
- filth in ground or hamburger, **Ch 16**,
pp 32–33
- ground, *L. monocytogenes* in, **Ch 17**,
pp 253–256
- ground, *Listeria* in, **Ch 17**, pp 234–237
- ground, *Salmonella* in, **Ch 17**,
pp 205–210, 212–216
- ground, total viable count in, automated
enumeration, **Ch 16**, pp 6–8
- ground, viruses in, **Ch 17**, p 268
- minced, *Salmonella* in, **Ch 17**,
pp 169–171
- preservatives in ground meat, **Ch 47**,
pp 14–15
- Salmonella* in roast beef, **Ch 16**,
pp 8–11

Beer

- acidity (total) of, **Ch 27**, pp 6–7
- acids (volatile) in, **Ch 27**, p 7
- alcohol in, **Ch 27**, p 4
- ash of, **Ch 27**, p 10
- bitterness of, **Ch 27**, pp 16–17
- calcium in, **Ch 27**, pp 12–13
- caloric content, **Ch 27**, p 6
- caramel in, **Ch 27**, p 16
- carbohydrate content, **Ch 27**, p 7
- carbon dioxide in, **Ch 27**, pp 10–11
- chlorides in, **Ch 27**, p 15
- color of, **Ch 27**, pp 1–2
- copper in, **Ch 27**, pp 13–14
- deliverable contents in bottles and
cans, **Ch 27**, p 22
- dextrin in, **Ch 27**, p 7
- diacetyl in, **Ch 27**, p 8
- ethanol in, **Ch 27**, pp 5–6
- extract of, **Ch 27**, p 4
- extract of original wort, **Ch 27**, p 4
- fermentation of, **Ch 27**, p 6
- foam collapse rate, **Ch 27**, pp 11–12
- glycerol in, **Ch 27**, p 6
- haze (total) after chilling, **Ch 27**, p 2
- iron in, **Ch 27**, pp 14–15
- nitrogen (free amino) in, **Ch 27**, p 10
- nitrogen in, **Ch 27**, p 9

- N*-nitrosodimethylamine in, **Ch 27**,
pp 17–21
- ochratoxin A in, **Ch 49**, pp 73–75
- original gravity content, **Ch 27**, pp 5–6
- pH of, **Ch 27**, p 7
- phosphorus in, **Ch 27**, p 10
- potassium in, **Ch 27**, p 21
- protein in, **Ch 27**, pp 9–10
- proteolytic chillproofing enzymes in,
Ch 27, p 17
- sample preparation, **Ch 27**, p 1
- sodium in, **Ch 27**, pp 21–22
- specific gravity of, **Ch 27**, p 3
- starch (unconverted) in, **Ch 27**, p 8
- sugars (reducing) in, **Ch 27**, p 7
- sulfur dioxide in, **Ch 27**, pp 15–16
- total contents in bottles and cans,
Ch 27, pp 22–23
- total contents of cans of known tare
weight, **Ch 27**, p 23
- viscosity of, **Ch 27**, p 3

Beet molasses

- sugars in, **Ch 44**, pp 21–23

Beet sugar

- in maple syrup, **Ch 44**, pp 42–47

Beets

- sugar in fruit juices, **Ch 37**, pp 27–31
- sugar-beet-derived syrups in frozen
concentrated orange juice, **Ch 37**,
pp 26–27

Belladonna

- in drug ointments, **Ch 20**, p 6

Bellier test

- peanut oil in olive, cottonseed, corn,
and soybean oils, **Ch 41**, p 53

Bendiocarb

- in technical and wettable powder
pesticide formulations, **Ch 7**, p 27

Bendroflumethiazide

- in drugs, **Ch 19**, p 27

Benedict solution method

- lactose in meat, **Ch 39**, p 22

Benfluralin

- in pesticide formulations, **Ch 7**,
pp 77–78

Benomyl

- in pesticide formulations, **Ch 7**, p 28

Bentazon

- in finished drinking water, **Ch 10**,
pp 106–113
- in pesticide formulations, **Ch 7**, p 46

Benzaldehyde

- in almond extract, **Ch 36**, pp 22–23
- in cordials and liqueurs, **Ch 26**, p 22
- in nonalcoholic beverages, **Ch 29**, p 2

Benzene hexachloride

- in pesticide formulations, **Ch 7**,
pp 76–77

Benzene hexachloride pesticides

- colorimetric method, **Ch 10**, p 59

Benzene-soluble chlorine method

- DDT in pesticide formulations, **Ch 7**,
pp 88–89

Benzo[*a*]pyrene

- in food, **Ch 48**, pp 1–4

- Benzoate**
in carbonated beverages, **Ch 29**, pp 2–3
- Benzocaine**
in drugs, **Ch 18**, pp 28–30
- Benzoic acid**
in almond extract, **Ch 36**, p 23
in beverages, **Ch 47**, p 12
in drugs, **Ch 19**, p 1
in food, **Ch 47**, pp 11–14
in orange juice, **Ch 37**, pp 24–25; **Ch 47**, p 14
in wheat flour, **Ch 32**, pp 19–20
- Benzoquinone method**
paraphenylenediamine in hair preparations, **Ch 15**, p 13
- Benzoyl peroxide bleach**
in wheat flour, **Ch 32**, pp 19–20
- Benzthiazide**
in drugs, **Ch 19**, pp 29–30
- Benztropine mesylate**
in drugs, **Ch 20**, pp 6–7
- Berberine**
in goldenseal raw materials, extracts, and dietary supplements, **Ch 51**, pp 31–33
- Berlin Institute method**
invert sugar in sugars and syrups, **Ch 44**, p 10
- Beryllium**
in solid wastes, **Ch 9**, pp 46–50
in waters and wastewaters, **Ch 9**, pp 50–60
- Beta particle counting method**
strontium-90 in water, **Ch 13**, pp 1–3
- Betaine**
in orange juice, **Ch 37**, p 10
- Beverages.** *see also* **Alcoholic beverages; Distilled liquors; Juices; Malt beverages and brewing materials; Nonalcoholic beverages and concentrates**
anthocyanin pigment content of, **Ch 37**, pp 37–39
antioxidant activity in, **Ch 47**, pp 8–11
benzoic acid in, **Ch 47**, p 12
extraneous materials in, **Ch 16**, pp 11–13
mold in soft drinks, **Ch 16**, p 78
quaternary ammonium compounds in, **Ch 47**, pp 25–26
salicylic acid in, **Ch 47**, pp 27–28
sulfites in, **Ch 47**, pp 35–38
- BF method**
aflatoxins in peanuts and peanut products, **Ch 49**, pp 11–13
- BHC**
in fruits and vegetables, **Ch 10**, pp 10–12
multiresidue methods, **Ch 10**, pp 1–10
technical residues, **Ch 10**, pp 59–61
in water, **Ch 10**, pp 27–32
- α-BHC**
in fruits and vegetables, **Ch 10**, pp 10–12
in water, **Ch 10**, pp 27–32
- β-BHC**
in water, **Ch 10**, pp 27–32
- δ-BHC**
in water, **Ch 10**, pp 27–32
- γ-BHC**
in lindane shampoos and lotions, **Ch 7**, pp 75–76
in pesticide formulations, **Ch 7**, pp 73–76
in technical BHC, **Ch 7**, pp 75–76
in water, **Ch 10**, pp 27–32
- Bicarbonate**
in water, **Ch 11**, p 13
- Bifenthrin**
in agricultural products, **Ch 10**, pp 94–96
in foods, **Ch 10**, pp 17–26
- Bifuran**
in feeds, **Ch 5**, p 16
- Bioassay methods**
cat-eye, mydriatic and myotic drugs, **Ch 20**, p 7
chick edema factor in oils and fats, **Ch 41**, p 56
chick embryo, toxicity of aflatoxin B₁, **Ch 49**, p 34
eye irritants in cosmetics, **Ch 15**, p 3
vitamins and other nutrients, **Ch 45**, pp 73–85
- Bioavailability**
of iron, **Ch 45**, pp 83–85
- Biochemical identification kit methods**
E. coli in foods, **Ch 17**, pp 137–141, 279–280
Enterobacteriaceae in foods, **Ch 17**, pp 137–141, 279–280
gram-negative bacteria, **Ch 17**, pp 279–280
gram-positive bacteria, **Ch 17**, pp 280–282
Listeria spp., **Ch 17**, pp 223–229, 280–282
Salmonella spp. in foods, **Ch 17**, pp 136–141, 279–280
Staphylococcus spp., **Ch 17**, pp 280–282
- Biochemical oxygen demand**
of water, **Ch 11**, pp 3–5
- Biological agents**
bulk sample collection and swab sample collection of visible powders from nonporous surfaces, **Ch 17**, p 278
- Biological methods**
histamine in seafood, **Ch 35**, pp 15–16
paralytic shellfish poison, **Ch 35**, p 27; **Ch 49**, pp 86–88
- Biological samples**
cholinesterase in blood, **Ch 14**, pp 3–5
copper in serum, **Ch 14**, p 2
ephedrine alkaloids in human urine and plasma, **Ch 51**, pp 1–5
nitrogen (total) in urine, **Ch 14**, pp 7–10
zinc in serum, **Ch 14**, pp 2–3
- Biological threat agent methods**
AOAC INTERNATIONAL methods
committee guidelines for validation
of biological threat agent methods and/or procedures, **App I**
- Biosense ASP**
domoic acid in shellfish, **Ch 49**, pp 102–105
- Biphenyl pesticide residues**
in citrus fruits, **Ch 10**, pp 61–62
- Bird excrement**
on food and containers, **Ch 16**, pp 69–70
- Bismuth compounds**
in drugs, **Ch 18**, pp 5–6
- Bismuthate methods**
manganese (acid-soluble) in fertilizers, **Ch 2**, p 38
manganese in water, **Ch 11**, p 24
- Bitartrate method**
tartaric acid in fruit and fruit products, **Ch 37**, p 11
tartaric acid in wines, **Ch 28**, p 1
- Bithionol**
in feeds, **Ch 5**, p 8
- Bitterness**
of beer, **Ch 27**, pp 16–17
- Bitterness units method**
bitterness of beer, **Ch 27**, p 16
- Biuret**
in fertilizers, **Ch 2**, pp 21–22
- Biuret test**
protein in animal feed, **Ch 4**, p 24
- Black currants**
ethylenethiourea pesticide residues in, **Ch 10**, pp 74–76
- Black malt**
color of, **Ch 27**, p 28
- Black pepper**
filth in, **Ch 16**, pp 44–47, 52
mammalian feces in, **Ch 16**, p 68
Salmonella in, **Ch 16**, pp 8–11; **Ch 17**, pp 144–146, 150–153, 158–160, 173–181, 190–202
- Blackberries**
insects in frozen products, **Ch 16**, pp 33–34
mold in, **Ch 16**, p 74
- Bleach (benzoyl peroxide)**
in wheat flour, **Ch 32**, pp 19–20
- Bleaching powder**
chlorine (available) in, **Ch 7**, p 20
- Block digestion method**
protein (crude) in animal feed, forage (plant tissue), grain, and oilseeds, **Ch 4**, pp 34–36
protein (crude) in meat, **Ch 39**, pp 7–8
- Blood and blood products**
cholinesterase in, **Ch 14**, pp 3–5
copper in serum, **Ch 14**, p 2
ephedrine alkaloids in plasma, **Ch 51**, pp 1–5
PCBs (as Aroclor 1254) in serum, **Ch 10**, pp 33–35
zinc in serum, **Ch 14**, pp 2–3
- Bloom gelometer plunger**
jelly strength of gelatin, **Ch 38**, pp 1–2
- Blue No. 1**
analysis of, **Ch 46**, p 5
in foods, **Ch 46**, pp 3–4

- intermediates in, **Ch 46**, pp 14–15
- Blue No. 2**
analysis of, **Ch 46**, p 5
in foods, **Ch 46**, pp 3–4
- Blue No. 4**, **Ch 46**, p 6
- Blue No. 6**, **Ch 46**, p 7
- Blue No. 9**, **Ch 46**, p 6
- Blueberries**
maggots in, **Ch 16**, p 34
- BMD**. *see* **Bacitracin-MD**
- BOD**. *see* **Biochemical oxygen demand**
- Bone fertilizers**
mechanical analysis of, **Ch 2**, p 3
- Borates**
in food, **Ch 47**, p 15
- Borax method**
hydrochloric acid standard solution,
App A, p 4
sulfuric acid standard solution, **App A**,
p 8
- Bordeaux mixture pesticides**
arsenic in, **Ch 7**, pp 16–17
arsenious oxide in, **Ch 7**, p 16
with calcium arsenate, **Ch 7**, p 17
carbon dioxide in, **Ch 7**, pp 15–16
copper in, **Ch 7**, pp 16–17
with lead arsenate, **Ch 7**, pp 16–17
lead in, **Ch 7**, p 16
moisture in, **Ch 7**, pp 15–17
with Paris Green, **Ch 7**, p 16
- Boric acid**
in caviar, **Ch 47**, pp 17–18
in deodorants and antiperspirants,
Ch 15, pp 8–9
in face powders, **Ch 15**, p 12
in food, **Ch 47**, pp 15, 17–19
in meat, **Ch 47**, p 16
steam distillation into, protein (crude)
in animal feed, forage (plant tissue),
grain, and oilseeds, **Ch 4**, pp 34–36
in water, **Ch 11**, pp 24–25
- Boron**
in caviar, **Ch 47**, pp 15–16
in fertilizers, **Ch 2**, pp 31–32
in pet foods, **Ch 3**, pp 6–7
in plants, **Ch 3**, pp 2–7, 16
- Boron trifluoride method**
fatty acids in oils and fats, **Ch 41**,
pp 19–20
- Botanicals**. *see* **Dietary supplements**
- Botulinal neurotoxins (A, B, E, and F)**
detection of, **Ch 17**, pp 121–123
- Bovine colostrum**
bovine origin, bovine immunoglobulin G
in, **Ch 33**, pp 62–64
- Bovine immunoglobulin G analysis**
in bovine colostrum, milk powders,
and dietary supplements of bovine
origin, **Ch 33**, pp 62–64
- Bovine milk**. *see* **Milk**
- Brandy Drops**
alcohol in syrups used in confectionery,
Ch 44, p 25
- Brazil nuts**
aflatoxins in, **Ch 49**, pp 26–28
- Breading**
of frozen food products, filth in, **Ch 16**,
p 27
- Breads**
acetic acid in, **Ch 32**, pp 67–68
acids (volatile) in, **Ch 32**, pp 68–69
ash of, **Ch 32**, p 69
calcium in, **Ch 32**, p 69
chloride in ash of, **Ch 32**, p 69
citric acid in, **Ch 32**, p 69
fat in, **Ch 32**, pp 67, 70
fat number of, **Ch 32**, p 67
fiber (crude) in, **Ch 32**, pp 66, 70
high bran content, filth in, **Ch 16**, p 26
iron in, **Ch 32**, p 69
lactose in, **Ch 32**, pp 70–71
pH of, **Ch 32**, p 71
propionic acid in, **Ch 32**, pp 67–68
protein in, **Ch 32**, p 70
sample preparation, **Ch 32**, p 66
solids in, **Ch 32**, p 66
sterols in, **Ch 32**, p 70
sugars in, **Ch 32**, p 70
vitamins in enriched bread, **Ch 32**,
pp 69–70
white, filth in, **Ch 16**, p 27
- Breakfast cereals**. *see also* **Cereal foods**
extraneous materials in, **Ch 16**,
pp 28–29
- Brewers' grains**
characteristics of, **Ch 27**, pp 41–42
nitrogen in, **Ch 27**, p 9
protein in, **Ch 27**, p 9
- Brewer's grits**
filth in, **Ch 16**, p 22
foreign matter in, **Ch 16**, p 21
- Brewing materials**. *see* **Malt beverages**
and brewing materials
- Brewing sugars and syrups**
acidity of, **Ch 27**, pp 37–38
ash of, **Ch 27**, p 38
clarity of, **Ch 27**, p 36
color of, **Ch 27**, p 36
diastatic power of malt syrups, **Ch 27**,
p 37
extract of, **Ch 27**, pp 36–37
pH of, **Ch 27**, p 38
protein in, **Ch 27**, p 37
starch in, **Ch 27**, p 37
sugars (total reducing) in, **Ch 27**, p 38
- Brilliant blue FCF color additive**
analysis of, **Ch 46**, p 5
in foods, **Ch 46**, pp 1–2
- Brilliant lake red R**, **Ch 46**, p 7
- Brine saturation method**
filth in sage (rubbed and ground),
Ch 16, p 50
- Broccoli**
filth in canned products, **Ch 16**,
pp 40–41
- Brodifacoum**
technical and pesticide formulations,
Ch 7, pp 130–131
- Bromacil**
in finished drinking water, **Ch 10**,
pp 41–47
- Bromate titration**
resorcinol in hair lotions, **Ch 15**, p 14
salicylic acid in hair lotions, **Ch 15**, p 14
- Bromates**
in white and whole wheat flour, **Ch 32**,
pp 20–21
- Bromides**
elixirs of, **Ch 18**, pp 9–10
in water, **Ch 11**, pp 24–25, 29–31
- Brominated vegetable oils**
in nonalcoholic beverages, **Ch 47**,
pp 45–46
- Bromination methods**
benzocaine in drugs, **Ch 18**, p 29
dinitrophenol in drugs, **Ch 19**, p 3
phenolsulfonates in deodorants, **Ch 15**,
p 10
phenolsulfonates in drugs, **Ch 19**, p 6
sterols in macaroni products, **Ch 32**,
p 74
thiouracil in drugs, **Ch 19**, p 31
- Bromine**
in color additives, **Ch 46**, p 25
microchemical methods, **Ch 12**, pp 1–3
in water, **Ch 11**, p 24
- Bromisovalum**
in drugs, **Ch 19**, p 13
- Bromophenol blue methods**
quaternary ammonium compounds
in food and beverages, **Ch 47**,
pp 25–26
quaternary ammonium compounds in
milk, **Ch 47**, p 23
- Bromoxynil octanoate**
in pesticide formulations, **Ch 7**,
pp 78–79
- Brown No. 1**, **Ch 46**, p 6
- Brucine colorimetric method**
nitrogen (nitrate) in water, **Ch 11**, p 11
- Bufencarb**
in grapes and potatoes, **Ch 10**,
pp 55–58
- Buffer solutions**
for calibration of pH equipment, **App A**,
pp 2–3
for colorimetric pH comparisons,
App A, p 3
- Buquinolate**
in feeds, **Ch 5**, pp 8–9
- Bushel weight**
of malt, **Ch 27**, pp 24–25
- Butabarbital sodium**
in drugs, **Ch 19**, p 17
- Butacaine sulfate**
in drugs, **Ch 18**, pp 30–31
- Butachlor**
in finished drinking water, **Ch 10**,
pp 41–47
in pesticide formulations, **Ch 7**, p 79
in soft drinks and sports drinks, **Ch 10**,
pp 116–124
- Butter**
acid value of butterfat, **Ch 33**, p 77
acids (volatile) in, **Ch 33**, p 80
ash of, **Ch 33**, p 76
butyric acid in, **Ch 33**, pp 79–80
casein in, **Ch 33**, p 76

- color additives in butterfat, **Ch 33**, pp 77–78
- critical temperature of dissolution of oil, **Ch 33**, p 77
- examination of fat, **Ch 33**, p 77
- fat in, **Ch 33**, p 76
- fatty acids (water-insoluble) in, **Ch 33**, pp 78–80
- filth in, **Ch 16**, p 16
- lactic acid in butterfat, **Ch 33**, p 78
- microscopic examination, **Ch 33**, p 80
- moisture in, **Ch 33**, p 76
- mold in, **Ch 16**, p 76; **Ch 33**, p 80
- phosphatase in, **Ch 33**, pp 80–81
- preservatives in, **Ch 33**, p 80
- refractive index of butterfat, **Ch 33**, p 77
- salt in, **Ch 33**, pp 76–77
- sample preparation, **Ch 33**, p 76
- sampling, **Ch 33**, pp 3–4, 76
- Butter oil**
- phenolic antioxidants in, **Ch 47**, pp 2–5
- beta-sitosterol in, **Ch 41**, pp 49–50
- Butterfat**
- acid value of, **Ch 33**, p 77
- butyric acid in fats containing, **Ch 41**, pp 44–45
- color additives in, **Ch 33**, pp 77–78
- lactic acid in, **Ch 33**, p 78
- refractive index of, **Ch 33**, p 77
- vegetable fats in, **Ch 41**, pp 47–49
- n-Butyl alcohol**
- in distilled liquors, **Ch 26**, pp 12–13
- tert-Butyl alcohol**
- in distilled liquors, **Ch 26**, p 14
- Butylate**
- in finished drinking water, **Ch 10**, pp 41–47
- Butylated hydroxyanisole**
- in cereals, **Ch 47**, pp 5–6
- in foods, **Ch 47**, pp 1–2
- in oils, fats, and butter oil, **Ch 47**, pp 2–5
- Butylated hydroxytoluene**
- in cereals, **Ch 47**, pp 5–6
- in foods, **Ch 47**, pp 1–2
- in oils, fats, and butter oil, **Ch 47**, pp 2–5
- tert-Butylhydroquinone**
- in oils, fats, and butter oil, **Ch 47**, pp 2–5
- Butyric acid**
- in bread, **Ch 32**, pp 68–69
- in butter, **Ch 33**, pp 79–80
- in fat, **Ch 41**, pp 15–16
- in fats containing butterfat, **Ch 41**, pp 44–45
- in seafood, **Ch 35**, pp 14–15
- Cabbage**
- N*-methylcarbamate residues in, **Ch 10**, pp 51–52
- nicotine residues, **Ch 10**, pp 90–91
- Cacao bean and its products. see also Chocolate and chocolate products**
- afatoxins in cocoa beans, **Ch 49**, p 13
- alginate in chocolate products, **Ch 31**, p 16
- alkalinity of insoluble and soluble ash, **Ch 31**, p 2
- ash of, **Ch 31**, pp 1–2, 9
- caffeine in, **Ch 31**, pp 16–17
- chocolate liquor, cacao mass of, **Ch 31**, p 9
- coconut and palm kernel oils in cocoa butter, **Ch 31**, p 11
- critical temperature for dissolution of fat in acetic acid, **Ch 31**, p 11
- crude fiber in, **Ch 31**, p 3
- fat in, **Ch 31**, pp 9–11
- fat in milk chocolate, **Ch 31**, pp 11–12
- filth in cocoa, chocolate, and press cake, **Ch 16**, p 11
- fructose in milk chocolate, **Ch 31**, p 13
- glucose in, **Ch 31**, pp 14–15
- glucose in milk chocolate, **Ch 31**, p 13
- index of refraction of fat, **Ch 31**, p 13
- iodine absorption number of fat, **Ch 31**, p 10
- lactose in milk chocolate, **Ch 31**, pp 12–13
- lecithin in cacao fat, **Ch 31**, p 11
- maltose in milk chocolate, **Ch 31**, p 13
- melting point of fat, **Ch 31**, p 10
- milk fat in milk chocolate, **Ch 31**, p 10
- moisture in, **Ch 31**, p 1
- nitrogen in, **Ch 31**, p 2
- pectic acid in, **Ch 31**, pp 3–5
- pH of, **Ch 31**, p 2
- Polenske value fat, **Ch 31**, p 10
- protein in milk chocolate, **Ch 31**, p 12
- Reichert-Meißl value fat, **Ch 31**, p 10
- sample preparation, **Ch 31**, p 1
- saponification number of cacao fat, **Ch 31**, p 11
- separation of fat, **Ch 31**, p 10
- shell in, **Ch 31**, p 3
- silver number for detection of coconut and palm kernel oils, **Ch 31**, p 11
- spiral vessel count of, **Ch 31**, pp 5–7
- starch in, **Ch 31**, pp 15–16
- stone cell and group count of, **Ch 31**, pp 7–9
- sucrose in, **Ch 31**, p 13
- sucrose in milk chocolate, **Ch 31**, p 13
- theobromine in, **Ch 31**, pp 16–17
- unsaponifiable matter in cocoa butter, **Ch 31**, p 11
- Cacao fat**
- coconut and palm kernel oils in cocoa butter and fat from milk chocolate, **Ch 31**, p 11
- critical temperature for dissolution in acetic acid, **Ch 31**, p 11
- index of refraction, **Ch 31**, p 10
- iodine absorption number of, **Ch 31**, p 10
- lecithin in, **Ch 31**, p 11
- melting point of, **Ch 31**, p 10
- Polenske value, **Ch 31**, p 10
- Reichert-Meißl value, **Ch 31**, p 10
- saponification number of, **Ch 31**, p 11
- Cacodylate injections**
- arsenic in, **Ch 18**, p 5
- Cadaverine**
- in canned tuna and mahimahi, **Ch 35**, pp 20–23
- Cadmium**
- in ceramicware, **Ch 9**, pp 6–14
- in cookware, **Ch 9**, pp 5–6
- in earthenware, **Ch 9**, p 14
- in fertilizers, **Ch 2**, pp 42, 44, 51–52
- in foods, **Ch 9**, pp 1–5, 16–23
- in solid wastes, **Ch 9**, pp 46–50
- in water, **Ch 11**, pp 16–17
- in waters and wastewaters, **Ch 9**, pp 50–60
- Cadmium anthranilate**
- in feeds, **Ch 5**, p 9
- Caffeine. see also APC drugs**
- antihistamines in drugs with, **Ch 18**, pp 20–21
- in cacao products, **Ch 31**, pp 16–17
- in carbonated beverages, **Ch 29**, pp 2–3
- in drugs, **Ch 19**, pp 9–11; **Ch 20**, pp 4, 7, 16
- with effervescent potassium bromide in drugs, **Ch 18**, p 9
- in green coffee, **Ch 30**, p 1
- in nonalcoholic beverages, **Ch 29**, pp 3–4
- in roasted coffee, **Ch 30**, pp 2–3
- in tea, **Ch 30**, pp 11–12
- Cake mixes**
- Salmonella* in, **Ch 16**, pp 8–11; **Ch 17**, pp 193–202
- Calcium**
- in animal feed, **Ch 4**, pp 60–61
- in baking powders, **Ch 25**, p 5
- in beer, **Ch 27**, pp 12–13
- in bread, **Ch 32**, p 69
- in calcium arsenate pesticide formulations, **Ch 7**, pp 10–11
- in canned vegetables, **Ch 42**, p 6
- in cheese, **Ch 33**, pp 82–84
- in drugs, **Ch 18**, pp 6–7
- in electrolyte replenishers, **Ch 18**, p 8
- in enteral products, **Ch 50**, pp 15–17
- in face powders, **Ch 15**, pp 12, 13
- in fertilizers, **Ch 2**, pp 32–33
- in fortified food products, **Ch 50**, pp 65–72
- in fruits and fruit products, **Ch 37**, p 8
- in infant formula, **Ch 50**, pp 15–18
- in lime sulfur pesticide formulations, **Ch 7**, p 19
- in liming materials, **Ch 1**, pp 2, 5–6
- in mechanically separated poultry and beef, **Ch 39**, pp 16–17
- in pet foods, **Ch 3**, pp 5–7; **Ch 4**, pp 60–61; **Ch 50**, pp 15–17
- in plants, **Ch 3**, pp 2–8
- in salt, **Ch 11**, p 32
- in solid wastes, **Ch 9**, pp 46–50
- in vitamin preparations, **Ch 18**, pp 8–9
- in water, **Ch 11**, p 15
- in wheat flour, **Ch 32**, p 4
- Calcium arsenate**
- Bordeaux mixture pesticide formulations with, **Ch 7**, p 17

- pesticide formulations, **Ch 7**, p 10
- Calcium bromide**
elixir of, **Ch 18**, p 9
- Calcium cyanide pesticides**, **Ch 7**, p 17
- Calcium cyclamate**
in canned fruit, **Ch 47**, p 48
in nonalcoholic beverages, **Ch 47**, p 47
- Calcium gluconate**
in drugs, **Ch 18**, p 7
- Calcium hypochlorite**
chlorine (available) in, **Ch 7**, p 20
- Calcium oxalate precipitate method**
oxalic acid in canned vegetables,
Ch 42, pp 8–9
- Calcium pantothenate**
in vitamin preparations, **Ch 45**, p 48
- Calcium salicylate drugs**
theobromine in theobromine-calcium
salicylate drugs, **Ch 20**, pp 7–8
- Calcium silicate slags**
neutralizing value, **Ch 1**, pp 3–4
sulfide sulphur in, **Ch 1**, p 4
- Calculation method**
protein efficiency ratio, **Ch 45**,
pp 80–82
- Calomel**
mercury in, **Ch 18**, pp 15–16
in ointments, **Ch 18**, p 16
in tablets, **Ch 18**, pp 16–17
- Caloric content**
of beer, **Ch 27**, p 6
of wines, **Ch 28**, p 6
- Cambridge filter pads**
nicotine on, **Ch 3**, p 37
- Campesterol**
in saw palmetto raw materials and
dietary supplements, **Ch 51**,
pp 24–27
- Camphor**
in drugs, **Ch 20**, p 30
- Canadian lead number**
of maple products, **Ch 44**, p 39
- Candling procedures**
parasites in fish muscle, **Ch 35**, p 27
- Candy and candy coatings**
filth in, **Ch 16**, pp 36–37
- Cane molasses**
sugars in molasses, **Ch 44**, pp 21–23
- Cane sugar**
color of, **Ch 44**, p 1
dextran in, **Ch 44**, pp 16–18
in honey, **Ch 44**, p 33
in maple syrup, **Ch 44**, pp 38–39,
42–47
- Cannabinol**
in drug powders, **Ch 22**, p 5
- Canned foods**
bacterial contamination in low-acid
foods, **Ch 17**, pp 111–112
commercial sterility of low-acid foods,
Ch 17, pp 110–114
sporeforming organisms in low-acid
foods, **Ch 17**, pp 113–114
tin in, **Ch 9**, pp 44–45
- Canned vegetables**. *see* **Vegetable
products (canned)**
- Cantaloupe**
Salmonella in, **Ch 16**, pp 8–11
- Capillary gas chromatographic
methods**
chlorothalonil in technical and
formulated pesticide materials,
Ch 7, pp 43–45
cypermethrin in pesticide formulations,
Ch 7, pp 58–59
fat in cereal products, **Ch 32**, pp 45–49
hexachlorobenzene in technical and
formulated pesticide materials,
Ch 7, pp 43–45
octadecenoic isomers and general fatty
acid composition in oils and fats,
Ch 41, pp 33–37
N-octyl bicycloheptene dicarboximide
in pesticide formulations, **Ch 7**,
pp 65–66
piperonyl butoxide in pesticide
formulations, **Ch 7**, pp 65–66
pyrethrins in pesticide formulations,
Ch 7, pp 65–66
tebuconazole in fungicide formulations,
Ch 7, pp 36–37
- Capillary tube method**
melting point of fats and fatty acids,
Ch 41, p 4
- Capsaicinoids**
in capsicums and their extractives,
Ch 43, pp 14–15
- Capsicums**
capsaicinoids in, **Ch 43**, pp 14–15
filth in, **Ch 16**, pp 44–48
in ginger extract, **Ch 36**, p 24
- Captan**
in pesticide formulations, **Ch 7**,
pp 79–80
- Captan pesticide residues**
in fruits and vegetables, **Ch 10**, p 63
- Caramel**
in beer, **Ch 27**, p 16
in cordials and liqueurs, **Ch 26**, p 21
in wines, **Ch 28**, p 13
- Caramel malt**
extract and color of, **Ch 27**, p 28
- Caraway**
essential oil in extract, **Ch 36**, p 25
- Caraway seed**
filth in, **Ch 16**, pp 44–47
- Carbadox**
in feeds, **Ch 5**, pp 9–10
- Carbamate pesticide residues**
N-methylcarbamate insecticide and
metabolite residues, **Ch 10**, pp
55–58
N-methylcarbamate insecticide
residues, **Ch 10**, pp 51–52
N-methylcarbamoyloximes and
N-methylcarbamates in finished
drinking water, **Ch 10**, pp 52–55
- Carbanolate**
in fruits and vegetables, **Ch 10**,
pp 51–52
- Carbanthrene blue color additive**,
Ch 46, p 6
- Carbaryl**
in apples and spinach, **Ch 10**, p 65
in finished drinking water, **Ch 10**,
pp 52–55
in foods, **Ch 10**, pp 17–26
in fruits and vegetables, **Ch 10**,
pp 51–52
in grapes and potatoes, **Ch 10**,
pp 55–58
in pesticide formulations, **Ch 7**,
pp 28–29
residues of, **Ch 10**, pp 64–65
- Carbidopa**
in solid dosage forms, **Ch 18**, pp 56–57
- Carbofuran**
in finished drinking water, **Ch 10**,
pp 52–55
in fruits and vegetables, **Ch 10**,
pp 51–52
in grapes and potatoes, **Ch 10**,
pp 55–58
in pesticide formulations, **Ch 7**, p 29
- Carbofuran phenol**
in water, **Ch 10**, pp 99–104
- Carbohydrate content**
of soluble instant coffee, **Ch 30**,
pp 5–10
of wines, **Ch 28**, p 6
- Carbohydrates**
in beer, **Ch 27**, p 7
in fruit juices, **Ch 37**, p 15
in infant formula, **Ch 50**, p 18
- Carbon**
in fertilizers, (carbonate), **Ch 2**, p 33
microchemical determination, **Ch 12**,
pp 3–6
in water, **Ch 11**, pp 7–9
- Carbon column cleanup method**
organophosphorus pesticide residues,
Ch 10, pp 35–36
- Carbon dioxide**
in baking powders, **Ch 25**, pp 1–2;
Ch 32, p 27
in beer, **Ch 27**, pp 10–11
in liming materials, **Ch 1**, p 3
in pesticide formulations, **Ch 7**,
pp 15–17
in self-rising flour, **Ch 32**, p 5
in wines, **Ch 28**, pp 13–15
- Carbon disulfide**
in pesticide formulations, **Ch 7**,
pp 24–25
- Carbon disulfide evolution method**
dithiocarbamates in pesticide
formulations, **Ch 7**, p 32
maneb in pesticide formulations
containing fentin acetate or fentin
hydroxide, **Ch 7**, pp 14–15
- Carbon isotope ratio mass
spectrometric methods**
corn and cane sugar products in honey,
Ch 44, p 33
corn syrup and cane sugar in maple
syrup, **Ch 44**, pp 38–39

Carbon stable isotope ratio methods

carbon stable isotope ratio of apple
cider vinegar, **Ch 37**, pp 25–26

Carbon stable isotopes

ratio of apple cider vinegar, **Ch 37**,
pp 25–26
ratio in apple juice, **Ch 37**, pp 21–22
ratio of ethanol derived from fruit juices
and maple syrups, **Ch 37**, pp 33–37
ratio in orange juice, **Ch 37**, p 22

Carbon tetrachloride

in drugs, **Ch 18**, p 2
in grain, **Ch 10**, p 50

Carbonated beverages

benzoate, caffeine, and saccharin in,
Ch 29, pp 2–3

Carbonates

in fertilizers, **Ch 2**, p 33
in soda lye, **Ch 8**, p 1
in water, **Ch 11**, p 13

Carbophenothion

in fruits and vegetables, **Ch 10**,
pp 35–39

Carboxin

in finished drinking water, **Ch 10**,
pp 41–47

Carbromal

in drugs, **Ch 19**, pp 13–14

Cardamon

filth in, **Ch 16**, pp 44–48

Carius combustion methods

bromine determination, **Ch 12**, pp 1–3
chlorine determination, **Ch 12**, pp 1–3
iodine determination, **Ch 12**, pp 1–3
sulfur determination, **Ch 12**, pp 10–11

B-Carotene

in supplements and raw materials,
Ch 51, pp 13–19

Carotenes

in dried plant materials and mixed
feeds, **Ch 45**, pp 10–11
in fresh plant materials and silages,
Ch 45, pp 9–10
in macaroni products, **Ch 32**, pp 75–76
in plants, **Ch 3**, p 33
in wheat flour, **Ch 32**, p 21

Carotenoids

in eggs, **Ch 34**, p 1
in macaroni products, **Ch 32**, pp 75–77

Carrots

organophosphorus pesticide residues
in, **Ch 10**, pp 36–39

Casein

in butter, **Ch 33**, p 76
in evaporated milk, **Ch 33**, p 70
filth in, **Ch 16**, p 17
in malted milk and chocolate malted
milk, **Ch 33**, p 72
in milk, **Ch 33**, p 16
nitrogen, in milk, **Ch 33**, pp 58–59
phosphatase in, **Ch 33**, p 45
Salmonella in, **Ch 17**, pp 128–132,
166–168, 210–212

Casein coagulation method

proteolytic chillproofing enzymes in
beer, **Ch 27**, p 17

Cassia extract

alcohol in, **Ch 36**, p 24
oil in, **Ch 36**, p 24

Cat-eye bioassay method

mydriatic and myotic drugs, **Ch 20**, p 7

Catalase

in frozen vegetables, **Ch 42**, p 13

Catalytic combustion method

sulfur determination, **Ch 12**, p 12

Cation exchange capacity

for peat, **Ch 2**, p 56

Catsup

benzoic acid in, **Ch 47**, p 12

Caustic values

liming materials, **Ch 1**, pp 2–3

Caviar

boric acid in, **Ch 47**, pp 17–18
boron in, **Ch 47**, pp 15–16

Cayenne pepper

filth in, **Ch 16**, pp 44–48
ground, capsaicinoids in, **Ch 43**,
pp 14–15

CB methods

aflatoxins in cocoa beans, **Ch 49**, p 13
aflatoxins in peanuts and peanut
products, **Ch 49**, pp 9–11

Celery

thiram residues in, **Ch 10**, pp 96–99

Celery leaves

filth in, **Ch 16**, pp 44–47

Celery seed

filth in, **Ch 16**, pp 44–48

Cellulose acetate strip method

identification of fish species, **Ch 35**,
p 31

Cephapirin

in milk, **Ch 23**, pp 21–22; **Ch 33**,
pp 50–52

Ceralpha assay

α -amylase activity in white wheat flour,
milled malt, and microbial enzyme
preparations, **Ch 32**, pp 23–25

Ceramic fiber filter method

fiber (crude) in animal feed and pet
food, **Ch 4**, pp 44–47

Ceramicware

cadmium and lead in, **Ch 9**, pp 6–14

Cereal adjuncts

ash of, **Ch 27**, p 33
crude fat, **Ch 27**, p 33
crude fiber in, **Ch 27**, p 33
extract of, **Ch 27**, pp 32–33
extract of corn grits, **Ch 27**, p 33
moisture in, **Ch 27**, p 32
oil in, **Ch 27**, p 32
protein in, **Ch 27**, p 33
sampling of, **Ch 27**, p 31
sorting corn grits, **Ch 27**, p 32

Cereal foods

alpha-amylase in flour, meal, and
malted cereals, **Ch 32**, pp 22–25
antioxidants in corn and rice breakfast
cereals, **Ch 32**, p 63
baked products, **Ch 32**, pp 71–78
barley and barley products, **Ch 32**,
pp 44–66
bread, **Ch 32**, pp 66–71

buckwheat and buckwheat products,
Ch 32, pp 44–66

butylated hydroxyanisole and butylated
hydroxytoluene in, **Ch 47**, pp 5–6

corn and corn products, **Ch 32**,
pp 44–66

egg noodles, **Ch 32**, pp 73–78

extraneous materials in breakfast
cereals, **Ch 16**, pp 28–29

fat in, **Ch 32**, pp 45–49

fiber (dietary) in cereal grains and
products, **Ch 32**, pp 5–12

folates (total) in, **Ch 45**, pp 68–73

beta-D-glucans in oat and barley
fractions and ready-to-eat cereals,
Ch 32, pp 58–62

glucose, fructose, sucrose, and
maltose in presweetened cereals,
Ch 32, pp 62–63

macaroni, **Ch 32**, pp 73–78

niacin and niacinamide in, **Ch 45**,
pp 18–19

oats and oat products, **Ch 32**, pp 44–66

rice and rice products, **Ch 32**, pp 44–66

rye and rye products, **Ch 32**, pp 44–66

soybean flour in uncooked cereal
products, **Ch 32**, p 27

soybeans and soybean products,
Ch 32, pp 44–66

starch in, **Ch 32**, pp 55–58

wheat and wheat products, **Ch 32**,
pp 44–66

wheat flour, **Ch 32**, pp 1–43

Cereal grains

fiber (insoluble dietary), **Ch 32**, pp 5–7
protein in, **Ch 32**, pp 44–45

Certified reference materials, App A,

Cesium-134

in foods, **Ch 13**, pp 8–10

Cesium-137

in foods, **Ch 13**, pp 8–10
in milk and other foods, **Ch 13**, pp 6–8

α -Chaconine

in potato tubers, **Ch 49**, pp 124–126

**Charcoal column chromatographic
method**

separation of sugars in honey, **Ch 44**,
pp 28–30

Cheese

acidity of, **Ch 33**, p 86
aflatoxin M₁ in, **Ch 49**, pp 47–48
ash of, **Ch 33**, p 82
calcium in, **Ch 33**, pp 82–84
chloride in, **Ch 33**, p 84
citric acid in, **Ch 33**, pp 88–89
color additives in, **Ch 33**, p 86
dehydroacetic acid in, **Ch 47**, p 19
fat in, **Ch 33**, pp 87–88
filth in, **Ch 16**, pp 16–18
gelatin in cottage cheese, **Ch 33**, p 90
gums in soft curd cheese, **Ch 33**, p 90
lactose in process cheese, **Ch 33**,
pp 89–90
Listeria in, **Ch 17**, pp 220–223,
229–234, 253–256
magnesium in, **Ch 33**, pp 82–84

- moisture in, **Ch 33**, pp 81–82
 nitrate in, **Ch 33**, pp 86–87
 nitrite in, **Ch 33**, pp 86–87
 nitrogen in, **Ch 33**, pp 84–85
 phosphatase in, **Ch 33**, pp 91–94
 phosphorus in, **Ch 33**, pp 82–84, 94–95
Salmonella in, **Ch 17**, pp 203–210
 salt in, **Ch 33**, p 84
 sample collection, **Ch 33**, p 81
 sample preparation, **Ch 33**, p 81
 sampling, **Ch 33**, p 4
 sorbic acid in, **Ch 47**, pp 28–29
 sorbic acid in cottage cheese, **Ch 33**, p 91
 tartaric acid in, **Ch 33**, p 88
 titanium in, **Ch 9**, p 45; **Ch 33**, p 85
- Chelated iron**
 in iron chelate concentrates, **Ch 2**, pp 35–36
- Chelometric methods**
 liming materials, **Ch 1**, p 6
- Chemical development method**
 fingerprint detection on papers, **Ch 24**, p 1
- Chemical methods**
 antibiotics in feeds, **Ch 5**, pp 44–60
 fructose in sugars and syrups, **Ch 44**, p 11
 glucose in sugars and syrups, **Ch 44**, p 10
 histamine in seafood, **Ch 35**, pp 16–17
 lactose in sugars, **Ch 44**, p 15
 maltose in sugars and syrups, **Ch 44**, p 15
 vitamins and other nutrients, **Ch 45**, pp 1–55
- Chemical oxygen demand**
 of water, **Ch 11**, pp 6–7
- Chemical preservatives**
 benzoic acid in beverages, **Ch 47**, p 12
 benzoic acid in food, **Ch 47**, pp 11–14
 benzoic acid in orange juice, **Ch 47**, p 14
 borates in food, **Ch 47**, p 15
 boric acid in caviar, **Ch 47**, pp 15–16
 boric acid in food, **Ch 47**, pp 15–19
 boric acid in meat, **Ch 47**, p 16
 boron in caviar, **Ch 47**, pp 17–18
 dehydroacetic acid in cheese, **Ch 47**, p 19
 diethylcarbonate in food, **Ch 47**, p 19
 fluorides in food, **Ch 47**, p 20
 formaldehyde in food, **Ch 47**, p 21
 formic acid in food, **Ch 47**, p 21
 hydrogen peroxide in milk, **Ch 47**, p 21
 monochloroacetic acid in liquids and preservatives, **Ch 47**, pp 21–22
 monochloroacetic acid in nonalcoholic beverages and wines, **Ch 47**, pp 22–23
 nitrites in curing preparations, **Ch 47**, p 23
 preservatives in ground beef, **Ch 47**, pp 14–15
 propionates in food, **Ch 47**, p 23
- quaternary ammonium compounds in aqueous solutions, **Ch 47**, p 27
 quaternary ammonium compounds in commercial preservatives, **Ch 47**, pp 24–25
 quaternary ammonium compounds in food and beverages, **Ch 47**, pp 25–26
 quaternary ammonium compounds in milk, **Ch 47**, pp 23–24, 27
 salicylic acid in food and beverages, **Ch 47**, pp 27–28
 sorbic acid in cheese, **Ch 47**, pp 28–29
 sorbic acid in dairy products, **Ch 47**, p 29
 sorbic acid in food, **Ch 47**, pp 13–14
 sulfites in beverages, **Ch 47**, pp 35–38
 sulfites in foods, **Ch 47**, pp 32–38
 sulfites in meats, **Ch 47**, pp 31–32
 sulfites in wines, **Ch 47**, p 37
 sulfurous acid in dried fruit, **Ch 47**, p 31
 sulfurous acid in food, **Ch 47**, pp 30–31
 sulfurous acid in meats, **Ch 47**, p 38
 thiourea in frozen peaches, **Ch 47**, pp 40–41
 thiourea in orange juice, **Ch 47**, pp 39–40
 thiourea in orange peel, **Ch 47**, p 41
- Chenopodium oil**
 in drugs, **Ch 20**, p 31
- Cherries**
 azinphos-methyl pesticide residues in, **Ch 10**, pp 58–59
 maggots in, **Ch 16**, p 34
- Chervil**
 filth in, **Ch 16**, pp 44–47
- Chewing gum**
 filth in, **Ch 16**, p 37
- Chick bioassay**
 vitamin D₃ in poultry feed supplements, **Ch 45**, p 78
- Chick edema factor**
 in oils and fats, **Ch 41**, pp 56–57
- Chick embryo bioassay**
 toxicity of aflatoxin B₁, **Ch 49**, p 34
- Chicken.** see **Poultry and poultry products**
- Chicory**
 filth in, **Ch 16**, pp 11–12
 in roasted coffee, **Ch 30**, p 3
- Children.** see **Infant products**
- Chili pepper**
 capsaicinoids in, **Ch 43**, pp 14–15
- Chili powder**
 filth in, **Ch 16**, pp 47–48
- Chinchona alkaloids**, **Ch 20**, pp 16–18
- Chives**
 filth in, **Ch 16**, pp 44–47
- Chlindamycin**
 in milk, **Ch 33**, pp 50–52
- Chloral hydrate**
 in drugs, **Ch 19**, p 18
- Chloramben**
 in pesticide formulations, **Ch 7**, p 81
- Chloramine T pesticides**, **Ch 7**, pp 20–21
- Chloramines**
 in milk, **Ch 33**, pp 35–36
- Chloramphenicol**
 in milk, **Ch 33**, pp 50–52
- Chlordane**
 AG, in granular pesticide formulations, **Ch 7**, pp 83–84
 AG, heptachlor in, **Ch 7**, p 84
 technical (AG), alpha and gamma isomers in, **Ch 7**, p 83
 technical, hexachlorocyclopentadiene in, **Ch 7**, p 83
 technical, and pesticide formulations, **Ch 7**, pp 81–82
- α-Chlordane**
 in water, **Ch 10**, pp 27–32
- γ-Chlordane**
 in water, **Ch 10**, pp 27–32
- Chlordimeform**
 in pesticide formulations, **Ch 7**, pp 84–85
- Chloride.** see also **Salt**; **Sodium chloride**
 in ash of bread, **Ch 32**, p 69
 in cheese, **Ch 33**, p 84
 in distilled liquors, **Ch 26**, pp 8–9
 in eggs, **Ch 34**, p 5
 in meat extracts and similar products, **Ch 39**, p 24
 in milk-based infant formula, **Ch 50**, p 12
 in pesticide formulations, **Ch 7**, pp 17–18
 in prepared mustard, **Ch 43**, p 7
 in water, **Ch 11**, pp 11–12, 29–31
- Chloride (total) method**
 tetrachloroethylene in drugs, **Ch 18**, p 2
 trichloroethylene in drugs, **Ch 18**, p 3
- Chlorides**
 in beer, **Ch 27**, p 15
 in deodorants, **Ch 15**, p 9
 in plants, **Ch 3**, pp 16–18
 in roasted coffee, **Ch 30**, p 3
 in tobacco, **Ch 3**, p 34
 in water-soluble color additives, **Ch 46**, pp 25–26
 in wines, **Ch 28**, pp 6–7
- Chlorinated acidic pesticide residues**
 in finished drinking water, **Ch 10**, pp 106–113
- Chlorinated hydrocarbons**
 in drugs, **Ch 18**, p 3
- Chlorine**
 in animal feed, (soluble), **Ch 4**, pp 61–62
 in bleaching powders, **Ch 7**, p 20
 in calcium hypochlorite, **Ch 7**, p 20
 in chloramine T pesticide formulations, **Ch 7**, pp 20–21
 in color additives, **Ch 46**, p 25
 in disinfectants, (available), **Ch 6**, pp 22–23
 in fat of wheat flour, **Ch 32**, pp 18–19
 in fertilizers, (water-soluble), **Ch 2**, p 33
 in fruit products, **Ch 37**, p 9
 in meat, **Ch 39**, p 4
 microchemical methods, **Ch 12**, pp 1–3
 in organohalogen pesticide formulations, **Ch 7**, p 71

- as sodium chloride in seafood, **Ch 35**, pp 9–10
in sodium hypochlorite solution pesticide formulations, **Ch 7**, p 20
- Chlorine methods**
active, heptachlor in pesticide formulations, **Ch 7**, pp 97–98
soluble, DDT in pesticide formulations, **Ch 7**, pp 88–89
total, chlordane (technical) and pesticide formulations, **Ch 7**, pp 81–82
- 3-Chloro-1,2-propanediol**
in foods and food ingredients, **Ch 48**, pp 9–10
- Chlorobenzilate**
in pesticide formulations, **Ch 7**, p 51
in water, **Ch 10**, pp 27–32
- Chlorobutanol**
in drugs, **Ch 18**, pp 3–4
procaine in presence of, **Ch 18**, pp 31–32
- Chloroform**
in drugs, **Ch 18**, p 2
in grain, **Ch 10**, p 50
- Chloroform extraction**
2-isopropyl-4-pentenyl urea in drugs, **Ch 19**, p 18
- Chloroform-methanol extraction method**
fat in foods, **Ch 45**, pp 85–86
- Chlorogenic acid**
in green coffee, **Ch 30**, p 1
in instant coffee, **Ch 30**, p 3
in roasted coffee, **Ch 30**, p 3
- Chloroneb**
in water, **Ch 10**, pp 27–32
- p-Chlorophenyl phenyl sulfone**
residues of, **Ch 10**, pp 65–67
- Chlorophyll**
in plants, **Ch 3**, pp 31–33
- Chloroplatinate methods**
potassium in fruits and fruit products, **Ch 37**, p 7
- Chloropropylate**
in pesticide formulations, **Ch 7**, p 51
- Chlorothalonil**
in foods, **Ch 10**, pp 17–26
in technical and formulated pesticide materials, **Ch 7**, pp 43–45
in water, **Ch 10**, pp 27–32
- Chlorothiazide**
in drugs, **Ch 19**, pp 27–30
- Chlorotoluron**
in pesticide formulations, **Ch 7**, pp 29–31
- Chloroxuron**
in pesticide formulations, **Ch 7**, pp 29–31
- Chlorpheniramine maleate**
with aspirin, phenacetin, and caffeine in drugs, **Ch 18**, pp 20–21
in drug combinations, **Ch 20**, pp 10–11
in drug tablets, **Ch 18**, pp 19–20
- Chlorpropamide**
in drug tablets, **Ch 19**, p 23
- Chlorpropham**
in finished drinking water, **Ch 10**, pp 41–47
- Chlorpyrifos**
in foods, **Ch 10**, pp 17–26
in fruits and vegetables, **Ch 10**, pp 10–12
in pesticide formulations, **Ch 7**, p 106
in soft drinks and sports drinks, **Ch 10**, pp 125–136
- Chlorpyrifos-methyl**
in foods, **Ch 10**, pp 17–26
- Chlortetracycline**
in edible animal tissues, **Ch 23**, pp 22–26
in feeds, **Ch 5**, p 45
in milk, **Ch 33**, pp 50–57
- Chlortetracycline HCl**
in feeds, **Ch 5**, pp 66–68
- Chocolate and chocolate products.** *see also Cacao bean and its products; Milk chocolate*
alginates in, **Ch 31**, p 16
alginates in chocolate beverages, **Ch 29**, p 6
alginates in frozen desserts, **Ch 33**, p 98
alkaline phosphatase activity in chocolate milk, **Ch 33**, pp 45–46
casein in chocolate malted milk, **Ch 33**, p 72
chocolate liqueur, cacao mass of, **Ch 31**, p 9
filth in, **Ch 16**, p 11
phenolphthalein in chocolate drug preparations, **Ch 19**, pp 5–6
Salmonella in chocolate, **Ch 16**, pp 8–11; **Ch 17**, pp 128–132, 144–146, 150–156, 158–164, 166–167, 171–190, 193–198, 210–216
Salmonella in cocoa, **Ch 17**, pp 166–167
- Cholecalciferol.** *see Vitamin D₃*
- Cholesterol**
animal fats in vegetable oils and fats, **Ch 41**, pp 50–52
in baked products, **Ch 32**, p 72
in bread, **Ch 32**, p 70
in eggs, **Ch 34**, pp 3–5
in foods, **Ch 45**, pp 104–105
in macaroni products, **Ch 32**, pp 74–75
in multicomponent foods, **Ch 45**, pp 89–91
- Choline**
in infant formula and milk, **Ch 50**, pp 30–32
- Cholinesterase**
activity in whole blood, **Ch 14**, pp 3–4
in blood, **Ch 14**, pp 4–5
- Cholinesterase inhibition method**
organophosphorus pesticide residues, **Ch 10**, pp 40–41
- Chromatographic methods.** *see also Column chromatographic methods; Gas chromatographic methods; Liquid chromatographic methods;*
- Paper chromatographic methods;**
Thin layer chromatographic methods
acetic and propionic acids in bread, **Ch 32**, pp 67–68
anion-exchange, carbohydrates in soluble (instant) coffee, **Ch 30**, pp 5–10
aspirin, phenacetin, and caffeine in drugs, **Ch 19**, pp 10–11
benzoic acid in drugs, **Ch 19**, p 1
citric and isocitric acids in fruits and fruit products, **Ch 37**, p 11
codeine in APC drug tablets, **Ch 20**, p 3
codeine with antihistamines in drugs, **Ch 20**, p 2
coumarin in vanilla extract, **Ch 36**, pp 6–8
ergotamine in drugs, **Ch 20**, pp 12–13
ethyl vanillin in vanilla extract, **Ch 36**, pp 6–8
fatty acids and butyric acid in butter, **Ch 33**, pp 79–80
fatty acids in seafood, **Ch 35**, pp 13–15
gel permeation, organochlorine pesticide residues in animal fats, **Ch 10**, p 27
glucose in honey, **Ch 44**, p 32
glycerides in shortening, **Ch 41**, pp 61–62
ion, chromium (dissolved hexavalent) in waters and wastewaters, **Ch 9**, pp 60–62
ion, inorganic anions in water, **Ch 11**, pp 29–31
ion, sugars in cane and beet final molasses, **Ch 44**, pp 21–23
ion exclusion, sulfites in food and beverages, **Ch 47**, p 38
ion-pair column, phenylephrine hydrochloride in drugs, **Ch 18**, pp 24–25
ion-pair column, trimethobenzamide hydrochloride in drugs, **Ch 18**, p 55
ipecac alkaloid in drugs, **Ch 20**, pp 8–9
morphine in opium and paregoric, **Ch 20**, pp 4–5
neostigmine in drugs, **Ch 20**, pp 15–16
partition, gamma-BHC (lindane) in pesticide formulations, **Ch 7**, pp 73–74
physostigmine salicylate and physostigmine sulfate in ointments, **Ch 20**, pp 14–15
polar components in frying fats, **Ch 41**, pp 31–32
salicylic acid in drugs, **Ch 19**, p 1
vanillin in vanilla extract, **Ch 36**, pp 6–8
- Chromatographic-spectrophotometric methods**
caffeine in roasted coffee, **Ch 30**, p 3
- Chromium**
dissolved hexavalent, in waters and wastewaters, **Ch 9**, pp 60–62
in fertilizers, **Ch 2**, pp 42, 46, 51–52
in infant formula and adult nutritional products, **Ch 50**, pp 80–82
in solid wastes, **Ch 9**, pp 46–50

- in water, **Ch 11**, pp 16–17
in waters and wastewaters, **Ch 9**, pp 50–60
- Chromotropic acid colorimetric method**
methanol in distilled liquors, **Ch 26**, p 15
- Chromotropic acid test**
formaldehyde in food, **Ch 47**, p 21
- Cigarette fillers.** *see also* **Tobacco**
glycerol in, **Ch 3**, p 35
menthol in, **Ch 3**, pp 39–41
propylene glycol in, **Ch 3**, p 35
triethylene glycol in, **Ch 3**, p 35
- Cinchophen**
in drugs, **Ch 20**, p 26
- Cinerin**
in pesticide formulations, **Ch 7**, pp 65–66
- Cinnamon**
alcohol in extracts, **Ch 36**, p 24
filth in, **Ch 16**, pp 44–49
oil in extracts, **Ch 36**, p 24
- CIPAC–AOAC methods.** *see also* **AOAC–CIPAC methods**
γ-BHC in technical BHC, pesticide formulations, and lindane shampoos and lotions, **Ch 7**, pp 75–76
chlorotoluron in pesticide formulations, **Ch 7**, pp 29–31
chloroxuron in pesticide formulations, **Ch 7**, pp 29–31
copper (water-soluble) in water-insoluble copper fungicides, **Ch 7**, p 12
cyanazine in technical products and pesticide formulations, **Ch 7**, pp 46–48
cyhexatin technical and pesticide formulations, **Ch 7**, pp 131–132
cypermethrin in pesticide formulations, **Ch 7**, p 59
DDT in technical products and pesticide formulations, **Ch 7**, pp 87–88
deltamethrin in technical products and pesticide formulations, **Ch 7**, p 60
dichlobenil in pesticide formulations, **Ch 7**, p 92
diflubenzuron in pesticide formulations, **Ch 7**, p 95
dithianon in technical products and formulations, **Ch 7**, pp 31–32
endosulfan in pesticide formulations, **Ch 7**, pp 95–96
fentin in fentin-maneb pesticide formulations, **Ch 7**, pp 13–14
fentin in pesticide formulations, **Ch 7**, p 13
formothion in pesticide formulations, **Ch 7**, p 111
maneb in pesticide formulations containing fentin acetate or fentin hydroxide, **Ch 7**, pp 14–15
methamidophos in technical products and pesticide formulations, **Ch 7**, pp 119–120
metoxuron in pesticide formulations, **Ch 7**, pp 29–31
permethrin in pesticide formulations, **Ch 7**, p 61
phosphamidon in technical and formulated pesticide products, **Ch 7**, pp 126–127
pirimiphos-methyl in technical products and pesticide formulations, **Ch 7**, pp 125–126
temephos in pesticide formulations, **Ch 7**, pp 128–129
terbuthylazine in pesticide formulations, **Ch 7**, p 50
tetradifon (technical) and pesticide formulations, **Ch 7**, p 103
thiodicarb in technical products and formulations, **Ch 7**, pp 38–39
thiram in pesticide formulations, **Ch 7**, pp 39–40
- Citral**
in flavor extracts and toilet preparations, **Ch 36**, p 26
in lemon and orange extracts, **Ch 36**, p 19
- Citric acid**
in bread, **Ch 32**, p 69
in cheese, **Ch 33**, pp 88–89
in cordials and liqueurs, **Ch 26**, p 21
in cranberry juice cocktail and apple juice, **Ch 37**, p 14
in dried milk, **Ch 33**, p 73
in fruits and fruit products, **Ch 37**, p 11
in milk, **Ch 33**, p 8
in nonalcoholic beverages, **Ch 29**, p 1
in wines, **Ch 28**, pp 11–12
- Citrus juices**
filth in canned juices, **Ch 16**, p 35
mold in, **Ch 16**, pp 74, 78
solids (soluble) in, **Ch 37**, p 7
- Citrus Red No. 2**
analysis of, **Ch 46**, p 5
- Clams**
paralytic shellfish toxins in, **Ch 49**, pp 105–116
shell in canned products, **Ch 16**, p 30
shucked, volume of, **Ch 35**, p 6
- Clarity**
of brewing sugars and syrups, **Ch 27**, p 36
- Cleanup methods**
FD&C color additives in foods, **Ch 46**, pp 3–4
- Clioquinol**
in creams and ointments, **Ch 18**, pp 35–36
- Clopidol**
in animal tissues, **Ch 23**, pp 2–4
in chicken tissues, **Ch 23**, pp 4–6
- Clostridium botulinum***
detection of botulinum neurotoxins A, B, E, and F, **Ch 17**, pp 121–123
and its toxins in foods, **Ch 17**, pp 115–117
- Clostridium nigrificans***
in sugars, **Ch 17**, pp 112–113
- Clostridium perfringens***
in foods, **Ch 17**, pp 117–120
from shellfish, **Ch 17**, pp 120–121
- Clostridium thermosaccharolyticum***
in sugars, **Ch 17**, pp 112–113
- Cloves**
alcohol in extracts, **Ch 36**, p 24
filth in, **Ch 16**, pp 44–47
oil in extracts, **Ch 36**, p 24
tannin in, **Ch 43**, p 3
- Cloxacillin**
in milk, **Ch 23**, pp 21–22; **Ch 33**, pp 50–52
- Coal fly ash**
metals in, **Ch 9**, pp 46–50
- Coating and glazing substances**
in roasted coffee, **Ch 30**, pp 3–4
- Cobalamin**
microbiological assays, **Ch 45**, pp 55–58
in milk-based infant formula, **Ch 50**, pp 22–24
in vitamin preparations, **Ch 45**, pp 58–59
- Cobalt**
in animal feed, **Ch 4**, p 62
in fertilizers, **Ch 2**, pp 33–34, 42, 45, 51–52
in plants, **Ch 3**, pp 8–10
in solid wastes, **Ch 9**, pp 46–50
in waters and wastewaters, **Ch 9**, pp 50–60
- Cobaltinitrite gravimetric method**
potassium in fruits and fruit products, **Ch 37**, p 7
- Cocaine**
procaine in presence of, **Ch 18**, pp 31–32
- Cocaine hydrochloride**
in drug powders, **Ch 22**, p 2
- Cocoa**
filth in, **Ch 16**, p 11
Salmonella in, **Ch 17**, pp 166–167
- Cocoa beans**
aflatoxins in, **Ch 49**, p 13
- Cocoa butter**
coconut and palm kernel oils in, **Ch 31**, p 11
unsaponifiable matter in, **Ch 31**, p 11
- Coconut**
aflatoxins in, **Ch 49**, p 13
glycerol in shredded coconut, **Ch 40**, p 3
Salmonella in, **Ch 17**, pp 169–171, 193–202
- Coconut oil**
in cocoa butter and in fat extracted from milk chocolate, **Ch 31**, p 11
silver number for detection of, **Ch 31**, p 11
- Coconut (shredded)**
filth in, **Ch 16**, pp 18–19
- COD.** *see* **Chemical oxygen demand**
- Cod fish blocks**
minced fish flesh in mixed fillet-minced blocks, **Ch 35**, pp 7–8
- Cod liver oil**
in emulsions, **Ch 20**, p 31
- Codeine**
with antihistamines in drugs, **Ch 20**, p 2

- in APC drug tablets, **Ch 20**, p 3
in drug elixirs, **Ch 20**, pp 2–3
in drugs, **Ch 19**, p 9; **Ch 20**, p 7
monohydrate, **Ch 20**, pp 2–3
phosphate, **Ch 20**, p 2
procaine in presence of, **Ch 18**,
pp 31–32
sulfate, **Ch 20**, p 2
- Codex-Adopted-AOAC Methods**
arsenic in foods, **Ch 9**, pp 1–3, 22
automated Kjeldahl method, protein
(crude) in animal feed and pet food,
Ch 4, p 27
cadmium in foods, **Ch 9**, pp 1–3
face powders analysis, **Ch 15**,
pp 11–13
fat acidity of grains, **Ch 32**, p 54
fat in cheese, **Ch 33**, p 87
fat in dried milk, **Ch 33**, p 73
fat in ice cream and frozen desserts,
Ch 33, p 97
fat in milk, **Ch 33**, p 18
fat in whey cheese, **Ch 33**, p 87
fatty acids in oils and fats, **Ch 41**,
pp 19–20
fish flesh content in frozen coated fish
products, **Ch 35**, pp 2–4
histamine in seafood, **Ch 35**, pp 17–19
iodide in ready-to-feed milk-based
infant formula, **Ch 50**, pp 14–15
lead in edible oils and fats, **Ch 41**,
pp 9–11
lead in foods, **Ch 9**, pp 1–3
methyl esters of fatty acids in oils and
fats, **Ch 41**, pp 25–26
minced fish flesh in mixed fillet-minced
cod blocks, **Ch 35**, pp 7–8
moisture in animal feed, **Ch 4**, p 1
moisture in dried fruits, **Ch 37**, p 4
net contents of frozen seafood, **Ch 35**,
pp 1–2
nitrites in cured meat, **Ch 39**, pp 8–9
nitrogen (total) in fertilizers, **Ch 2**,
pp 13–14
parasites in fish muscle, **Ch 35**, p 27
protein nitrogen content of milk, **Ch 33**,
p 14
sample preparation for meat and meat
products, **Ch 39**, p 1
sampling sweetened condensed milk,
Ch 33, p 71
selenium in foods, **Ch 9**, pp 1–3
soil in frozen fruits and vegetables,
Ch 16, pp 35–36
spiral vessel count of cacao products,
Ch 31, pp 5–7
stone cell and group count of cacao
products, **Ch 31**, pp 7–9
sulfites in food and beverages, **Ch 47**,
p 38
thiamine in human and pet foods,
Ch 45, pp 11–13
tin in foods, **Ch 9**, pp 44–45
total dietary fiber in foods, **Ch 45**,
pp 100–101
vitamin A in milk and milk-based infant
formula, **Ch 50**, pp 1–3
vitamin A in mixed feeds, premixes,
and human and pet foods, **Ch 45**,
pp 6–9
vitamin D₃ in ready-to-feed milk-based
infant formula, **Ch 50**, pp 5–6
vitamin E activity in milk-based infant
formula, **Ch 50**, pp 4–5
trans-vitamin K₁ in ready-to-feed milk-
based infant formula, **Ch 50**, pp 6–8
zinc in foods, **Ch 9**, pp 1–3
- Codex Alimentarius Draft European
Regional Standard for Vinegar–
AOAC Method**
solids in vinegar, **Ch 43**, p 13
- Codistillation methods**
sweep, organophosphorus pesticide
residues, **Ch 10**, pp 36–39
- Coenzymes**
coenzyme Q₁₀ content in raw materials
and dietary supplements, **Ch 51**,
pp 33–35
- Coffee**
filth in, **Ch 16**, pp 11–12
- Coffee (green)**
aflatoxins in, **Ch 49**, p 30
caffeine in, **Ch 30**, p 1
chlorogenic acid in, **Ch 30**, p 1
coloring matter in, **Ch 30**, p 1
macroscopic examination, **Ch 30**, p 1
ochratoxin A in, **Ch 49**, pp 65, 67–69
- Coffee (instant)**
carbohydrate content in, **Ch 30**,
pp 5–10
chlorogenic acid in, **Ch 30**, p 3
- Coffee (roasted)**
acidity of, **Ch 30**, p 2
ash of, **Ch 30**, p 2
caffeine in, **Ch 30**, pp 2–3
chicory in, **Ch 30**, p 3
chlorides in, **Ch 30**, p 3
chlorogenic acid in, **Ch 30**, p 3
coating and glazing substances in,
Ch 30, pp 3–4
dextrin in, **Ch 30**, pp 3–4
fiber (crude) in, **Ch 30**, p 4
gelatin in, **Ch 30**, pp 3–4
glucose (commercial) in, **Ch 30**, pp 3–4
macroscopic examination, **Ch 30**, p 2
moisture in, **Ch 30**, pp 4–5
ochratoxin A in, **Ch 49**, pp 65–67
petroleum ether extract of, **Ch 30**, p 4
sample preparation, **Ch 30**, p 2
solids (soluble) in, **Ch 30**, p 5
starch in, **Ch 30**, p 5
sugars in, **Ch 30**, p 5
- Colchicine**
in drugs, **Ch 20**, pp 11–12
- Cold test**
salad oils (refined, winterized), **Ch 41**,
p 54
- Cole-type crops**
azinphos-methyl pesticide residues in,
Ch 10, pp 58–59
- ColiComplete method**
confirmed total coliforms and *E. coli* in
all foods, **Ch 17**, pp 41–43
- Coliform counts**
in dairy products, **Ch 17**, pp 27–32
in foods, **Ch 17**, p 32
in milk, **Ch 17**, pp 27–28
- Coliform groups**
in eggs and egg products, **Ch 17**, p 2
most probable number method, **Ch 17**,
pp 5–6
- Coliforms**
in chilled, frozen, precooked, or
prepared foods, **Ch 17**, pp 4–5
confirmed total, in foods, **Ch 17**,
pp 41–43
in dairy products, **Ch 17**, pp 27–32
detection and confirmed quantitation, in
foods, **Ch 17**, pp 36–39
fecal, in foods, **Ch 17**, pp 44–45
fecal, in shellfish growing waters,
Ch 17, pp 39–41
in foods, **Ch 17**, p 32
in foods, rapid enumeration of, **Ch 17**,
pp 32–36
in milk, **Ch 17**, pp 27–28
in nut meats, **Ch 17**, pp 4–5
total, in foods, **Ch 17**, pp 44–46
total, in water, **Ch 17**, p 41
- Collert method**
total coliforms and *E. coli* in water,
Ch 17, p 41
- Collaborative study**
guidelines for collaborative
study procedures to validate
characteristics of a method of
analysis, **App D**
- Collard greens**
filth in, **Ch 16**, pp 41–42
N-methylcarbamate residues in, **Ch 10**,
pp 51–52
- Color**
of beer, **Ch 27**, pp 1–2
of black malt, **Ch 27**, p 28
of brewing sugars and syrups, **Ch 27**,
p 36
of caramel malt, **Ch 27**, p 28
in color additives, **Ch 46**, pp 11–14
of distilled liquors, **Ch 26**, p 1
of egg yolks, **Ch 34**, p 1
of laboratory wort, **Ch 27**, p 28
of raw cane sugars, **Ch 44**, p 1
in spices, **Ch 43**, p 1
in vanilla extract, **Ch 36**, p 9
in vinegars, **Ch 43**, p 13
of white wines, **Ch 28**, p 1
of wort, **Ch 27**, p 39
- Color additives**
amines in, **Ch 46**, p 14
anthocyanin pigment content of natural
colorants, **Ch 37**, pp 37–39
in butterfat, **Ch 33**, pp 77–78
in cheese, **Ch 33**, p 86
commercial synthetic organic, analysis
of, **Ch 46**, pp 5–11
in cream, **Ch 33**, p 66
in evaporated milk, **Ch 33**, p 71
extracts of, **Ch 46**, pp 13–14
FD&C, in foods, **Ch 46**, pp 3–4
free acid in, **Ch 46**, p 26

- halogens, **Ch 46**, pp 25–26
in ice cream and frozen desserts,
Ch 33, p 98
inorganic salts in, **Ch 46**, p 26
insoluble matter in, **Ch 46**, p 13
intermediates, **Ch 46**, pp 14–21
lake red C amine in D&C Red Nos. 8
and 9, **Ch 46**, p 15
melting point of, **Ch 46**, p 26
metals and other elements, **Ch 46**,
pp 22–25
in milk, **Ch 33**, p 38
 β -naphthol in, **Ch 46**, p 14
natural coloring matters, **Ch 46**, p 5
oil-soluble, in foods, **Ch 46**, pp 2–3
pigments and lakes, separation and
identification of, **Ch 46**, p 1
pyrene in D&C Green No. 8, **Ch 46**,
p 15
separation and identification in foods,
drugs, and cosmetics, **Ch 46**,
pp 1–14
soluble, and their lakes, **Ch 46**, p 1
soluble matter, **Ch 46**, p 26
specifications and methods for colors
appearing in previous editions,
Ch 46, pp 10–11
subsidiary and lower sulfonated dyes,
Ch 46, pp 21–22
synthetic organic, in foods, **Ch 46**,
pp 1–2
total color in, **Ch 46**, pp 11–13
volatile matter in, **Ch 46**, p 13
- Color classification**
of honey, **Ch 44**, p 26
of maple products, **Ch 44**, p 37
- Colorimetric enzymatic methods**
glucoamylase activity in industrial
enzyme preparations, **Ch 45**,
pp 49–50
phytase activity in feed, **Ch 4**, pp 75–77
- Colorimetric methods**
aldehydes in lemon, orange, and lime
extracts, **Ch 36**, pp 18–19
alginates in food dressings, **Ch 43**, p 11
aluminum in liming materials, **Ch 1**, p 7
ammonia in crabmeat, **Ch 35**, pp 8–9
antioxidants in food, **Ch 47**, pp 1–2
arsenic (total) in feeds, **Ch 5**, pp 7–8
benzene hexachloride pesticide
residues, **Ch 10**, p 59
benzocaine in drugs, **Ch 18**, pp 28–29
bifuran in feeds, **Ch 5**, p 16
bromide in water, **Ch 11**, pp 24–25
brucine, nitrogen (nitrate) in water,
Ch 11, p 11
buffers and indicators for pH
comparisons, **App A**, p 3
calcium gluconate in drugs, **Ch 18**, p 7
calcium in cheese, **Ch 33**, pp 82–84
carbaryl pesticide residues, **Ch 10**,
pp 64–65
carotenoids in macaroni products,
Ch 32, pp 76–77
chloramines in milk, **Ch 33**, pp 35–36
chlordane (technical) and pesticide
formulations, **Ch 7**, p 82
chromotropic acid, methanol in distilled
liquors, **Ch 26**, p 15
citral in lemon and orange extracts,
Ch 36, p 19
citric acid in cheese, **Ch 33**, p 89
cobalt in animal feed, **Ch 4**, p 62
cobalt in fertilizers, **Ch 2**, pp 33–34
color (insoluble in amyl alcohol) in
vanilla extract, **Ch 36**, p 9
copper in animal feed, **Ch 4**, p 63
copper in foods, **Ch 9**, p 23
copper in milk and milk products,
Ch 33, p 38
copper in plants, **Ch 3**, p 10
creatine in meat, **Ch 39**, pp 14–15
DDT residues, **Ch 10**, pp 67–69
deoxyribonucleic acid hybridization,
Listeria spp. in dairy products,
seafoods, and meats, **Ch 17**,
pp 229–232
deoxyribonucleic acid hybridization,
Salmonella in foods, **Ch 17**,
pp 161–164
diacetyl in beer, **Ch 27**, p 8
disulfiram in drug tablets, **Ch 19**,
pp 31–32
beta-estradiol in drugs, **Ch 21**, p 1
ethopabate in feeds, **Ch 5**, pp 13–14
fluoride in water, **Ch 11**, pp 12–13
fluorine on apples and pears, **Ch 9**,
p 24
furazolidone in feeds, **Ch 5**, p 16
gliaden as a measure of gluten in
foods, **Ch 32**, pp 15–17
glycarbamide in feeds, **Ch 5**, p 17
hydrogen peroxide in milk, **Ch 47**, p 21
hydroxyproline in meat and meat
products, **Ch 39**, pp 15–16
hypochlorites in milk, **Ch 33**, pp 35–36
indole in crabmeat, oysters, and
shrimp, **Ch 35**, pp 19–20
iodide in water, **Ch 11**, pp 24–25
iron in beer, **Ch 27**, pp 14–15
iron in liming materials, **Ch 1**, p 7
iron in plants, **Ch 3**, pp 10–11
iron in water, **Ch 11**, p 14
ketosteroids in drugs, **Ch 21**, p 1
beta-lactam antibiotics in fluid milk
products, **Ch 33**, pp 48–50
lactic acid in eggs, **Ch 34**, p 9
lead on apples and pears, **Ch 9**, p 29
magnesium in cheese, **Ch 33**,
pp 82–84
malathion pesticide residues, **Ch 10**,
pp 84–85
manganese (acid-soluble) in animal
feed, **Ch 4**, p 65
manganese in fertilizers, **Ch 2**, p 38
manganese in liming materials, **Ch 1**,
p 8
manganese in plants, **Ch 3**, pp 11–12
menthol in cigarette filler, **Ch 3**,
pp 39–40
mercury in foods, **Ch 9**, p 37
methoxychlor residues, **Ch 10**, p 87
methyl anthranilate in nonalcoholic
beverages, **Ch 29**, p 5
2-(*p*-*tert*-butylphenoxy)-1-methylethyl
2-chloroethyl sulfite pesticide
residues, **Ch 10**, pp 62–63
mixed, zinc in plants, **Ch 3**, pp 14–15
molybdenum in plants, **Ch 3**, p 12
monoclonal enzyme immunoassay
methods, *Salmonella* in foods,
Ch 17, pp 146–153, 161
monoclonal enzyme-linked
immunosorbent assay, *L.*
monocytogenes in dairy products,
seafoods, and meats, **Ch 17**,
pp 232–234
natural coloring matters, **Ch 46**, p 5
niacin and niacinamide in drugs, foods,
and feeds, **Ch 45**, pp 17–18
nihydrzone in feeds, **Ch 5**, pp 22–23
nitrites in cured meat, **Ch 39**, pp 8–9
nitrodan in feeds, **Ch 5**, pp 24–25
nitrofurazone in feeds, **Ch 5**, p 16
nitrogen (ammonia) in water, **Ch 11**,
p 10
nitrogen (free amino) beer, **Ch 27**, p 10
nitrogen (nitrate and nitrite) in animal
feed, **Ch 4**, pp 38–39
nitrogen (total) in water, **Ch 11**, p 10
parathion in pesticide formulations,
Ch 7, p 123
parathion residues, **Ch 10**, pp 91–92
phenol in hazardous substances, **Ch 8**,
pp 5–6
phenylephrine hydrochloride in drugs,
Ch 18, pp 22–23
phosphorus in cheese, **Ch 33**,
pp 82–84
phosphorus in fruits and fruit products,
Ch 37, p 8
phosphorus in liming materials, **Ch 1**,
p 8
phosphorus in wines, **Ch 28**, p 9
phosphorus (total) in foods, **Ch 45**,
pp 50–52
photoelectric, chlorophyll in plants,
Ch 3, pp 31–32
piperonyl butoxide in pesticide
formulations, **Ch 7**, p 63
polyclonal enzyme immunoassay
methods, *Listeria* in foods, **Ch 17**,
pp 234–240
polyclonal enzyme immunoassay
methods, *Salmonella* in foods,
Ch 17, pp 153–156, 176–181
propyl gallate in food, **Ch 47**, pp 6–7
protein (crude) in animal feed and pet
food, **Ch 4**, pp 29
pyrogallol in hair dyes, **Ch 15**, p 14
rapid immunoenrichment-based
screening method, *Salmonella* in
foods, **Ch 17**, pp 181–185
reflectance, bacterial counts in raw and
pasteurized milk, **Ch 17**, pp 7–9
salicylic acid in food and beverages,
Ch 47, p 28
silicon in liming materials, **Ch 1**, pp 8–9
single, zinc in plants, **Ch 3**, pp 15–16

- sodium cyclamate and calcium cyclamate in canned fruit, **Ch 47**, p 48
- sodium lauryl sulfate in egg white, **Ch 47**, pp 42–43
- sorbic acid in wines, **Ch 28**, pp 17–18
- sulfadimethoxine in feeds, **Ch 5**, pp 33–34
- sulfur dioxide in beer, **Ch 27**, pp 15–16
- sulfurous acid in dried fruit, **Ch 47**, p 31
- tea seed oil in olive oil, **Ch 41**, p 54
- thiourea in orange peel, **Ch 47**, p 41
- titanium in liming materials, **Ch 1**, p 8
- α -tocopherol acetate in foods and feeds, **Ch 45**, pp 38–41, 43–44
- α -tocopherol in foods and feeds, **Ch 45**, pp 3–41
- total dietary fiber in foods and food products, **Ch 45**, pp 105–110
- TPTZ, iron in distilled liquors, **Ch 26**, p 8
- TPTZ, iron in wines, **Ch 28**, p 9
- trimethylamine nitrogen in seafood, **Ch 35**, p 9
- urea in animal feed, **Ch 4**, p 37
- vitamin A in mixed feeds, premixes, and human and pet foods, **Ch 45**, pp 6–9
- vitamin D in vitamin preparations, **Ch 45**, pp 25–29
- ZDBT, copper in distilled liquors, **Ch 26**, p 7
- zinc in fertilizers, **Ch 2**, p 40
- zinc in foods, **Ch 9**, p 45
- zirconium (soluble) in antiperspirant aerosols, **Ch 15**, pp 7–8
- Coloring matter**
in distilled liquors, **Ch 26**, p 2
in green coffee, **Ch 30**, p 1
in macaroni products, **Ch 32**, pp 75–76
- Colors**
artificial, in distilled liquors, **Ch 26**, p 2
coal-tar, in distilled liquors, **Ch 26**, p 2
in oils and fats, **Ch 41**, pp 57–58
- Column chromatographic methods.** *see also* **Chromatographic methods; Gas chromatographic methods; Liquid chromatographic methods**
aflatoxins in peanuts and peanut products, **Ch 49**, pp 9–10
alumina, hydrocarbons (saturated) in glycerides, **Ch 41**, p 56
butyric acid in fat, **Ch 41**, pp 15–16
charcoal, separation of sugars in honey, **Ch 44**, pp 28–30
color additives in foods, **Ch 46**, pp 1–3
fatty acids in eggs, **Ch 34**, p 11
fatty acids in seafood, **Ch 35**, pp 13–14
glycerides in monoglyceride concentrates, **Ch 41**, pp 58–59
- Combustion methods**
carbon determination, **Ch 12**, pp 3–5
Carius, bromine determination, **Ch 12**, pp 1–3
Carius, chlorine determination, **Ch 12**, pp 1–3
Carius, iodine determination, **Ch 12**, pp 1–3
crude protein in cereal grains and oilseeds, **Ch 32**, pp 44–45
hydrogen determination, **Ch 12**, pp 3–5
nitrogen in beer, wort, and brewing grains, **Ch 27**, p 9
nitrogen (total) in fertilizers, **Ch 2**, pp 12–13
oxygen flask, bromine determination, **Ch 12**, p 3
oxygen flask, chlorine determination, **Ch 12**, p 3
oxygen flask, iodine determination, **Ch 12**, p 3
oxygen flask, sulfur determination, **Ch 12**, pp 11–12
protein (crude) in animal feed, **Ch 4**, p 31
protein (crude) in meat and meat products, **Ch 39**, pp 6–7
titrimetric catalytic, sulfur determination, **Ch 12**, p 12
- Commercial sterility**
of canned, low-acid foods, **Ch 17**, pp 110–114
- Competitive direct enzyme-linked immunosorbent assay**
domoic acid in, **Ch 49**, pp 102–105
total fumonisins in corn, **Ch 49**, pp 61–63
- Comprehensive nitrogen method**
nitrogen (total) in fertilizers, **Ch 2**, pp 14–15
- Condensed milk.** *see also* **Sweetened condensed milk**
filth in, **Ch 16**, p 16
sampling, **Ch 33**, p 3, 71
starch in, **Ch 4**, p 59
- Condiment seeds**
excreta (rodent and insect) in, **Ch 16**, p 49
filth in, **Ch 16**, pp 44–47
- Condiments.** *see* **Spices and other condiments**
- Conductance method**
Salmonella in foods, **Ch 17**, pp 169–171
- Conductivity value**
of maple syrup, **Ch 44**, pp 39–40
- Confectionery**
alcohol in syrups used in, **Ch 44**, p 25
ash of, **Ch 44**, p 24
ether extract of, **Ch 44**, pp 24–25
glucose (commercial) in, **Ch 44**, p 24
moisture in, **Ch 44**, p 24
nitrogen in, **Ch 44**, p 24
paraffin in, **Ch 44**, p 25
reducing sugars in, **Ch 44**, p 24
sample preparation, **Ch 44**, p 24
shellac in, **Ch 44**, p 25
starch in, **Ch 44**, p 24
sucrose in, **Ch 44**, p 24
- Confirmatory method**
aflatoxin B₁ identification, **Ch 49**, pp 32–34
- aflatoxins B₁ and M₁ in liver, **Ch 49**, pp 49–51
- Constant boiling hydrochloric acid method**
sodium hydroxide standard solution, **App A**, p 7
standard solution, **App A**, p 4
- Continuous flow method**
C-4 plant sugars in honey, **Ch 44**, p 35
p-toluenesulfonamide residues in ice cream, **Ch 33**, pp 98–100
- Continuous hydride generation atomic absorption method**
selenium in feeds and premixes, **Ch 4**, pp 69–71
- Convection oven method**
moisture in frozen french-fried potatoes, **Ch 42**, p 14
- Cooking**
seafood products, **Ch 35**, p 2
- Cookware**
cadmium and lead in, **Ch 9**, pp 5–14
- Copper**
in animal feed, **Ch 4**, pp 60–61, 63
in beer, **Ch 27**, pp 13–14
in distilled liquors, **Ch 26**, p 7
in edible oils and fats, **Ch 9**, pp 14–15
in enteral products, **Ch 50**, pp 15–17
in fertilizers, **Ch 2**, pp 34–35
in foods, **Ch 9**, pp 16–23
in fortified food products, **Ch 50**, pp 65–72
in infant formulas, **Ch 50**, pp 15–18
in liver, **Ch 14**, pp 1–2
in milk and milk products, **Ch 33**, p 38
in pesticide formulations, **Ch 7**, pp 4, 9, 11–12, 16–17
in pet foods, **Ch 3**, pp 5–7; **Ch 4**, pp 60–61; **Ch 50**, pp 15–17
in plants, **Ch 3**, pp 2–7
reduced, invert sugar in sugars and syrups, **Ch 44**, p 10
in serum, **Ch 14**, p 2
in solid wastes, **Ch 9**, pp 46–50
in tea, **Ch 9**, pp 15–16; **Ch 30**, p 12
in water, **Ch 11**, pp 16–17
in waters and wastewaters, **Ch 9**, pp 50–60
in wines, **Ch 28**, p 7
- Copper carbonate pesticides**
copper in, **Ch 7**, p 11
- Copper catalyst method**
block digestion, protein (crude) in animal feed, forage (plant tissue), grain, and oilseeds, **Ch 4**, pp 34–36
protein (crude) in animal feed and pet food, **Ch 4**, pp 31–32
- Copper fungicides**
copper (water-soluble) in, **Ch 7**, p 12
- Copper naphthenate pesticides**
copper in, **Ch 7**, p 11
- Copper-reducing substances**
in spices, **Ch 43**, p 2
- Copper salts**
in animal feed, **Ch 4**, p 60
- Copper serum method**
water (added) in milk, **Ch 33**, p 30

- CuSO₄/TiO₂ mixed catalyst method**
protein (crude) in animal feed and pet food, **Ch 4**, p 25
- Copra and copra meal**
aflatoxins in, **Ch 49**, p 13
- Coprostanol**
in mammalian feces, **Ch 16**, p 69
- Cordials and liqueurs**
acids in, **Ch 26**, p 21
alcohol by volume, **Ch 26**, pp 19–20
alcohol in, **Ch 26**, p 19
alcoholic dairy products, **Ch 26**, pp 19–20
aldehydes in, **Ch 26**, p 20
ash of, **Ch 26**, p 21
cacao mass of chocolate liqueur, **Ch 31**, p 9
caramel in, **Ch 26**, p 21
fusel oil in, **Ch 26**, p 20
glycerol in, **Ch 26**, p 21
methanol in, **Ch 26**, p 20
phosphorus in, **Ch 26**, p 21
physical examination, **Ch 26**, p 19
solids (total) in, **Ch 26**, p 20
specific gravity of, **Ch 26**, p 19
sucrose in, **Ch 26**, p 21
volatile esters in, **Ch 26**, p 22
- Coriander**
filth in, **Ch 16**, pp 44–48
- Corn.** *see also* **Cereal foods; Grains**
aflatoxins in, **Ch 49**, pp 6–9, 14–24, 26–28
fat acidity, **Ch 32**, p 54
field corn in mixtures of field and sweet corn, **Ch 42**, p 9
foreign matter in canned products, **Ch 16**, p 41
fumonisins in, **Ch 49**, pp 56–63
N-methylcarbamate residues in kernels, **Ch 10**, pp 51–52
mold in cream style products, **Ch 16**, p 79
ochratoxin A in, **Ch 49**, pp 69–71
thiram residues in, **Ch 10**, pp 96–99
zearalenone in, **Ch 32**, p 54; **Ch 49**, pp 82–86
 α -zearalenone in, **Ch 49**, pp 83–84
- Corn cereals**
antioxidants in, **Ch 32**, p 63
filth in, **Ch 16**, p 28
- Corn chips**
filth in, **Ch 16**, pp 28, 36
- Corn flour**
filth in, **Ch 16**, p 25
- Corn grits**
extract of, **Ch 27**, p 33
filth in, **Ch 16**, p 22
sorting, **Ch 27**, p 32
- Corn Industries Research Foundation—AOAC methods**
moisture in corn syrups, **Ch 44**, pp 48–49
saccharides (major) in corn syrup, **Ch 44**, pp 52–53
saccharides (minor) in dextrose products, **Ch 44**, p 53
- Corn meal**
filth in, **Ch 16**, pp 21–22
iron in, **Ch 32**, p 44
mammalian feces in, **Ch 16**, p 66
- Corn oil**
peanut oil in, **Ch 41**, p 53
- Corn syrups and sugars**
acidity of, **Ch 44**, p 51
ash of, **Ch 44**, p 50
corn sugar in honey, **Ch 44**, p 33
dry substance in, **Ch 44**, pp 49–50
fructan (total) in foods, **Ch 44**, p 53
glucose in, **Ch 44**, pp 51–52
in honey, **Ch 44**, p 33
in maple syrup, **Ch 44**, pp 38–39
moisture in, **Ch 44**, pp 48–49
nitrogen in, **Ch 44**, p 51
saccharides (major) in, **Ch 44**, pp 52–53
saccharides (minor) in, **Ch 44**, p 53
sample preparation, **Ch 44**, p 48
in sugars and syrups, **Ch 44**, p 8
sugars (reducing) in, **Ch 44**, p 51
- Cortisone acetate**
in bulk drug and dosage forms, **Ch 21**, pp 2–3
- Cosmetics**
bacteria in, **Ch 17**, pp 6–7
color additives in, separation and identification, **Ch 46**, pp 1–14
deodorants and antiperspirants, **Ch 15**, pp 6–11
depilatories, **Ch 15**, p 11
efficacy of preservation of non-eye area water-miscible formulations, **Ch 15**, pp 3–6
ethyl alcohol in, **Ch 15**, pp 1–2
eye irritants in, **Ch 15**, p 3
face powders, **Ch 15**, pp 11–13
hair preparations, **Ch 15**, pp 13–15
propylene glycol in, **Ch 15**, pp 2–3
suntan preparations, **Ch 15**, p 15
vanishing cream, **Ch 15**, p 16
water in, **Ch 15**, pp 1–2
- Cottage cheese**
gelatin in, **Ch 33**, p 90
sorbic acid in, **Ch 33**, p 91
- Cottonseed and cottonseed products**
aflatoxins in, **Ch 49**, pp 7–9, 24–26, 28
- Cottonseed oil**
in oils and fats, **Ch 41**, p 52
peanut oil in, **Ch 41**, p 53
- Cough syrup**
pyrilamine in, **Ch 18**, p 19
- Coumarin**
in vanilla extract, **Ch 36**, pp 6–8
in wines, **Ch 28**, p 19
- Crab**
Listeria in, **Ch 17**, pp 229–234
- Crabmeat**
ammonia in, **Ch 35**, pp 8–9
filth in canned products, **Ch 16**, p 30
frozen, drained weight of, **Ch 35**, pp 6–7
generic identification of cooked and frozen, **Ch 35**, pp 31–32
indole in, **Ch 35**, pp 19–20
shell in canned products, **Ch 16**, p 30
- Cracking flotation method**
insect infestation (internal) of grains and seeds, **Ch 16**, p 21
insect infestation (internal) of oats, **Ch 16**, p 20
insect infestation (internal) of wheat, **Ch 16**, pp 19–20
- Cranberries**
maleic hydrazide residues in, **Ch 10**, pp 85–86
- Cranberry juice cocktail**
quinic, malic, and citric acids in, **Ch 37**, p 14
- Cranberry sauce**
mold in, **Ch 16**, p 74
- Cream**
acids (volatile) in, **Ch 33**, pp 65–66
ash of, **Ch 33**, p 66
color additives in, **Ch 33**, p 66
fat in, **Ch 33**, pp 66–70
fatty acids in, **Ch 33**, p 65
filth in, **Ch 16**, p 16
gelatin in, **Ch 33**, p 66
lactic acid in, **Ch 33**, p 65
lactose in, **Ch 33**, p 66
nitrogen (total) in, **Ch 33**, p 66
phosphatase in, **Ch 33**, p 66
preservatives in, **Ch 33**, p 66
pressurized, **Ch 33**, p 65
sample collection, **Ch 33**, p 64
sample preparation, **Ch 33**, pp 64–65
sediment in, **Ch 16**, p 16
solids (total) in, **Ch 33**, p 66
water (added) in, **Ch 33**, p 66
- Cream of tartar**
in tartrate powders, **Ch 25**, p 3
- Creams**
clioquinol in, **Ch 18**, pp 35–36
vanishing, **Ch 15**, p 16
- Creatine**
in meat, **Ch 39**, pp 14–15
in meat extracts and similar products, **Ch 39**, pp 24–25
- Creatinine**
in meat extracts and similar products, **Ch 39**, p 25
- Cresidine sulfonic acid**
in FD&C Red No. 40, **Ch 46**, pp 15–17
- Crops**
glyphosate and aminomethylphosphonic acid residues in, **Ch 10**, pp 78–83
- Crude fiber.** *see* **Fiber (crude)**
- Crude protein.** *see* **Protein (crude)**
- Cryoscopic methods**
freezing point of milk, **Ch 33**, pp 5–7
water (added) in milk, **Ch 33**, pp 30–33
- Crystalline substances**
in drugs, **Ch 18**, pp 54–55
- Crystallization method**
rotenone in Derris and Cubé powder, **Ch 7**, p 61
- Crystallographic methods**
crystalline substances in drugs, **Ch 18**, pp 54–55

- beta-ionone in flavor extracts and toilet preparations, **Ch 36**, p 26
beta-ionone in raspberry concentrates, **Ch 36**, pp 26–27
- Cubé powder**
ether extract of, **Ch 7**, p 62
rotenone in, **Ch 7**, pp 61–62
- Cucumbers**
organochlorine pesticide residues in, **Ch 10**, pp 32–33
- Culture media**
for eggs and egg products, **Ch 17**, pp 1–2
for *Salmonella*, **Ch 17**, pp 128–130
- Cumin**
filth in, **Ch 16**, pp 44–47
- Cundiff-Markunas method**
alkaloids (total as nicotine) in tobacco, **Ch 3**, pp 36–37
- Cuprethol method**
copper in beer, **Ch 27**, p 14
- Curculio larvae**
in pecan pieces, **Ch 16**, p 18
- Cured meats**
nitrites in, **Ch 39**, pp 8–9
- Curing preparations**
nitrites in, **Ch 47**, p 23
- Curry powder**
filth in, **Ch 16**, pp 44–47
- Cyanamide**
nitrogen (water-insoluble) in, **Ch 2**, p 16
- Cyanazine**
in technical products and pesticide formulations, **Ch 7**, pp 46–48
in water, **Ch 10**, pp 99–104
- Cyanide**
in distilled liquors, **Ch 26**, pp 17–18
in pesticide formulations, **Ch 7**, pp 17–18
in wines, **Ch 28**, p 15
- Cyanide method**
formaldehyde in pesticide formulations, **Ch 7**, p 133
- Cyanocobalamin**
in vitamin preparations, **Ch 45**, pp 58–59
- Cyanogenetic glucosides**
in feeds, **Ch 4**, p 75; **Ch 49**, p 123
- Cyclamates**
cyclohexylamine in, **Ch 47**, pp 49–51
in nonalcoholic beverages, **Ch 47**, pp 47–48
- Cycloate**
in finished drinking water, **Ch 10**, pp 41–47
- Cyclohexane-acetic acid solvent method**
iodine value of fats and oils, **Ch 41**, pp 7–9
- Cyclohexanol test**
colors (artificial) in distilled liquors, **Ch 26**, p 2
- Cyclohexylamine**
in cyclamates and artificially sweetened products, **Ch 47**, pp 49–51
- Cyclohexylsulfamate salts**
in nonalcoholic beverages, **Ch 47**, p 48
- Cyclopropene**
in oils, **Ch 41**, pp 52–53
- Cyfluthrin**
in pesticide formulations, **Ch 7**, pp 103–104
- λ-Cyhalothrin**
in agricultural products, **Ch 10**, pp 94–96
in foods, **Ch 10**, pp 17–26
- Cyhexatin**
technical and pesticide formulations, **Ch 7**, pp 131–132
- Cylinder plate method**
bacitracin in premix feeds, **Ch 5**, pp 63–64
- Cypermethrin**
in agricultural products, **Ch 10**, pp 94–96
in pesticide formulations, **Ch 7**, pp 58–59
- Cyprodinil**
in foods, **Ch 10**, pp 17–26
- Cysteic acid**
in food and feed ingredients, **Ch 45**, p 88
- Cystine**
in feeds, **Ch 4**, pp 9–17
- Cytidine 5'-monophosphate**
in infant formula and adult nutritional formula, **Ch 50**, pp 84–86
- 2,4-D**
in finished drinking water, **Ch 10**, pp 106–113
in pesticide formulations, **Ch 7**, pp 85, 90–92, 101–102
in soft drinks and sports drinks, **Ch 10**, pp 116–124
- DAADBSA. see 4,4-(Diazooamino) dibenzenesulfonic acid**
- Dairy products. see also Infant formulas; Milk**
aflatoxin M₁ in, **Ch 49**, p 47
alcoholic, alcohol by volume in, **Ch 26**, pp 19–20
alkaline phosphatase activity, **Ch 33**, pp 45–46
bacterial counts in, **Ch 17**, pp 27–29
butter, **Ch 33**, pp 75–81
cheese, **Ch 33**, pp 81–95
coliform counts in, **Ch 17**, pp 27–32
condensed milk, **Ch 33**, pp 70–71
cream, **Ch 33**, pp 64–70
dehydroacetic acid in cheese, **Ch 47**, p 19
dried milk, **Ch 33**, pp 71–75
evaporated milk, **Ch 33**, pp 70–71
extraneous materials in, **Ch 16**, pp 13–18
filth in, **Ch 16**, pp 16–18
ice cream and frozen desserts, **Ch 33**, pp 95–100
L. monocytogenes in, **Ch 17**, pp 232–257
Listeria spp. in, **Ch 17**, pp 229–232, 258–262
malted milk, **Ch 33**, pp 71–75
milk, **Ch 33**, pp 4–64
nonfat dry milk, **Ch 33**, pp 71–75
S. aureus in, **Ch 17**, pp 104–105
Salmonella in, **Ch 17**, pp 216–219
Salmonella in vanilla ice cream, **Ch 16**, pp 8–11
sampling, **Ch 33**, pp 1–4
sediment in, **Ch 16**, pp 13–16
sorbic acid in, **Ch 47**, p 29
sorbic acid in cheese, **Ch 47**, pp 28–29
titanium in cheese, **Ch 9**, p 45
- Dalapon**
in pesticide formulations, **Ch 7**, pp 86–87
- 2,4-DB**
in finished drinking water, **Ch 10**, pp 106–113
- D&C colors**
analysis of, **Ch 46**, pp 5–10
Blue No. 4, **Ch 46**, p 6
Blue No. 6, **Ch 46**, p 7
Blue No. 9, **Ch 46**, p 6
Brown No. 1, **Ch 46**, p 6
Green No. 5, **Ch 46**, p 7
Green No. 6, **Ch 46**, p 7
Green No. 8, **Ch 46**, p 7
lake red C amine in Red Nos. 8 and 9, **Ch 46**, p 15
lakes, **Ch 46**, p 10
Orange No. 4, **Ch 46**, p 7
Orange No. 5, **Ch 46**, p 7
Orange No. 10, **Ch 46**, p 7
Orange No. 11, **Ch 46**, p 8
Orange No. 17, **Ch 46**, p 8
pyrene in D&C Green No. 8, **Ch 46**, p 15
Red No. 6, **Ch 46**, pp 8, 21
Red No. 7, **Ch 46**, pp 7, 21
Red No. 8, **Ch 46**, pp 7–8
Red No. 9, **Ch 46**, p 8
Red No. 17, **Ch 46**, p 8
Red No. 19, **Ch 46**, pp 8, 21
Red No. 21, **Ch 46**, pp 8–9
Red No. 22, **Ch 46**, p 9
Red No. 27, **Ch 46**, p 8
Red No. 28, **Ch 46**, p 8
Red No. 30, **Ch 46**, p 8
Red No. 31, **Ch 46**, p 8
Red No. 33, **Ch 46**, p 9
Red No. 34, **Ch 46**, p 9
Red No. 36, **Ch 46**, p 9
Red No. 37, **Ch 46**, p 9
Red No. 39, **Ch 46**, p 9
Violet No. 2, **Ch 46**, pp 9–10
Yellow No. 7, **Ch 46**, pp 9–10
Yellow No. 8, **Ch 46**, p 9
Yellow No. 10, **Ch 46**, pp 9, 21
Yellow No. 11, **Ch 46**, pp 9–10, 21
- DPCA**
in pesticide formulations, **Ch 7**, p 87
in water, **Ch 10**, pp 27–32
- DCPA-diacid**
in finished drinking water, **Ch 10**, pp 106–113
- 2,4'-DDD**
pesticide residues in soft drinks and sports drinks, **Ch 10**, pp 125–136

- 4,4'-DDD**
pesticide residues in soft drinks and sports drinks, **Ch 10**, pp 125–136
in water, **Ch 10**, pp 27–32
- o,p'-DDD**
in foods, **Ch 10**, pp 17–26
- DDE**
multiresidue methods, **Ch 10**, pp 1–10
- 2,4'-DDE**
pesticide residues in soft drinks and sports drinks, **Ch 10**, pp 125–136
- 4,4'-DDE**
pesticide residues in soft drinks and sports drinks, **Ch 10**, pp 125–136
in water, **Ch 10**, pp 27–32
- DDT**
in fruits and vegetables, **Ch 10**, pp 10–12
multiresidue methods, **Ch 10**, pp 1–10
residues of, **Ch 10**, pp 67–69
in technical products and pesticide formulations, **Ch 7**, pp 87–90
- 2,4'-DDT**
pesticide residues in soft drinks and sports drinks, **Ch 10**, pp 125–136
- 4,4'-DDT**
pesticide residues in soft drinks and sports drinks, **Ch 10**, pp 125–136
in water, **Ch 10**, pp 27–32
- o,p'-DDT**
multiresidue methods, **Ch 10**, pp 1–10
- Decoquinat**
in animal tissues, **Ch 23**, pp 6–7
in feeds, **Ch 5**, pp 10–11, 80–82
- Deep maroon color additive**, **Ch 46**, p 9
- Defined substrate technology method**
total coliforms and *E. coli* in water, **Ch 17**, p 41
- Dehydroacetic acid**
in cheese, **Ch 47**, p 19
- Deltamethrin**
in agricultural products, **Ch 10**, pp 94–96
in technical products and pesticide formulations, **Ch 7**, p 60
- Demeclocycline**
in milk, **Ch 33**, pp 52–57
- Denaturants**
in alcoholic products, (volatile), **Ch 8**, p 1
- Deniges-Tourrou test**
dulcin in food, **Ch 47**, p 51
- Densitometric methods**
alcohol by volume in distilled liquors, **Ch 26**, pp 4–5
alcohol by volume in liqueurs and alcoholic dairy products, **Ch 26**, pp 19–20
- Deodorants. see also Antiperspirants**
aluminum in, **Ch 15**, pp 6–7
boric acid in, **Ch 15**, pp 8–9
chlorides in, **Ch 15**, p 9
hexachlorophene in, **Ch 15**, pp 9–10
methenamine in, **Ch 15**, p 10
phenolsulfonates in, **Ch 15**, pp 10–11
sulfates in, **Ch 15**, p 9
urea in, **Ch 15**, p 11
- zinc in, **Ch 15**, pp 6–7
- Deoxynivalenol**
in wheat, **Ch 32**, p 54; **Ch 49**, pp 54–56
- Deoxyribonucleic acid methods**
colorimetric, *Listeria* spp. in dairy products, seafoods, and meats, **Ch 17**, pp 229–232
colorimetric, *Salmonella* in foods, **Ch 17**, pp 161–164
membrane filter, somatic cells in milk, **Ch 17**, p 271
- Depilatories**
sulfides in powders, **Ch 15**, p 11
- Derivative gas chromatographic methods**
organic acids in vanilla extract, **Ch 36**, p 12
- Derris and Cubé powder**
ether extract of, **Ch 7**, p 62
rotenone in, **Ch 7**, pp 61–62
- Desiccation methods**
vacuum, water (free) in fertilizers, **Ch 2**, p 5
- Dessert powders**
gelatin, **Ch 38**, pp 1–3
starch, **Ch 38**, pp 2–3
- Detection methods**
nitrates in fertilizers, **Ch 2**, p 12
- Detergent method**
fat in raw milk, **Ch 33**, pp 23–24
- Detergent sanitizing action**
of disinfectants, **Ch 6**, pp 24–27
- Deuterium**
site-specific deuterium/hydrogen ratios in vanilla, **Ch 36**, pp 13–15
- Devarda method**
nitrogen (ammoniacal and nitrate) in fertilizers, **Ch 2**, p 16
- Dexamethasone**
in drug substance and elixirs, **Ch 21**, pp 9–11
- Dexamethasone acetate**
in bulk drug and suspensions, **Ch 21**, pp 11–12
- Dexamethasone phosphate**
in drugs, **Ch 21**, p 9
- Dextran**
in raw cane sugar, **Ch 44**, pp 16–18
- Dextrin**
in beer, **Ch 27**, p 7
in honey, **Ch 44**, pp 28–30
in roasted coffee, **Ch 30**, pp 3–4
in vinegars, **Ch 43**, p 13
- Dextrose**
in corn syrup, **Ch 44**, pp 52–53
- Dextrose products**
ash in, **Ch 44**, p 50
glucose in, **Ch 44**, pp 51–52
nitrogen in, **Ch 44**, p 51
saccharides (minor) in, **Ch 44**, p 53
- Diacetyl**
in beer, **Ch 27**, p 8
- Diacetylmorphine**
in drug powders and tablets, **Ch 22**, p 4
in drugs, **Ch 20**, p 16
- Diamine test**
5-nitro-2-propoxyaniline in food, **Ch 47**, p 52
- 2,5-Diaminotoluene**
in hair dyes and rinses, **Ch 15**, p 13
- Diastase method**
starch in animal feed, **Ch 4**, p 57
starch in cacao products, **Ch 31**, p 16
- Diastatic activity**
of honey, **Ch 44**, p 36
of wheat flour, **Ch 32**, p 21
- Diastatic power**
of malt, **Ch 27**, pp 29–30
of malt syrups, **Ch 27**, p 37
- Diazepam**
in drug tablets, **Ch 22**, pp 2–3
- Diazinon**
confirmatory method, **Ch 10**, pp 39–40
in finished drinking water, **Ch 10**, pp 41–47
in fruits and vegetables, **Ch 10**, pp 36–39
multiresidue methods, **Ch 10**, pp 1–10
in pesticide formulations, **Ch 7**, pp 51, 106–107
- 4,4-(Diazoamino)bis(5-methoxy-2-methyl-benzenesulfonic acid)**
in FD&C Red No. 40, **Ch 46**, pp 16–17
- 4,4-(Diazoamino)dibenzenesulfonic acid**
in FD&C Yellow No. 6, **Ch 46**, pp 18–21
- 1,2-Dibromo-3-chloropropane**
in water, **Ch 10**, pp 113–116
- 1,2-Dibromoethane**
in water, **Ch 10**, pp 113–116
- Dibromofluorescein color additive**, **Ch 46**, p 7
- Dibutyltin dilaurate**
in feeds, **Ch 5**, pp 11–12
- Dicamba**
in finished drinking water, **Ch 10**, pp 106–113
in pesticide formulations, **Ch 7**, pp 90–92
- Dicamba-2,4-D**
in pesticide formulations, **Ch 7**, pp 90–92
- Dicamba-MCPA**
in pesticide formulations, **Ch 7**, pp 90–92
- Dichlobenil**
in pesticide formulations, **Ch 7**, p 92
- Dichlone**
in fresh fruits and vegetables, **Ch 10**, pp 69–70
- Dichlorimide method**
2,5-diaminotoluene in hair preparations, **Ch 15**, p 13
paraphenylenediamine in hair preparations, **Ch 15**, p 13
- 3,5-Dichlorobenzoic acid**
in finished drinking water, **Ch 10**, pp 106–113
- 2,6-Dichloroindophenol titrimetric method**
ascorbic acid in vitamin preparations and juices, **Ch 45**, pp 22–23

- vitamin C in ready-to-feed milk-based infant formula, **Ch 50**, pp 11–12
- Dichlorophene**
in drugs, **Ch 18**, pp 40–41
- 2,4-Dichlorophenoxyacetic acid.** *see* **2,4-D**
- Dichlorprop**
in finished drinking water, **Ch 10**, pp 106–113
- Dichlorvos**
in finished drinking water, **Ch 10**, pp 41–47
in foods, **Ch 10**, pp 17–26
- Dichromate oxidation method**
alcohol in wines, **Ch 28**, pp 2–3
ether in drugs, **Ch 18**, p 2
glycerol in beer, **Ch 27**, p 6
- Dicofol**
in pesticide formulations, **Ch 7**, pp 93–94
- Dicumarol**
in drugs, **Ch 19**, pp 20–23
- Dieldrin**
in fruits and vegetables, **Ch 10**, pp 10–12
multiresidue methods, **Ch 10**, pp 1–10
in pesticide formulations, **Ch 7**, pp 72–73
in soft drinks and sports drinks, **Ch 10**, pp 125–136
in water, **Ch 10**, pp 27–32
- Dienestrol**
in tablets, **Ch 21**, p 4
- Dietary fiber.** *see* **Fiber (dietary)**
- Dietary supplements.** *see also* **Vitamins and other nutrients**
aristolochic acid, **Ch 51**, pp 27–31
bovine origin, bovine immunoglobulin G in, **Ch 33**, pp 62–64
β-Carotene, **Ch 51**, pp 13–19
enzymes/coenzymes, **Ch 51**, pp 33–35
ephedra alkaloids, **Ch 51**, pp 1–10
Ginkgo biloba, **Ch 51**, pp 19–24
glucosamine, **Ch 51**, pp 10–13
goldenseal, **Ch 51**, pp 31–33
guidelines for dietary supplements and botanicals, **App K**
isoflavones in, **Ch 45**, pp 121–128
lycopene, **Ch 51**, pp 35–39
lysine in, **Ch 45**, pp 86–87
saw palmetto, **Ch 51**, pp 24–27
vitamin B₁₂ in, **Ch 50**, pp 36–38
- Diethyether extraction methods**
Randall/Soxtec, fat (crude) in feeds, cereal grains, and forages, **Ch 4**, pp 41–42
- Diethylcarbonate**
in food, **Ch 47**, p 19
in wines, **Ch 28**, p 18
- Diethylpropion hydrochloride**
in drug substance and tablets, **Ch 19**, pp 34–35
- Diethylstilbestrol**
in drugs, **Ch 21**, pp 3–4
in feeds, **Ch 5**, p 12
- Differential pulse polarographic methods**
arsenic in cacodylate injections, **Ch 18**, p 5
iodine in thyroid drug tablets, **Ch 21**, p 14
saccharin in food, **Ch 47**, pp 54–55
sulfites in food, **Ch 47**, pp 32–33
- Differential test**
phosphatase in milk, **Ch 33**, p 45
- Diflubenzuron**
in pesticide formulations, **Ch 7**, p 95
- Digestion methods.** *see also* **Microwave digestion**
closed system, elements in foods, **Ch 9**, p 2
enzyme, filth in pork sausage, ground beef, or hamburger, **Ch 16**, pp 32–33
fiber (crude) in plants, **Ch 3**, p 28
mercury in fish, **Ch 9**, p 37
nitrogen (nitrite) in wheat flour, **Ch 32**, p 18
pancreatin, filth in baked goods with fruit and nut tissues, **Ch 16**, p 26
pancreatin, filth in corn flour, **Ch 16**, p 25
perchloric acid, total color in color additives, **Ch 46**, p 13
protein in flour, **Ch 32**, pp 14–15
proteolytic activity of flour and malted wheat flour, **Ch 32**, pp 25–26
selenium in feeds and premixes, **Ch 4**, pp 68–69, 71
shell in canned clams and oysters, **Ch 16**, p 30
shell in canned crabmeat, **Ch 16**, p 30
wet, potassium in fertilizers, **Ch 2**, p 23
- Digital density meter method**
specific gravity of beer, **Ch 27**, p 3
specific gravity of wort, **Ch 27**, pp 3, 38
- Digitalis**, **Ch 20**, pp 27–30
- Digitonin method**
sterols in macaroni products, **Ch 32**, pp 74–75
- Digitoxin**
in drugs, **Ch 20**, pp 27–28
- Digitoxosides**
in drugs, **Ch 20**, pp 29–30
- Diglycerides**
in fats and oils, **Ch 41**, pp 62–64
- Digoxin**
in drugs, **Ch 20**, pp 28–30
- Dihydroanethole**
in nonalcoholic beverages, **Ch 29**, pp 4–5
- Dihydrocodeinone**
in drugs, **Ch 20**, p 4
- Dihydrosafrole**
in nonalcoholic beverages, **Ch 29**, pp 4–5
- Diiodofluorescein color additive**
analysis of, **Ch 46**, p 7
- Dill seed**
filth in, **Ch 16**, pp 44–47
- Dill weed**
filth in, **Ch 16**, pp 44–47
- Dilution method**
double, sucrose in sugars and syrups, **Ch 44**, p 8
- Dimethisterone**
in drugs, **Ch 21**, pp 6–7
- Dimethyl-p-nitrophenylphosphate.** *see also* **Methyl paraoxon**
in soft drinks and sports drinks, **Ch 10**, pp 116–124
- Dimetridazole**
in feeds, **Ch 5**, p 13
- 1,3-Dinitrobenzene**
residues in soil, **Ch 10**, pp 136–138
- Dinitrodiphenylhydrazine method**
santonin in santonica, **Ch 20**, p 32
- Dinitrophenol**
in drugs, **Ch 19**, p 3
- Dinitrophenylhydrazine method**
santonin in drug mixtures, **Ch 20**, p 32
- 2,4-Dinitrotoluene**
residues in soil, **Ch 10**, pp 136–138
in wastewater and groundwater, **Ch 11**, pp 27–28
- Dionine**
in drug syrups, **Ch 20**, p 4
- Dioxins**
in oils and fats, **Ch 41**, pp 56–57
- Diphenamid**
in finished drinking water, **Ch 10**, pp 41–47
- 2,2'-Diphenyl-2-picrylhydrazyl reaction**
antioxidant activity in foods and beverages, **Ch 47**, pp 8–11
- Diquat**
in pesticide formulations, **Ch 7**, p 48
in potatoes, **Ch 10**, pp 70–72
- Direct acid hydrolysis**
starch in animal feed, **Ch 4**, p 57
- Direct current arc excitation method**
metals in plants, **Ch 3**, pp 3–4
- Direct gas chromatographic methods**
nonvanillin vanilla volatiles in vanilla extract, **Ch 36**, pp 12–13
- Direct methods**
lignin in plants, **Ch 3**, pp 30–31
- Direct reading spectrographic method**
metals in plants, **Ch 3**, pp 2–3
- Direct sampling bottle method**
sampling of fluid fertilizers, **Ch 2**, pp 1–2
- Direct saponification method**
cholesterol in foods, **Ch 45**, pp 104–105
- Direct sieving method**
filth in tea, **Ch 16**, p 12
- Disc electrophoresis method**
detection of frozen and thawed shucked oysters, **Ch 35**, pp 4–6
- Disinfectants.** *see also* **Seed disinfectants**
Bacillus subtilis testing of liquid sporicides, **Ch 6**, pp 44–47
bacteriostatic activity of laundry additive disinfectants, **Ch 6**, pp 41–42
chlorine (available) in, **Ch 6**, pp 22–23
detergent sanitizing action of, **Ch 6**, pp 24–27

- fungicidal activity of, **Ch 6**, pp 23–24
germicidal action of, **Ch 6**, pp 24–32
germicidal equivalent concentration, **Ch 6**, pp 22–23
germicidal spray products, **Ch 6**, pp 28–32
hard surface carrier test methods, **Ch 6**, pp 6–22
laundry additive, **Ch 6**, pp 41–42
phenol coefficient methods, **Ch 6**, pp 1–6
phenols and phenates in formulations, **Ch 6**, pp 3–6
Pseudomonas aeruginosa testing, **Ch 6**, pp 6, 18–22
Salmonella choleraesuis testing, **Ch 6**, pp 10–13
Salmonella enterica testing, **Ch 6**, pp 6–10
Salmonella typhi testing, **Ch 6**, pp 1–3
sporocidal activity of, **Ch 6**, pp 32–37, 44–47
spray products, **Ch 6**, pp 28–32
Staphylococcus aureus testing, **Ch 6**, pp 3, 13–18
for swimming pools, **Ch 6**, pp 42–44
tuberculocidal activity of, **Ch 6**, pp 37–41
use-dilution methods, **Ch 6**, pp 6–10, 14–22
- Dispersion microscopy**
glass fragment characterization and matching, **Ch 24**, pp 1–3
- Distillation methods.** *see also* **Steam distillation methods**
alkaloids (total as nicotine) in tobacco, **Ch 3**, pp 35–36
arsenic in iron-arsenic tablets, **Ch 18**, p 5
arsenic in iron methylarsenate, **Ch 18**, p 5
fluoride in plants, **Ch 3**, pp 19–23
fluorine in animal feed, **Ch 4**, p 63
fluorine in foods, **Ch 9**, pp 24–28
fluorine (total) in pesticide formulations, **Ch 7**, pp 6–7
hydrazine sulfate, arsenic (total) in pesticide formulations, **Ch 7**, p 2
meperidine in drugs, **Ch 18**, p 18
moisture in animal feed, **Ch 4**, pp 1–2
moisture in cheese, **Ch 33**, pp 81–82
moisture in hops, **Ch 27**, pp 34–35
moisture in spices, **Ch 43**, pp 1–2
neostigmine in drugs, **Ch 20**, p 15
sulfur dioxide in meat extracts and similar products, **Ch 39**, p 25
thiram in pesticide formulations, **Ch 7**, pp 39–40
with toluene, moisture in animal feed, **Ch 4**, pp 1–2
- Distilled liquors**
acetone in, **Ch 26**, p 14
acids in, **Ch 26**, p 9
alcohol by volume, **Ch 26**, pp 2–6
alcohol by weight, **Ch 26**, p 6
alcohols (higher) in, **Ch 26**, pp 12–14
aldehydes in, **Ch 26**, pp 9–11
ash of, **Ch 26**, p 6
chloride in, **Ch 26**, pp 8–9
color of, **Ch 26**, p 1
coloring matter (natural and artificial organic and water-soluble), **Ch 26**, p 2
colors (artificial) in, **Ch 26**, p 2
colors (coal-tar) in, **Ch 26**, p 2
copper in, **Ch 26**, p 7
cordials and liqueurs, **Ch 26**, pp 19–22
cyanide in, **Ch 26**, pp 17–18
esters in, **Ch 26**, pp 9–10
ethyl acetate in, **Ch 26**, pp 12–14
ethyl carbamate in, **Ch 26**, pp 18–19
extract of, **Ch 26**, p 6
furfural in, **Ch 26**, p 14
fusel oil in, **Ch 26**, pp 11–12
iron in, **Ch 26**, p 8
isopropanol in, **Ch 26**, p 14
ketones in, **Ch 26**, p 14
methanol in, **Ch 26**, pp 15–16
phosphorus in, **Ch 26**, p 7
physical examination, **Ch 26**, p 1
potassium in, **Ch 26**, pp 6–7
sodium in, **Ch 26**, p 7
specific gravity (apparent) of, **Ch 26**, p 2
spirits, **Ch 26**, pp 1–19
tannin in, **Ch 26**, p 17
tertiary butyl alcohol in, **Ch 26**, p 14
- Disulfiram**
in drug tablets, **Ch 19**, pp 31–32
- Disulfoton**
in finished drinking water, **Ch 10**, pp 41–47
in pesticide formulations, **Ch 7**, pp 107–108
- Disulfoton sulfone**
in finished drinking water, **Ch 10**, pp 41–47
- Disulfoton sulfoxide**
in finished drinking water, **Ch 10**, pp 41–47
- Dithianon**
in technical products and formulations, **Ch 7**, pp 31–32
- Dithiocarbamates**
in pesticide formulations, **Ch 7**, p 32
- Dithiodiglycolic acid**
in cold permanent waves for hair, **Ch 15**, pp 14–15
- Dithizone method**
cadmium in foods, **Ch 9**, p 22
cobalt in plants, **Ch 3**, pp 8–10
lead in foods, **Ch 9**, p 33
mercury in foods, **Ch 9**, p 37
zinc in plants, **Ch 3**, pp 15–16
- Diuron**
in water, **Ch 10**, pp 99–104
- DMF test**
furazolidone in feeds, **Ch 5**, pp 16–17
zoalene in feeds, **Ch 5**, pp 16–17
- DNA colony hybridization method**
detection of *E. coli* producing heat-labile enterotoxin, **Ch 17**, pp 69–72
enterotoxigenic *E. coli*, **Ch 17**, pp 72–76
Salmonella in foods, **Ch 17**, pp 161, 212–216
- DNB.** *see* **1,3-Dinitrobenzene**
- DNT.** *see* **2,4-Dinitrotoluene**
- Docosenoic acid**
in oils and fats, **Ch 41**, pp 30–31
- Dodecyl gallate**
in oils, fats, and butter oil, **Ch 47**, pp 2–5
- Dodine**
in fruits and nuts, **Ch 10**, p 72
in pesticide formulations, **Ch 7**, p 132
- Domoic acid**
in mussels, **Ch 35**, p 11; **Ch 49**, pp 88–89
in shellfish, **Ch 49**, pp 102–105
- Double dilution method**
sucrose in sugars and syrups, **Ch 44**, p 8
- Double variation method**
glass fragment characterization and matching, **Ch 24**, pp 1–3
- Doxycycline**
in milk, **Ch 33**, pp 52–57
- Drained weight method**
seafoods in seafood cocktail, **Ch 35**, p 7
shrimp in shrimp cocktail, **Ch 35**, p 7
- Dressings.** *see* **Food dressings**
- Dried egg products**
Salmonella in, **Ch 17**, pp 128–132, 144–146, 153–156, 161–164, 171–205, 210–216
- Dried fruits**
moisture in, **Ch 37**, p 4
sulfurous acid in, **Ch 47**, p 31
- Dried milk and its products.** *see also* **Dairy products**
aflatoxin M₁ in, **Ch 33**, p 38
alkalinity of ash, **Ch 33**, p 72
ash of, **Ch 33**, p 72
bovine immunoglobulin G analysis, **Ch 33**, pp 62–64
bovine immunoglobulin G in, **Ch 33**, pp 62–64
citric acid in, **Ch 33**, p 73
fat (crude) or ether extract in, **Ch 4**, p 41
fat in, **Ch 33**, p 73
filth in, **Ch 16**, p 16
iodine in, **Ch 33**, pp 36–38
lactic acid in, **Ch 33**, p 73
Listeria in, **Ch 17**, pp 241–250
moisture in, **Ch 33**, p 72
N-nitrosodimethylamine in, **Ch 33**, pp 73–74
potassium in, **Ch 33**, pp 74–75
protein in, **Ch 33**, p 72
Salmonella in, **Ch 16**, pp 8–11; **Ch 17**, pp 131–132, 144–146, 150–156, 159–164, 167–173, 176–181, 190–202, 210–212; **Ch 33**, p 75
sample preparation, **Ch 33**, p 72
sampling, **Ch 33**, pp 3, 71–72
sodium in, **Ch 33**, pp 74–75
starch in, **Ch 4**, p 59
taurine in, **Ch 50**, pp 8–10

- vitamin D in, **Ch 45**, p 33
- Dried vegetables.** see **Vegetable products (dried)**
- Drinking water**
- bromide in, **Ch 11**, pp 29–31
- chloride in, **Ch 11**, pp 29–31
- chlorinated acidic pesticide residues in, **Ch 10**, pp 106–113
- chromium (dissolved hexavalent) in, **Ch 9**, pp 60–62
- ethylene thiourea residues in, **Ch 10**, pp 104–106
- fluoride in, **Ch 11**, pp 29–31
- N*-methylcarbamoyloximes and *N*-methylcarbamates in, **Ch 10**, p 52–55
- nitrate-N in, **Ch 11**, pp 29–31
- nitrite-N in, **Ch 11**, pp 29–31
- nitrogen- and phosphorus-containing pesticide residues in, **Ch 10**, pp 41–47
- orthophosphate in, **Ch 11**, pp 29–31
- pesticide residues in, **Ch 10**, pp 99–104
- sulfate in, **Ch 11**, pp 29–31
- Drugs.** see also **Drugs and feed additives in animal tissues; Drugs in feeds; specific drugs**
- acids, **Ch 19**, pp 1–2
- adrenocortico steroids, **Ch 21**, pp 8–14
- alkaloids, **Ch 20**, pp 1–27
- alkaloids and related amines, **Ch 18**, pp 44–47, 53
- alkanolamines, **Ch 18**, pp 21–26
- aminobenzoates, **Ch 18**, pp 28–32
- amphetamines, **Ch 22**, pp 1–2
- analgesics, **Ch 19**, pp 7–12
- anticoagulants, **Ch 19**, pp 20–23
- antifungal, **Ch 18**, pp 55–56
- antihistamines, **Ch 18**, pp 18–21
- antihypertensive, **Ch 18**, pp 57–58
- antiparkinsonian, **Ch 18**, pp 56–57
- antipyretics, **Ch 19**, pp 7–12
- barbiturates, **Ch 18**, pp 47–48
- chinchona alkaloids, **Ch 20**, pp 16–18
- color additives in, separation and identification, **Ch 46**, pp 1–14
- common and chemical names, **Ch 18**, pp 59–61; **Ch 19**, pp 36–37; **Ch 20**, p 35; **Ch 21**, p 15; **Ch 22**, p 7
- digitalis, **Ch 20**, pp 27–30
- ephedra alkaloids, **Ch 20**, pp 9–11
- ergot alkaloids, **Ch 20**, pp 11–14
- estrogens, natural, **Ch 21**, pp 1–3
- estrogens, synthetic, **Ch 21**, pp 3–6
- extraction with lighter-than-water solvents, **Ch 18**, p 1
- foreign matter in, (leafy and crude), **Ch 16**, p 54
- general methods, **Ch 18**, p 1
- halogenated, **Ch 18**, pp 3–5
- hypnotics, **Ch 19**, pp 13–20
- inorganic, **Ch 18**, pp 5–17
- ippecac alkaloids, **Ch 20**, pp 8–9
- microchemical tests, **Ch 18**, pp 44–53
- microscopy, **Ch 18**, pp 54–55
- natural products, **Ch 20**, pp 30–34
- niacin and niacinamide in, **Ch 45**, pp 17–18, 20–21
- opium alkaloids, **Ch 20**, pp 1–6
- partition chromatography with purified diatomaceous earth, **Ch 18**, p 1
- phenethylamines, **Ch 18**, pp 27–28
- phenolic, **Ch 19**, pp 2–7
- phenothiazines, **Ch 18**, pp 47, 51
- physostigmine alkaloids, **Ch 20**, pp 14–16
- progestational steroids, **Ch 21**, pp 6–8
- rauwolfia alkaloids, **Ch 20**, pp 18–25
- sampling, **Ch 18**, p 1
- sedatives, **Ch 19**, pp 13–20
- solvents in, **Ch 18**, pp 2–3
- sulfonamides, **Ch 19**, pp 24–26
- sulfur-containing, **Ch 19**, pp 30–35
- sympathomimetic, **Ch 18**, pp 51–52
- synthetics, **Ch 18**, pp 32–44, 47, 49–51, 53
- thiazides, **Ch 19**, pp 27–30
- thyroid, **Ch 21**, p 14
- RRR*- or *all-rac-alpha*-tocopherol in, **Ch 45**, pp 41–43
- trimethobenzamide hydrochloride in, **Ch 18**, p 55
- tropane alkaloids, **Ch 20**, pp 6–7
- vitamin E in, **Ch 45**, pp 46–47
- xanthine alkaloids, **Ch 20**, pp 7–8
- xanthine group alkaloids, **Ch 18**, p 53
- Drugs and feed additives in animal tissues**
- ANOT, **Ch 23**, p 1
- arsenic, **Ch 23**, p 2
- chlortetracycline, **Ch 23**, pp 22–26
- clopidol, **Ch 23**, pp 2–6
- common and chemical names of drugs, **Ch 23**, p 45
- decoquinat, **Ch 23**, pp 6–7
- ethoxyquin, **Ch 23**, p 7
- fenbendazole, **Ch 23**, pp 7–8
- beta-lactam antibiotics, **Ch 23**, pp 20–22
- melengestrol acetate, **Ch 23**, pp 8–10
- monensin in chicken, swine, and bovine tissues, **Ch 23**, pp 39–44
- nalidixic acid, **Ch 23**, pp 10–11
- narasin in chicken, swine, and bovine tissues, **Ch 23**, pp 39–44
- oxytetracycline, **Ch 23**, pp 22–26
- ractopamine in swine, bovine, and turkey tissues, **Ch 23**, pp 26–29
- ractopamine (parent and total) in bovine, swine, and turkey tissues, **Ch 23**, pp 29–39
- sulfamethazine in raw bovine milk, **Ch 23**, pp 14–15
- sulfamethazine in swine tissues, **Ch 23**, pp 11–14
- sulfonamides, **Ch 23**, pp 15–19
- tetracycline, **Ch 23**, pp 22–26
- zoalene, **Ch 23**, pp 19–20
- Drugs in feeds**
- 2-acetylamino-5-nitrothiazole, **Ch 5**, pp 1–2
- aklomid, **Ch 5**, pp 2–3
- 2-amino-5-nitrothiazole, **Ch 5**, p 4
- p*-aminobenzoic acid, **Ch 5**, pp 3–4
- amprolium, **Ch 5**, pp 4–5
- antibiotics, **Ch 5**, pp 60–88
- arprinocid, **Ch 5**, pp 5–6
- arsanilic acid, **Ch 5**, pp 3–4, 6–7
- arsenic (total), **Ch 5**, pp 7–8
- bacitracin in feed supplements, **Ch 5**, p 64
- bacitracin in mixed feeds, **Ch 5**, pp 64–65
- bacitracin in premixes, **Ch 5**, pp 44–45, 63–64
- bacitracin-MD in complete feed, **Ch 5**, pp 65–66
- bifuran, **Ch 5**, p 16
- bithionol, **Ch 5**, p 8
- buquinolate, **Ch 5**, pp 8–9
- cadmium anthranilate, **Ch 5**, p 9
- carbadox, **Ch 5**, pp 9–10
- chlortetracycline, **Ch 5**, p 46
- chlortetracycline HCl, **Ch 5**, pp 66–68
- common and chemical names of, **Ch 5**, p 88
- decoquinat, **Ch 5**, pp 10–11
- dibutyltin dilaurate, **Ch 5**, pp 11–12
- diethylstilbestrol in, **Ch 5**, p 12
- dimetridazole, **Ch 5**, p 13
- erythromycin, **Ch 5**, pp 68–69
- ethopabate, **Ch 5**, pp 13–14
- furazolidone, **Ch 5**, pp 14–17
- glycarbylamide, **Ch 5**, p 17
- griseofulvin in, **Ch 5**, p 46
- hygromycin B, **Ch 5**, p 69
- ipronidazole, **Ch 5**, p 18
- lasalocid, **Ch 5**, pp 46–47, 57–60, 69–70
- lincomycin, **Ch 5**, pp 70–71
- melengestrol acetate in feed supplements, **Ch 5**, pp 18–20
- monensin, **Ch 5**, pp 47–57, 71–73
- neomycin, **Ch 5**, pp 73–75
- nequinat, **Ch 5**, p 20
- nicarbazin, **Ch 5**, pp 20–21
- nicotine, **Ch 5**, p 21
- nifursol, **Ch 5**, p 22
- nihydrazone, **Ch 5**, pp 22–23
- nitarson, **Ch 5**, p 23
- nithiazide, **Ch 5**, pp 23–24
- nitrodan, **Ch 5**, pp 24–25
- nitrofurazone, **Ch 5**, p 16
- nitromide, **Ch 5**, p 25
- nitrophenide, **Ch 5**, p 25
- novobiocin, **Ch 5**, p 75
- nystatin, **Ch 5**, pp 75–76
- oleandomycin, **Ch 5**, p 76
- oxytetracycline, **Ch 5**, pp 76–77
- phenothiazine, **Ch 5**, p 26
- piperazine, **Ch 5**, pp 26–27
- procaine penicillin, **Ch 5**, p 77
- pyrantel tartrate, **Ch 5**, p 27
- racephenicol, **Ch 5**, pp 27–29
- reserpine, **Ch 5**, pp 29–30
- ronnel, **Ch 5**, pp 30–31
- roxarsone, **Ch 5**, pp 31–33
- sample preparation, **Ch 5**, p 1
- sampling of animal feed, **Ch 5**, p 1
- spectinomycin, **Ch 5**, p 78

- streptomycin, **Ch 5**, pp 78–79
sulfadimethoxine, **Ch 5**, pp 33–34
sulfaguanidine, **Ch 5**, p 34
sulfamerazine in, **Ch 5**, pp 37–38
sulfamethazine, **Ch 5**, pp 35, 37–38, 40–44
sulfanitran, **Ch 5**, pp 35–36
sulfathiazole, **Ch 5**, pp 3–4, 36–38
sulfathiazole, **Ch 5**, pp 37–38
sulfonamides, **Ch 5**, pp 37–38
thiabendazole, **Ch 5**, pp 38–40
thiabendazole in supplements and premixes, **Ch 5**, pp 39–40
tylosin, **Ch 5**, p 79
zoalene, **Ch 5**, pp 16–17, 40
- Drupelet berries**
mold in, **Ch 16**, p 74
- Dry ashing methods**
calcium in animal feed, **Ch 4**, p 61
lead, cadmium, zinc, copper, and iron in foods, **Ch 9**, pp 19–22
- Dry column-thermal energy analyzer method**
N-nitrosopyrrolidine in fried bacon, **Ch 39**, pp 11–12
- Dry rehydratable film method**
aerobic plate counts in foods, **Ch 17**, p 12
bacterial and coliform counts in dairy products, **Ch 17**, pp 28–32
bacterial and coliform counts in milk, **Ch 17**, pp 27–29
coliform counts in foods, **Ch 17**, p 32
confirmed *E. coli* counts in poultry, meats, and seafood, **Ch 17**, pp 64–65
E. coli counts in foods, **Ch 17**, p 32
high sensitivity, coliform count in dairy products, **Ch 17**, pp 29–32
mold counts in foods, **Ch 17**, pp 19–21
rapid enumeration of coliforms in foods, **Ch 17**, pp 32–36
yeast counts in foods, **Ch 17**, pp 19–21
- Dry substances**
in corn syrups and sugars, **Ch 44**, pp 49–50
- Dry volume.** *see* **Volume**
- Drying methods**
brewers' grains, **Ch 27**, p 41
moisture in animal feeds, **Ch 4**, pp 1–2
moisture in hops, **Ch 27**, pp 34–35
95–100°C, moisture in feeds, **Ch 4**, p 1
135°C for 2 hours, moisture in feeds, **Ch 4**, p 2
over sulfuric acid, moisture in animal feeds, **Ch 4**, p 2
solids in yeast, **Ch 27**, pp 40–41
- Dulcin**
in food, **Ch 47**, p 51
in nonalcoholic beverages, **Ch 47**, p 47
- Dumas method**
protein (crude) in animal feed, **Ch 4**, pp 25–27
- Duquenois-Levine qualitative test**
cannabinol in drug powders, **Ch 22**, p 5
- Dye binding method**
protein in dried milk, **Ch 33**, p 72
protein in ice cream and frozen desserts, **Ch 33**, p 97
protein in milk, **Ch 33**, pp 14–15
in raw and processed meats, **Ch 39**, pp 30–31
- Dyes**
separation of, **Ch 46**, p 1
subsidiary and lower sulfonated, in color additives, **Ch 46**, pp 21–22
- Earthenware**
cadmium and lead in, **Ch 9**, p 14
- EDTA titrimetric methods**
calcium in liming materials, **Ch 1**, p 6
hardness of water, **Ch 11**, pp 14–15
magnesium (acid-soluble) in fertilizers, **Ch 2**, pp 36–37
magnesium in liming materials, **Ch 1**, p 6
- Eggs and egg products**
acidity of ether extract, **Ch 34**, p 7
aflatoxin B₁ in, **Ch 49**, pp 28–30
carotenoids in, **Ch 34**, p 1
chloride in, **Ch 34**, p 5
cholesterol in, **Ch 34**, pp 3–5
color of yolks, **Ch 34**, p 1
culture media for, **Ch 17**, pp 1–2
dried, *Salmonella* in, **Ch 17**, pp 128–132, 144–146, 150–153, 161–164, 171–205, 210–216
fat in, **Ch 34**, p 3
fatty acids in, **Ch 34**, pp 11–13
filth in, **Ch 16**, pp 29–30
glucose in, **Ch 34**, pp 5–6
glycerol in, **Ch 34**, pp 6–7
beta-hydroxybutyric acid in, **Ch 34**, pp 7–9
lactic acid in, **Ch 34**, pp 7–9
lipid phosphorus in, **Ch 34**, p 3
lipids in, **Ch 34**, p 3
Listeria in, **Ch 17**, pp 244–250
microbiological methods, **Ch 17**, pp 1–3
nitrogen in, **Ch 34**, p 2
phosphorus in, **Ch 34**, p 5
pyoverdine in, **Ch 34**, p 13
quaternary ammonium compounds in, **Ch 34**, p 13
Salmonella in, **Ch 16**, pp 8–11; **Ch 17**, pp 128–132, 144–146, 153–156, 169–171, 216–219
sample preparation, **Ch 17**, p 2
sampling of, **Ch 17**, p 1; **Ch 34**, p 1
sodium lauryl sulfate in egg white, **Ch 47**, pp 42–43
solids (total) in, **Ch 34**, p 2
succinic acid in, **Ch 34**, pp 7–10
sucrose in, **Ch 34**, pp 5–6
- Eight-hour method**
Reveal for *E. coli* O157:H7 test system in selected foods, **Ch 17**, pp 78–81
- Electrode methods**
ammonia ion selective, volatile bases in fish, **Ch 35**, pp 34–36
fluoride-selective, fluoride in drug tablets and solutions, **Ch 18**, p 10
- Electrolyte replenishers**
calcium, potassium, and sodium in, **Ch 18**, p 8
- Electrolytic methods**
copper in Bordeaux mixture pesticide formulations, **Ch 7**, pp 16–17
copper in calcium arsenate pesticide formulations, **Ch 7**, p 17
copper in copper carbonate pesticide formulations, **Ch 7**, p 11
copper in copper naphthenate pesticide formulations, **Ch 7**, p 11
copper in lead arsenate pesticide formulations, **Ch 7**, pp 16–17
copper in Paris Green pesticide formulations, **Ch 7**, pp 9, 16
copper in pesticide formulations, **Ch 7**, pp 4, 16–17
lead in lead arsenate pesticide formulations, **Ch 7**, pp 16–17
- Electrometric titration method**
acidity in corn syrup, **Ch 44**, p 51
- Electron capture detection**
chlorinated acidic pesticide residues in finished drinking water, **Ch 10**, pp 106–113
organochlorine pesticide residues in water, **Ch 10**, p 32
- Electrophoretic methods**
acrylamide disc, identification of fish species, **Ch 35**, pp 28–29
disc, detection of frozen and thawed shucked oysters, **Ch 35**, pp 4–6
starch gel-zone, identification of fish species, **Ch 35**, pp 27–28
- Electroscopes**
radioactivity of substances, **Ch 13**, p 1
- Elemental analyses.** *see also* **individual elements**
liming materials, **Ch 1**, pp 4–9
- Elements.** *see* **Metals and other elements**
- Elevated temperature enrichment method**
Vibrio cholerae in oysters, **Ch 17**, pp 263–265
- ELFA.** *see* **Enzyme-linked fluorescent assays**
- ELISA.** *see* **Enzyme-linked immunosorbent assays**
- Elixirs**
of bromides, **Ch 18**, pp 9–10
phenylalkanolamine salts in, **Ch 18**, p 26
- Elmslie-Caldwell method**
iodine in mineral mixed feeds, **Ch 4**, p 64
- EM quant nitrate test strip**
nitrate in forages, **Ch 14**, pp 6–7
- Emanation method**
radioactivity of substances, **Ch 13**, p 1
- Emetine hydrochloride**
in drug tablets, **Ch 20**, p 8
- Emission spectrographic methods**
boric acid in food, **Ch 47**, pp 18–19
metals in plants, **Ch 3**, p 2
- Emulsifying agents**
polyorbate 60 in shortening, oils, and dressings, **Ch 47**, pp 41–42

- sodium lauryl sulfate in egg white,
Ch 47, pp 42–43
- Endive**
organophosphorus pesticide residues
in, **Ch 10**, pp 36–39
- Endosulfan**
in apples and cucumbers, **Ch 10**,
pp 32–33
in pesticide formulations, **Ch 7**,
pp 95–96
in water, **Ch 10**, pp 27–32
- α-Endosulfan**
in soft drinks and sports drinks, **Ch 10**,
pp 125–136
- β-Endosulfan**
in soft drinks and sports drinks, **Ch 10**,
pp 125–136
- Endosulfan sulfate**
in apples and cucumbers, **Ch 10**,
pp 32–33
in foods, **Ch 10**, pp 17–26
in soft drinks and sports drinks, **Ch 10**,
pp 125–136
in water, **Ch 10**, pp 27–32
- Endrin**
multiresidue methods, **Ch 10**, pp 1–10
in pesticide formulations, **Ch 7**,
pp 72–73
in water, **Ch 10**, pp 27–32
- Endrin aldehyde**
in water, **Ch 10**, pp 27–32
- Enrichment broth culture method**
Listeria in foods, **Ch 17**, pp 237–240
Salmonella in dry foods, **Ch 17**,
pp 171–172
- Enteral products**
minerals in, **Ch 50**, pp 15–17
phosphorus in, **Ch 50**, pp 13–14
vitamin D in, **Ch 50**, pp 28–30
- Enterobacteriaceae**
biochemical identification, **Ch 17**,
pp 137–141, 279–280
in foods, **Ch 17**, pp 46–49, 137–141
- Enterotoxins**
E. coli, **Ch 17**, pp 76–78
E. coli producing, heat-labile, **Ch 17**,
pp 69–72
Staphylococcal, **Ch 17**, pp 90–98,
106–109
- Environmental surfaces**
biological agents from nonporous
surfaces, bulk sample collection and
swab sample collection of visible
powders, **Ch 17**, p 278
detection of *L. monocytogenes* and
related *Listeria* spp., **Ch 17**,
pp 244–250
detection of *Salmonella*, **Ch 17**,
pp 216–219
- Environmental swabs**
Reveal for *E. coli* O157:H7 test, twenty
hour method, **Ch 17**, pp 83–86
- Enzymatic colorimetric method**
choline in infant formula and milk,
Ch 50, pp 30–32
- Enzymatic-gravimetric methods**
dietary fiber containing supplemented
resistant maltodextrin, **Ch 45**,
pp 113–118
dietary fiber in food and food products,
Ch 32, pp 5–12, 31–41
MES-TRIS buffer, dietary fiber in food
and food products, **Ch 32**, pp 7–10
phosphate buffer, dietary fiber in food
and food products, **Ch 32**, pp 5–7
soluble dietary fiber in food and food
products, **Ch 45**, pp 102–103
total dietary fiber in foods, **Ch 45**,
pp 100–101, 130–136
- Enzymatic methods**
carbon dioxide in wines, **Ch 28**, p 15
citric acid in wine, **Ch 28**, pp 11–12
extract of corn grits, **Ch 27**, p 33
beta-D-glucan in oats, **Ch 32**, pp 64–66
glucose and fructose in wine, **Ch 28**,
pp 5–6
lactose in milk, **Ch 33**, pp 17–18,
59–62
L-malic acid in apple juice, **Ch 37**,
pp 15–16
L-malic acid in fruits and fruit products,
Ch 37, p 16
- Enzymatic spectrophotometric
methods**
cholinesterase activity in whole blood,
Ch 14, pp 3–4
fructan (total) in foods, **Ch 45**, pp 95–
97
beta-D-glucans oat and barley fractions
and ready-to-eat cereal products,
Ch 32, pp 58–62
- Enzyme digestion method**
filth in pork sausage, ground beef, or
hamburger, **Ch 16**, pp 32–33
resistant starch in starch and plant
materials, **Ch 45**, pp 128–130
- Enzyme hydrolysis**
starch in animal feed, **Ch 4**, pp 57–58
- Enzyme immunoassays**
Assurance Gold, *Salmonella* in foods,
Ch 17, pp 181–185
assurance polyclonal, *L. monocytogenes*
and related *Listeria* spp. in selected
foods, **Ch 17**, pp 241–244
based on monoclonal antibody to
potentially celiac toxic amino acid
prolamin sequences, gliadin as a
measure of gluten in foods, **Ch 32**,
pp 41–43
colorimetric monoclonal, *L. monocytogenes*
in dairy products, seafoods, and
meats, **Ch 17**, pp 232–234
colorimetric monoclonal antibody,
gliadin as a measure of gluten in
foods, **Ch 32**, pp 15–17
colorimetric monoclonal methods,
Salmonella in foods, **Ch 17**, pp 146–
153, 161
colorimetric polyclonal methods,
Listeria in foods, **Ch 17**, pp 234–237
- colorimetric polyclonal methods,
Salmonella in foods, **Ch 17**, pp 153–
156, 176–181
E. coli O157:H7 in selected foods,
Ch 17, pp 57–60
fluorogenic monoclonal screening
methods, *Salmonella* in foods,
Ch 17, p 161
polyclonal methods, *Salmonella* in
foods, **Ch 17**, pp 156–158
polyvalent, Staphylococcal enterotoxins
in selected foods, **Ch 17**, pp 94–97
- Enzyme-linked fluorescent assays**
Salmonella in foods, **Ch 17**, pp 210–
212
- Enzyme-linked immunofluorescent
assays**
Listeria in foods, **Ch 17**, pp 250–253
Salmonella in food, **Ch 17**, pp 158–160
- Enzyme-linked immunosorbent assays**
aflatoxin B₁ in corn and roasted
peanuts, **Ch 49**, pp 17–19
aflatoxin B₁ in cottonseed products and
mixed feed, **Ch 49**, p 28
aflatoxins in corn, **Ch 49**, p 14
aflatoxins in corn, cottonseed, peanuts,
and peanut butter, **Ch 49**, pp 7–9
aflatoxins in peanut butter, **Ch 49**, p 13
detection of botulinum neurotoxins A, B,
E, and F, **Ch 17**, pp 121–123
domoic acid in shellfish, **Ch 49**,
pp 102–105
Salmonella in foods, **Ch 17**, pp 173–
176
soy protein in raw and heat-processed
meat products, **Ch 39**, pp 17–21
total fumonisins in corn, **Ch 49**,
pp 61–63
zearalenone in corn, wheat, and feed,
Ch 49, pp 84–86
- Enzyme preparations**
glucoamylase activity in, **Ch 45**,
pp 49–50
industrial, neutral lactase activity in,
Ch 33, p 57
- Enzymes**
coenzyme Q₁₀ content in raw materials
and dietary supplements, **Ch 51**,
pp 33–35
papain proteolytic activity, **Ch 47**,
pp 43–44
- Eosin yellowish method**
quaternary ammonium compounds in
aqueous solutions and milk, **Ch 47**,
p 27
- Eosin YS color additive**, **Ch 46**, p 9
- Ephedra alkaloids**, **Ch 20**, pp 9–11
Aconitum alkaloids in dietary
supplements and raw botanical
materials, **Ch 51**, pp 7–10
ephedrine alkaloids in human urine and
plasma, **Ch 51**, pp 1–5
ephedrine and pseudoephedrine in
botanicals and dietary supplements,
Ch 51, pp 5–7

- Ephedrine**
in botanicals and dietary supplements, **Ch 51**, pp 5–7
in drug inhalants, **Ch 20**, p 9
in drug tablets and capsules, **Ch 20**, p 10
in drugs, **Ch 18**, p 28
in solid dosage drugs, **Ch 20**, p 10
in water-soluble jellies, syrups, and solutions of ephedrine salts, **Ch 20**, p 9
- Ephedrine alkaloids**
in human urine and plasma, **Ch 51**, pp 1–5
- Ephedrine sulfate**
in elixirs and syrups, **Ch 18**, p 26
- Epinephrine**
norepinephrine in preparations, **Ch 18**, pp 21–22
- EPN**
in apples and green beans, **Ch 10**, pp 35–36
- EPTC**
in finished drinking water, **Ch 10**, pp 41–47
- Ergocalciferol.** *see* **Vitamin D₂**
- Ergot alkaloids**, **Ch 20**, pp 11–14
- Ergotamine**
in drugs, **Ch 20**, pp 12–14
- Erucic acid**
in oils and fats, **Ch 41**, pp 29–30
- Erythrityl tetranitrate**
in drugs, **Ch 18**, pp 34–35
- Erythromycin**
in feeds, **Ch 5**, pp 68–69
in milk, **Ch 33**, pp 50–52
- Erythrosine color additive**
analysis of, **Ch 46**, p 5
in foods, **Ch 46**, pp 1–2
- Erythrosine yellowish NA color additive**, **Ch 46**, p 8
- Escherichia coli**
automated enumeration, in foods, **Ch 17**, pp 86–88
biochemical identification, **Ch 17**, pp 137–141, 279–280
in chilled or frozen foods, **Ch 17**, p 50
confirmed counts in poultry, meats, and seafood, **Ch 17**, pp 64–65
counts in foods, **Ch 17**, p 32
detection and confirmed quantitation, in foods, **Ch 17**, pp 36–39
detection of heat-labile enterotoxin, **Ch 17**, pp 69–72
enterotoxigenic, **Ch 17**, pp 72–76
enterotoxins, **Ch 17**, pp 76–78
in foods, **Ch 17**, pp 41–46, 137–141
invasiveness of mammalian cells by, **Ch 17**, pp 67–69
microbiological methods, **Ch 17**, pp 4–5
most probable number method, **Ch 17**, pp 5–6
in shellfish growing waters, **Ch 17**, pp 36–39
in water, **Ch 17**, p 41
- Escherichia coli/coliform count plate**
confirmed *E. coli* counts in poultry, meats, and seafood, **Ch 17**, pp 64–65
- Escherichia coli O157:H7**
counts in foods, **Ch 17**, pp 60–63
in selected foods, Assurance GDS, **Ch 17**, pp 65–67
in selected foods, enzyme immunoassay, **Ch 17**, pp 57–60
in selected foods, Reveal test, **Ch 17**, pp 78–81
in selected foods, visual immunoprecipitate assay, **Ch 17**, pp 50–56
in selected foods and environmental swabs, Reveal test, **Ch 17**, pp 83–86
Shigatoxin genes from, **Ch 17**, pp 81–83
- Essential oils**
in emulsion, **Ch 36**, p 25
in flavor extracts and toilet preparations, **Ch 36**, p 25
in fruits and fruit products, **Ch 37**, p 18
in hops and hop pellets, **Ch 27**, pp 35–36
in nonalcoholic beverages, **Ch 29**, p 3
- Esters**
in distilled liquors, **Ch 26**, pp 9–10
in lemon oil, **Ch 36**, pp 21–22
in nonalcoholic beverages, **Ch 29**, p 2
volatile, in cordials and liqueurs, **Ch 26**, p 22
- beta-Estradiol**
in drugs, **Ch 21**, p 1
- Estradiol valerate**
in drugs, **Ch 21**, p 1
- Estrogens**
conjugated, **Ch 21**, p 1
natural, **Ch 21**, pp 1–3
synthetic, **Ch 21**, pp 3–6
- Ethanol**
in beer, **Ch 27**, pp 5–6
in canned salmon, **Ch 35**, pp 26–27
carbon stable isotope ratio derived from fruit juices and maple syrups, **Ch 37**, pp 33–37
- Ethchlorvynol**
in drugs, **Ch 19**, pp 18–19
- Ether**
in drugs, **Ch 18**, p 2
- Ether extract**
in animal feed, **Ch 4**, pp 40–41
cereal adjuncts, **Ch 27**, p 33
of confectionery, **Ch 44**, pp 24–25
of Derris and Cubé powder, **Ch 7**, p 62
in dried milk products, **Ch 4**, p 41
of eggs, acidity of, **Ch 34**, p 7
in fish meal, **Ch 4**, p 41
in grains, **Ch 32**, p 44
in meat and meat products, **Ch 39**, p 2
in pet food, **Ch 4**, pp 40–41
petroleum, of roasted coffee, **Ch 30**, p 4
petroleum, of tea, **Ch 30**, p 12
of plants, **Ch 3**, p 28
- of prepared mustard, **Ch 43**, p 7
in soybean flour, **Ch 32**, p 63
in wheat flour, **Ch 32**, p 5
- Ether extraction methods**
fat in cream, **Ch 33**, pp 69–70
fat in fig bars and raisin filled crackers, **Ch 32**, pp 72–73
fat in milk, **Ch 33**, pp 18–19
phenolphthalein in tablets, **Ch 19**, p 6
succinic acid in eggs, **Ch 34**, pp 9–10
sulfonmethane or sulfonethylmethane in drugs, **Ch 19**, p 18
unsaponifiable matter in cocoa butter, **Ch 31**, p 11
unsaponifiable residue of oils and fats, **Ch 41**, p 45
- Ethinyl estradiol**
in drugs, **Ch 21**, pp 1–2
- Ethion**
in foods, **Ch 10**, pp 17–26
in fruits and vegetables, **Ch 10**, pp 36–39
multiresidue methods, **Ch 10**, pp 1–10
in pesticide formulations, **Ch 7**, p 108
in soft drinks and sports drinks, **Ch 10**, pp 125–136
- Ethisterone**
in drugs, **Ch 21**, p 8
- Ethopabate**
in feeds, **Ch 5**, pp 13–14
- Ethoprop**
in finished drinking water, **Ch 10**, pp 41–47
- Ethoxyquin**
in animal feed, **Ch 4**, pp 73–75
in animal tissues, **Ch 23**, p 7
- Ethyl acetate**
in distilled liquors, **Ch 26**, pp 12–14
- Ethyl alcohol.** *see also* **Alcohol**;
Alcoholic beverages
in cosmetics, **Ch 15**, pp 1–2
- Ethyl carbamate**
in alcoholic beverages and soy sauce, **Ch 28**, pp 15–17
in distilled spirits, **Ch 26**, pp 18–19
- Ethyl esters**
of fish oils, **Ch 41**, pp 27–29
- Ethyl parathion**
in microencapsulated pesticide formulations, **Ch 7**, pp 124–125
- Ethyl vanillin**
in vanilla extract and artificial vanilla flavor, **Ch 36**, pp 2–8
- Ethylan**
multiresidue methods, **Ch 10**, pp 1–10
residues of, **Ch 10**, pp 72–73
- Ethylene dibromide**
in grains, **Ch 10**, pp 50, 73–74
in pesticide formulations, **Ch 7**, pp 24–25
- Ethylene dichloride**
in pesticide formulations, **Ch 7**, pp 24–25
in spice oleoresins, **Ch 47**, p 56
- Ethylene thiourea**
residues of, **Ch 10**, pp 74–76
in water, **Ch 10**, pp 104–106

Ethylenediamine test

- furazolidone in feeds, **Ch 5**, pp 16–17
- zoalene in feeds, **Ch 5**, pp 16–17

Ethylmorphine

- in drug syrups, **Ch 20**, p 4

Ethynodiol diacetate

- in drugs, **Ch 21**, p 6

Etridiazole

- in water, **Ch 10**, pp 27–32

ETU. see Ethylene thiourea

Eugenol

- in volatile oil, **Ch 43**, p 5

European Decaffeination Association-AOAC method

- solids (soluble) in roasted coffee, **Ch 30**, p 5

Evaporated milk

- albumin in, **Ch 33**, p 70
- ash of, **Ch 33**, p 70
- casein in, **Ch 33**, p 70
- color additives in, **Ch 33**, p 71
- fat in, **Ch 33**, p 70
- filth in, **Ch 16**, p 16
- gelatin in, **Ch 33**, p 70
- lactic acid in, **Ch 33**, p 70
- lactose in, **Ch 33**, p 70
- lead in, **Ch 9**, pp 29–31; **Ch 33**, p 70
- nitrogen (total) in, **Ch 33**, p 70
- preservatives in, **Ch 33**, p 70
- sample preparation, **Ch 33**, p 70
- sampling, **Ch 33**, pp 3, 70
- solids (total) in, **Ch 33**, p 70

Excitation method

- alternating current spark, metals in plants, **Ch 3**, pp 4–5
- direct current arc, metals in plants, **Ch 3**, pp 3–4

Excreta. see also Mammalian feces

- bird, on food and containers, **Ch 16**, pp 69–70
- in brewer's grits, **Ch 16**, pp 21–22
- in condiment seeds, **Ch 16**, p 49
- in corn flour, **Ch 16**, p 25
- in eggs and egg products, **Ch 16**, p 30
- in grain products, **Ch 16**, p 22
- insect, in flour, **Ch 16**, pp 24, 70–71
- insect, on food and containers, **Ch 16**, p 70
- in peanut butter, **Ch 16**, p 19

Expectorants

- methapyrilene in, **Ch 18**, p 19

Exposure chamber method

- microbial ranking of porous packaging materials, **Ch 16**, pp 56–61

Extract. see also Ether extract

- of barley for malting, **Ch 27**, pp 23–24
- of beer, **Ch 27**, p 4
- of brewers' grains, **Ch 27**, p 42
- of brewing sugars and syrups, **Ch 27**, pp 36–37
- of caramel malt, **Ch 27**, p 28
- of cereal adjuncts, **Ch 27**, pp 32–33
- of color additives, **Ch 46**, pp 13–14
- of corn grits, **Ch 27**, p 33
- of distilled liquors, **Ch 26**, p 6
- of malt, **Ch 27**, pp 26–28
- of original wort from beer, **Ch 27**, p 4

- of wheat flour, **Ch 32**, p 1

- of wines, **Ch 28**, p 4

- of wort, **Ch 27**, p 38

Extraction methods

- boiling methanol, moisture in animal feed, grain and forage, **Ch 4**, p 8
 - chloroform, 2-isopropyl-4-pentenoyl urea in drugs, **Ch 19**, p 18
 - diethylether, Randall/Soxtec-submersion, fat (crude) in feeds, cereal grains, and forages, **Ch 4**, pp 41–43
 - direct, phosphorus (available) in fertilizers, **Ch 2**, pp 11–12
 - dithizone, cobalt in plants, **Ch 3**, pp 8–10
 - dithizone, zinc in plants, **Ch 3**, pp 15–16
 - ether, phenolphthalein in tablets, **Ch 19**, p 6
 - ether, sulfonmethane or sulfonethylmethane in drugs, **Ch 19**, p 18
 - extractives from flexible barrier materials, **Ch 48**, pp 4–5
 - hexanes, Randall/Soxtec-submersion, fat (crude) in feeds, cereal grains, and forages, **Ch 4**, pp 43–44
 - indirect, phosphorus (citrate-soluble) in fertilizers, **Ch 2**, p 10
 - isoflavones in soy and selected foods containing soy, **Ch 45**, pp 119–121
 - lighter-than-water solvents for drugs, **Ch 18**, p 1
 - meperidine in drugs, **Ch 18**, p 18
 - into methanol-formamide, moisture in animal feed, grain and forage, **Ch 4**, pp 6–7
 - phenylpropanolamine hydrochloride in drugs, **Ch 18**, p 26
 - Staphylococcal enterotoxin in foods, **Ch 17**, pp 97–98
 - starch in animal feed, **Ch 4**, p 57
 - supercritical fluid, oil in oilseeds, **Ch 41**, pp 68–71
 - water (free) in fertilizers, **Ch 2**, p 5
- Extraneous materials. see also Filth;**
- Microbiological methods**
- animal excretions, **Ch 16**, pp 61–71
 - aphids in hops, **Ch 16**, p 12
 - in baked goods, **Ch 16**, pp 26–28
 - in beverages and beverage materials, **Ch 16**, pp 11–13
 - in breakfast cereals, **Ch 16**, pp 28–29
 - in cocoa, chocolate, and press cake, **Ch 16**, p 11
 - in coconut (shredded), **Ch 16**, pp 18–19
 - in coffee (ground) and coffee substitutes, **Ch 16**, pp 11–12
 - in dairy products, **Ch 16**, pp 13–18
 - in drugs (leafy and crude), **Ch 16**, p 54
 - in eggs and egg products, **Ch 16**, pp 29–30
 - in fish and other marine products, **Ch 16**, pp 30–33

- in fruits and fruit products, **Ch 16**, pp 33–36, 74–75

- in grains and their products, **Ch 16**, pp 19–25

- in gums (plant and crude), **Ch 16**, pp 53–54

- isolation techniques, **Ch 16**, pp 1–4
- light and heavy filth, **Ch 16**, pp 4–6
- in meat products, **Ch 16**, pp 30–33
- microbial ranking of porous packaging materials, **Ch 16**, pp 56–61
- mold, **Ch 16**, pp 71–79

- in nuts and nut products, **Ch 16**, pp 18–19

- packaging material penetration, **Ch 16**, p 55

- in papain, **Ch 16**, p 54

- in peanut butter, **Ch 16**, p 19

- plant material in vanilla extract, **Ch 36**, pp 9–10

- in poultry products, **Ch 16**, p 30
- Salmonella* in food, **Ch 16**, pp 8–11
- shell in cacao products, **Ch 31**, pp 3–9
- in snack foods, **Ch 16**, p 36
- in spices and other condiments, **Ch 16**, pp 40, 44–53

- in spirulina powders and tablets, **Ch 16**, pp 54–55

- in sugars and sugar products, **Ch 16**, pp 36–37

- in tea, **Ch 16**, pp 12–13

- total viable count in food, automated enumeration, **Ch 16**, pp 6–8

- in vegetables and vegetable products, **Ch 16**, pp 37–47, 75–80

Eye irritants

- in cosmetics, **Ch 15**, p 3

Face powders

- analysis of, **Ch 15**, pp 11–13

Falling number determination method

- alpha-amylase in flour, meal, and malted cereals, **Ch 32**, p 22

Fanchon maroon color additive, Ch 46, p 9

FAO/WHO-AOAC methods

- thawing frozen fruits, **Ch 37**, p 2
- thawing frozen vegetables, **Ch 42**, p 10

Farina

- filth in, **Ch 16**, p 22

Fast green FCF color additive

- analysis of, **Ch 46**, p 5
- in foods, **Ch 46**, pp 1–2

Fat acidity

- corn, **Ch 32**, p 54
- grains, **Ch 32**, p 54
- wheat flour, **Ch 32**, p 12

Fat (crude)

- in animal feed, **Ch 4**, pp 40–44
- in cereal grain, **Ch 4**, pp 41–44
- in dried milk products, **Ch 4**, p 41
- in fish meal, **Ch 4**, p 41
- in forages, **Ch 4**, pp 41–44
- in pet food, **Ch 4**, pp 40–41

Fat number

- of bread, **Ch 32**, p 67

Fats. *see also* **Animal fats; Fat (crude);****Oils and fats**

acid value of butterfat, **Ch 33**, p 77
 animal fats in vegetable fats and oils,
Ch 41, pp 50–52
 in baked products, **Ch 32**, p 72
 in bread, **Ch 32**, pp 67, 70
 in butter, **Ch 33**, p 76
 butyric acid in, **Ch 41**, pp 15–16, 44–45
 in cacao products, **Ch 31**, pp 9–11
 in cereal adjuncts, **Ch 27**, p 33
 in cereal products, **Ch 32**, pp 45–49
 in cheese, **Ch 33**, pp 87–88
 coconut and palm kernel oils in cocoa
 butter and fat extracted from milk
 chocolate, **Ch 31**, p 11
 containing butterfat, butyric acid in,
Ch 41, pp 44–45
 in cream, **Ch 33**, pp 66–70
 in dried milk, **Ch 33**, p 73
 in eggs, **Ch 34**, p 3
 in evaporated milk, **Ch 33**, p 70
 examination of fat in butter, **Ch 33**, p 77
 in face powders, **Ch 15**, pp 11–12
 in fig bars and raisin filled crackers,
Ch 32, pp 72–73
 in fish meal, **Ch 35**, pp 12–13
 in food dressings, **Ch 43**, pp 9–10
 in foods, **Ch 41**, pp 20–25; **Ch 45**
 pp 85–86
 foreign, containing tristearin in lard,
Ch 41, pp 54–55
 in grains, **Ch 32**, p 44
 in ice cream and frozen desserts,
Ch 33, p 97
 in infant formula, **Ch 50**, p 18
 lactic acid in butterfat, **Ch 33**, p 78
 in macaroni products, **Ch 32**, p 73
 in malted milk, **Ch 33**, p 73
 in meat and meat products, **Ch 39**,
 pp 2–3, 25–30
 in meat and poultry products, **Ch 39**,
 p 3
 melting point of, **Ch 41**, p 4
 in milk, **Ch 33**, pp 18–30
 in milk chocolate, **Ch 31**, pp 11–12
 mineral oils in, **Ch 41**, pp 55–56
 1-monoglycerides in, **Ch 41**, pp 60–61
 in nuts and nut products, **Ch 40**, p 1
 partially hydrogenated, isolated *trans*
 unsaturated fatty acid content in,
Ch 41, pp 39–41
 polar components in frying fats, **Ch 41**,
 pp 31–32
 refractive index of butterfat, **Ch 33**,
 p 77
 in seafood, **Ch 35**, p 11
 separation from ice cream, **Ch 33**, p 97
 separation of fat in cacao products,
Ch 31, p 10
 in sweetened condensed milk, **Ch 33**,
 p 71
 vegetable, in butterfat, **Ch 41**, pp 47–49
 in wheat flour, **Ch 32**, p 5

Fatty acid methyl esters

identification of *Bacillus anthracis* from
 culture, **Ch 17**, pp 275–277

Fatty acids

in butter, **Ch 33**, pp 78–80
 in cream, **Ch 33**, p 65
 cyclopropene in oils, **Ch 41**, pp 52–53
 in eggs, **Ch 34**, pp 11–13
 in encapsulated fish oils, **Ch 41**,
 pp 27–29
 in face powders, **Ch 15**, pp 11–12
 in fish oil methyl and ethyl esters,
Ch 41, pp 27–29
 free, in crude and refined oils, **Ch 41**,
 pp 12–13
 in hydrogenated vegetable oils and
 animal fats, **Ch 41**, pp 33–37
 isolated *trans* unsaturated content in
 partially hydrogenated fats, **Ch 41**,
 pp 39–41
trans isomers in margarines, **Ch 41**,
 pp 41–42
 melting point of, **Ch 41**, p 4
 methyl esters in oils and fats, **Ch 41**,
 pp 25–26
cis, cis-methylene interrupted
 polyunsaturated, in oils, **Ch 41**, p 33
 microbial profile, *Vibrio vulnificus*
 identification, **Ch 17**, pp 265–267
 in oils and fats, **Ch 41**, pp 19–20
 saturated and unsaturated in oils and
 fats, **Ch 41**, p 16
 in seafood, **Ch 35**, pp 13–15
 total, in oils and fats, **Ch 41**, pp 13–14
 total isolated *trans* unsaturated, in fats
 and oils, **Ch 41**, pp 42–44

Fatty products

hexachlorobenzene and mirex pesticide
 residues in, **Ch 10**, pp 83–84

FD&C color additives

analysis of, **Ch 46**, pp 5–6, 11
 Blue No. 1, **Ch 46**, pp 3–5, 14–15
 Blue No. 2, **Ch 46**, pp 3–5
 citrus Red No. 2, **Ch 46**, p 5
 in foods, **Ch 46**, pp 3–4
 Green No. 3, **Ch 46**, pp 3–5
 Orange B, **Ch 46**, p 6
 Red No. 3, **Ch 46**, pp 3–5
 Red No. 4, **Ch 46**, p 5
 Red No. 40, **Ch 46**, pp 3–4, 6, 15–17
 Red No. 2 (former), **Ch 46**, pp 3–5
 Yellow No. 5, **Ch 46**, pp 3–4, 6, 17–18,
 21
 Yellow No. 6, **Ch 46**, pp 3–4, 6, 18–22

Fecal coliforms

in foods, **Ch 17**, pp 44–45
 in shellfish growing waters, **Ch 17**,
 pp 39–41

Feces. *see* **Mammalian feces****Feed additives.** *see* **Drugs and feed
additives in animal tissues****Feeds.** *see also* **Drugs and feed
additives in animal tissues; Pet
foods**

2-acetylaminomethyl-5-nitrothiazole in, **Ch 5**,
 p 1
 acidity (water-soluble) of, **Ch 4**, p 60
 additives in, **Ch 4**, pp 73–77
 aflatoxin B₁ in, **Ch 49**, pp 28, 40–43
 aflatoxins in, **Ch 49**, pp 5–6

aklomidin in, **Ch 5**, pp 2–3
 alanine in, **Ch 4**, pp 9–19
 2-amino-5-nitrothiazole, **Ch 5**, p 4
 amino acids in, **Ch 4**, pp 9–24
p-aminobenzoic acid in, **Ch 5**, pp 3–4
 amprolium in, **Ch 5**, pp 4–5
 amylase-treated neutral detergent fiber
 in, **Ch 4**, pp 49–55
 antibiotics in, **Ch 5**, pp 60–88
 arginine in, **Ch 4**, pp 9–19
 arprinocid in, **Ch 5**, pp 5–6
 arprinocid in premixes, **Ch 5**, p 6
 arsanilic acid in, **Ch 5**, pp 3–4, 6–7
 arsenic (total) in, **Ch 5**, pp 7–8
 ash of, **Ch 4**, p 8
 aspartic acid in, **Ch 4**, pp 9–19
 bacitracin in feed supplements, **Ch 5**,
 p 64
 bacitracin in mixed feeds, **Ch 5**,
 pp 64–65
 bacitracin in premixes, **Ch 5**, pp 44–45,
 63–64
 bacitracin-MD in complete feed, **Ch 5**,
 pp 65–66
 bifuran in, **Ch 5**, p 16
 bithionol in, **Ch 5**, p 8
 buquinolate in, **Ch 5**, pp 8–9
 cadmium anthranilate in, **Ch 5**, p 9
 calcium in, **Ch 4**, pp 60–61
 carbadox in, **Ch 5**, pp 9–10
 carotenes and xanthophylls in mixed
 feeds, **Ch 45**, pp 10–11
 chlorine (soluble) in, **Ch 4**, pp 61–62
 chlortetracycline HCl in, **Ch 5**, pp 66–
 68
 chlortetracycline in, **Ch 5**, p 45
 cobalt in, **Ch 4**, p 62
 copper in, **Ch 4**, pp 60–61, 63
 cyanogenetic glucosides in, **Ch 4**, p 75;
Ch 49, p 123
 cystine in, **Ch 4**, pp 9–17
 decoquatine in, **Ch 5**, pp 10–11, 80–82
 dibutyltin dilaurate in, **Ch 5**, pp 11–12
 diethylstilbestrol in, **Ch 5**, p 12
 dimetridazole in, **Ch 5**, p 13
 dried milk products, fat (crude) or ether
 extract in, **Ch 4**, p 41
 erythromycin in, **Ch 5**, pp 68–69
 ether extract in, **Ch 4**, pp 40–41
 ethopabate in, **Ch 5**, pp 13–14
 ethoxyquin in, **Ch 4**, pp 73–75
 fat (crude) in, **Ch 4**, pp 40–44
 fat (crude) in forages, **Ch 4**, pp 41–44
 fiber (acid detergent) in, **Ch 4**, pp
 48–49
 fiber (acid detergent) in forages, **Ch 4**,
 pp 32–33
 fiber (crude) in, **Ch 4**, pp 44–47
 fish meal, fat (crude) or acetone extract
 in, **Ch 4**, p 41
 fluorine in, **Ch 4**, p 63
 furazolidone in, **Ch 4**, p 73; **Ch 5**,
 pp 14–17
 furazolidone in feed premixes, **Ch 5**,
 pp 14–15
 galactan in, **Ch 4**, p 60
 glutamic acid in, **Ch 4**, pp 9–19

- glycarbylamide in, **Ch 5**, p 17
glycine in, **Ch 4**, pp 9–19
griseofulvin in, **Ch 5**, p 46
highly acid milk by-products, moisture in, **Ch 4**, p 4
histidine in, **Ch 4**, pp 9–19
hydrocyanic acid in, **Ch 4**, p 75
hygromycin B in, **Ch 5**, p 69
identification of animal tissues, **Ch 4**, pp 72–73
identification of mineral constituents, **Ch 4**, pp 72–73
identification of vegetable tissues, **Ch 4**, p 72
iodine in mineral mixed feeds, **Ch 4**, pp 63–64
ipronidazole in, **Ch 5**, p 18
iron in, **Ch 4**, pp 60–61
isoleucine in, **Ch 4**, pp 9–19
lasalocid in, **Ch 5**, pp 46–47, 69–70
lasalocid in premixes, **Ch 5**, pp 57–60
lasalocid sodium in feeds and premixes, **Ch 5**, pp 57–60
leucine in, **Ch 4**, pp 9–19
lignin in, **Ch 4**, pp 48–49
lincomycin in, **Ch 5**, pp 70–71
lysine in, **Ch 4**, pp 9–19
lysine in feed grade amino acids and premixes, **Ch 4**, pp 20–24
manganese in, **Ch 4**, pp 60–61, 65
melengestrol acetate in feed supplements, **Ch 5**, pp 18–20
menadione sodium bisulfite in premixes, **Ch 45**, pp 48–49
methionine in, **Ch 4**, pp 9–17
methionine in feed grade amino acids and premixes, **Ch 4**, pp 20–24
microscopy examination and identification of, **Ch 4**, pp 71–73
mineral salts in, **Ch 4**, p 60
minerals in, **Ch 4**, pp 60–71, 72–73
moisture in, **Ch 4**, pp 1–2, 4–8
moisture in forage, **Ch 4**, pp 2–8
monensin in, **Ch 5**, pp 47–57, 71–73
monensin in premixes, **Ch 5**, pp 47–57
monensin in supplements, **Ch 5**, pp 51–57
narasin in premixes, supplements and feeds, **Ch 5**, pp 51–57
neomycin in, **Ch 5**, pp 73–75
nequinat in, **Ch 5**, p 20
niacin and niacinamide in, **Ch 45**, pp 17–18, 20–21
nicarbazin in, **Ch 5**, pp 20–21
nicotine in, **Ch 5**, p 21
nifursol in, **Ch 5**, p 22
nihydrazone in, **Ch 5**, pp 22–23
nitarson in, **Ch 5**, p 23
nithiazide in, **Ch 5**, pp 23–24
nitrate in forages, **Ch 14**, pp 5–7
nitrodan in, **Ch 5**, pp 24–25
nitrofurazone in, **Ch 5**, p 16
nitrogen (albuminoid) in, **Ch 4**, p 37
nitrogen (amido) in, **Ch 4**, p 38
nitrogen (ammoniacal) in, **Ch 4**, pp 36–37
nitrogen (nitrate and nitrite) in, **Ch 4**, pp 38–39
nitromide in, **Ch 5**, p 25
nitrophenide in, **Ch 5**, p 25
novobiocin in, **Ch 5**, p 75
nystatin in, **Ch 5**, pp 75–76
oleandomycin in, **Ch 5**, p 76
oxytetracycline hydrochloride in feed, fish feed, and animal remedies, **Ch 5**, pp 82–87
oxytetracycline in, **Ch 5**, pp 76–77, 82–87
pentosans in, **Ch 4**, pp 59–60
pepsin digestibility of protein feeds, **Ch 4**, pp 39–40
phenothiazine in, **Ch 5**, p 26
phenylalanine in, **Ch 4**, pp 9–19
phosphorus in, **Ch 4**, pp 65–66
phytase activity in, **Ch 4**, pp 75–77
piperazine in, **Ch 5**, pp 26–27
procaine penicillin in, **Ch 5**, p 77
proline in, **Ch 4**, pp 9–19
protein (crude) in, **Ch 4**, pp 24–32, 34–36; **Ch 32**, pp 14, 50
protein (crude) in forages, **Ch 4**, pp 32–36
pyrantel tartrate in, **Ch 5**, p 27
racephenicol in, **Ch 5**, pp 27–29
reserpine in, **Ch 5**, pp 29–30
ronnel in, **Ch 5**, pp 30–31
roxarsone in, **Ch 5**, pp 31–33
roxarsone in feed premixes, **Ch 5**, pp 31–32
salinomycin in premixes, supplements and feeds, **Ch 5**, pp 51–57
Salmonella in, **Ch 17**, pp 131–133, 164–166, 171–172
sample preparation, **Ch 4**, p 1; **Ch 5**, p 1
sampling of, **Ch 4**, p 1; **Ch 5**, p 1
selenium in feeds and premixes, **Ch 4**, pp 66–71
serine in, **Ch 4**, pp 9–19
spectinomycin in, **Ch 5**, p 78
starch in, **Ch 4**, pp 57–59
streptomycin in, **Ch 5**, pp 78–79
sucrose in, **Ch 4**, pp 56–57
sugars (total) in, **Ch 4**, p 56
sulfadimethoxine in, **Ch 5**, pp 33–34
sulfaguandine in, **Ch 5**, p 34
sulfamerazine in, **Ch 5**, pp 37–38
sulfamethazine in, **Ch 5**, pp 35, 37–38, 40–44
sulfanitran in, **Ch 5**, pp 35–36
sulfaquinoxaline in, **Ch 5**, pp 3–4, 36–38
sulfathiazole in, **Ch 5**, pp 37–38
sulfonamides in, **Ch 5**, pp 37–38
sulfur amino acids in, **Ch 45**, p 88
thiabendazole in, **Ch 5**, pp 38–40
thiabendazole in supplements and premixes, **Ch 5**, pp 39–40
threonine in, **Ch 4**, pp 9–19
threonine in feed grade amino acids and premixes, **Ch 4**, pp 20–24
 α -tocopherol acetate in, **Ch 45**, pp 38–41, 43–44
 α -tocopherol in, **Ch 45**, pp 38–41
RRR- or *all-rac*- α -tocopherol in supplements, **Ch 45**, pp 41–43
tryptophan in, **Ch 45**, pp 87–88
tylosin in, **Ch 4**, p 73; **Ch 5**, p 79
urea in, **Ch 4**, pp 36–37; **Ch 14**, p 5
valine in, **Ch 4**, pp 9–19
vitamin A in mixed feeds and premixes, **Ch 45**, pp 6–9
vitamin D in concentrates, **Ch 45**, pp 74–78
vitamin D in mixed feeds and premixes, **Ch 45**, pp 33–35
vitamin D₃ in poultry feed supplements, **Ch 45**, p 78
zearalenone in, **Ch 49**, pp 84–86
zinc in, **Ch 4**, pp 60–61
zoalene in, **Ch 4**, p 73; **Ch 5**, pp 16–17, 40
Fehling solution method, modified
sugars (total) in animal feed, **Ch 4**, p 56
Fenamiphos
in finished drinking water, **Ch 10**, pp 41–47
Fenamiphos sulfone
in water, **Ch 10**, pp 99–104
Fenamiphos sulfoxide
in water, **Ch 10**, pp 99–104
Fenarimol
in finished drinking water, **Ch 10**, pp 41–47
Fenbendazole
in beef liver, **Ch 23**, pp 7–8
Fenitrothion
technical and pesticide formulations, **Ch 7**, p 109
Fennel seed
filth in, **Ch 16**, pp 44–47
Fenpropathrin
in agricultural products, **Ch 10**, pp 94–96
Fensulfothion
in pesticide formulations, **Ch 7**, pp 109–111
Fentin
in fentin-maneb pesticide formulations, **Ch 7**, pp 13–14
in pesticide formulations, **Ch 7**, p 13
Fentin acetate
in pesticide formulations, **Ch 7**, pp 13–15
Fentin hydroxide
in pesticide formulations, **Ch 7**, pp 13–15
Fentin-maneb pesticides
fentin in, **Ch 7**, pp 13–14
Fenugreek
filth in, **Ch 16**, pp 44–47
Fenvalerate
in agricultural products, **Ch 10**, pp 94–96
Ferbam
in pesticide formulations, **Ch 7**, p 32
Fermentable extract
of brewing sugars and syrups, **Ch 27**, pp 36–37
of wort, **Ch 27**, p 38

Fermentationof beer, **Ch 27**, p 6**Ferric chloride test**benzoic acid in food, **Ch 47**, p 11
salicylic acid in food and beverages,
Ch 47, pp 27–28**Ferric oxide**in liming materials, **Ch 1**, p 5**Ferricyanide method**quaternary ammonium compounds in
commercial preservatives, **Ch 47**,
pp 24–25**Ferricyanide reduction method**starch in animal feed, **Ch 4**, p 58**Ferrous salts**in animal feed, **Ch 4**, p 60**Ferrous sulfate**in drugs, **Ch 18**, pp 12–14**Ferrous sulfate–zinc-soda method**nitrogen (ammoniacal and nitrate) in
fertilizers, **Ch 2**, pp 15–16**Fertilizer-pesticide mixtures**sampling methods, **Ch 7**, p 1**Fertilizers. see also Peat; Soils**acid-forming quality of, **Ch 2**, p 41
aluminum in aluminum sulfate-type soil
acidifiers, **Ch 2**, p 42
ammoniacal solutions, **Ch 2**, pp 2–3
arsenic in, **Ch 2**, pp 42–43, 51–52
ash (acid-insoluble), **Ch 2**, p 4
biuret in, **Ch 2**, pp 21–22
bone, **Ch 2**, p 3
boron in, **Ch 2**, pp 31–32
cadmium in, **Ch 2**, pp 42, 44, 51–52
calcium in, **Ch 2**, pp 32–33
carbon (carbonate) in, **Ch 2**, p 33
chlorine (water-soluble) in, **Ch 2**, p 33
chromium in, **Ch 2**, pp 42, 46, 51–52
cobalt in, **Ch 2**, pp 33–34, 42, 45,
51–52
copper in, **Ch 2**, pp 34–35
fluid, **Ch 2**, pp 1–2
iron (chelated) in iron chelate
concentrates, **Ch 2**, pp 35–36
iron in, **Ch 2**, pp 35–36
lead in, **Ch 2**, pp 42, 49, 51–52
magnesium in, **Ch 2**, pp 36–37
manganese in, **Ch 2**, pp 38–39
mechanical analysis of, **Ch 2**, pp 3–4
methyleneureas (water-soluble) in,
Ch 2, p 20
molybdenum in, **Ch 2**, pp 42, 47, 51–52
nickel in, **Ch 2**, pp 42, 48, 51–52
nitrates in, **Ch 2**, pp 12, 15–16
nitrogen activity index of urea-
formaldehyde fertilizers, **Ch 2**, p 18
nitrogen activity of, **Ch 2**, pp 17–18
nitrogen (ammoniacal) in, **Ch 2**, pp
15–16
nitrogen (nitrate) in, **Ch 2**, pp 15–16
nitrogen (total) in, **Ch 2**, pp 12–15
nitrogen (water-insoluble) in, **Ch 2**,
pp 16–17
nitrogen (water-insoluble) in
cyanamide, **Ch 2**, p 16
nonacid-forming quality of, **Ch 2**, p 41
nutrients (minor) in, **Ch 2**, pp 29–31phosphate rock, **Ch 2**, p 4
phosphorus in, **Ch 2**, pp 5–12
platinum recovery, **Ch 2**, p 2
potassium in, **Ch 2**, pp 22–29
sample preparation, **Ch 2**, p 3
sampling of, **Ch 2**, pp 1–3
selenium in, **Ch 2**, pp 42, 50–52
slag, **Ch 2**, p 3
sodium in, **Ch 2**, p 39
solid, **Ch 2**, p 1
sulfur in, **Ch 2**, pp 39–40
tankage, **Ch 2**, p 3
triamino-s-triazine in mixes, **Ch 2**,
pp 20–21
urea-formaldehyde, **Ch 2**, p 18
urea in, **Ch 2**, pp 18–20
water in, **Ch 2**, pp 4–5
zinc in, **Ch 2**, pp 40–41**Fiber**amylase-treated neutral detergent fiber
in feeds, **Ch 4**, pp 49–55
in animal feed, (acid detergent), **Ch 4**,
pp 47–48
in animal feed, (crude), **Ch 4**, pp 44–47
in forages, (acid detergent), **Ch 4**,
pp 32–33
in pet food, (crude), **Ch 4**, pp 44–47**Fiber (crude)**in baked products, **Ch 32**, p 72
in bread, **Ch 32**, pp 66, 70
in cacao products, **Ch 31**, p 3
in cereal adjuncts, **Ch 27**, p 33
in grains, **Ch 32**, p 44
in macaroni products, **Ch 32**, p 73
in nuts and nut products, **Ch 40**, p 2
in plants, **Ch 3**, p 28
in prepared mustard, **Ch 43**, p 8
in roasted coffee, **Ch 30**, p 4
in soybean flour, **Ch 32**, p 63
in spices, **Ch 43**, p 3
in tea, **Ch 30**, p 12
in wheat flour, **Ch 32**, p 5**Fiber (dietary)**containing supplemented resistant
maltodextrin, **Ch 45**, pp 113–118
in food and food products, **Ch 32**,
pp 5–12, 31–41
soluble, in foods and food products,
Ch 45, pp 102–103
total, in foods, **Ch 45**, pp 100–101,
130–136
total, in foods and food products,
Ch 45, pp 105–110
total, in foods and food products with
2% or less starch, **Ch 45**, p 103
in wheat flour, **Ch 32**, p 5**Fibrous material**in frozen green beans, **Ch 42**, p 12**Field disk assays**beta-lactam antibiotics in milk, **Ch 33**,
p 50**Fig paste**aflatoxin B₁ and total aflatoxins in,
Ch 49, pp 34–37
filth in, **Ch 16**, pp 34–35**Filth. see also Extraneous materials**in alimentary pastes, **Ch 16**, pp 27–28in apple butter, **Ch 16**, p 33
in apple chops, **Ch 16**, p 33
in baked goods with fruit and nut
tissues, **Ch 16**, p 26
in barley cereal, **Ch 16**, pp 28–29
in bean curd (dried), **Ch 16**, pp 39–40
in bean paste, **Ch 16**, pp 37–38
in beverages and beverage materials,
Ch 16, pp 11–13
in breeding of frozen food products,
Ch 16, p 27
in brewer's grits, **Ch 16**, p 22
in broccoli (canned), **Ch 16**, pp 40–41
in candy, **Ch 16**, pp 36–37
in canned and comminuted tomato
products, **Ch 16**, pp 43–44
in cereals (corn and rice), **Ch 16**, p 28
in cheeses, **Ch 16**, pp 17–18
in chewing gum, **Ch 16**, p 37
in chicken giblet paste, **Ch 16**, p 30
in citrus and pineapple juices (canned),
Ch 16, p 35
in cocoa, chocolate, and press cake,
Ch 16, p 11
in coconut (shredded), **Ch 16**, pp 18–
19
in coffee (ground) and coffee
substitutes, **Ch 16**, pp 11–12
in corn chips, **Ch 16**, pp 28, 36
in corn flour, **Ch 16**, p 25
in corn meal (white and yellow), **Ch 16**,
pp 21–22
in crabmeat (canned), **Ch 16**, p 30
in cracked wheat and flours, **Ch 16**,
p 21
in dairy products, **Ch 16**, pp 16–17
in dressings, **Ch 16**, p 53
in drugs (leafy and crude), **Ch 16**, p 54
in eggs and egg products, **Ch 16**,
pp 29–30
in fig paste, **Ch 16**, pp 34–35
in fish and fish products (canned),
Ch 16, pp 30–32
from fish paste, **Ch 16**, p 32
in fish products containing spice,
Ch 16, p 31
from fish sauce (Bagoong), **Ch 16**, p 32
in fruit paste, **Ch 16**, pp 34–35
in grain products, **Ch 16**, p 22
in grains and seeds, **Ch 16**, p 19
in green leafy vegetables, **Ch 16**,
pp 41–42
in ground beef or hamburger, **Ch 16**,
pp 32–33
in gums (plant and crude), **Ch 16**,
pp 53–54
in high bran content breads, **Ch 16**,
p 26
in high-fat baked products, **Ch 16**, p 27
in honey, **Ch 16**, p 37
in horseradish (prepared), **Ch 16**, p 53
in infant cereal, **Ch 16**, pp 28–29
in jams and jellies, **Ch 16**, p 35
light and heavy filth, **Ch 16**, pp 4–6
in molasses, **Ch 16**, p 37
in mushrooms, **Ch 16**, pp 42–43
in mustard (prepared), **Ch 16**, p 53

- in oatmeal, **Ch 16**, pp 28–29
in papain (crude and refined), **Ch 16**, p 54
in peanut butter, **Ch 16**, p 19
in pecans, **Ch 16**, p 18
in pepper sauce, **Ch 16**, p 52
in peppers, **Ch 16**, p 52
in pickles, **Ch 16**, pp 52–53
in popcorn, **Ch 16**, p 36
in pork sausage (uncooked), **Ch 16**, pp 32–33
in potato chips, **Ch 16**, p 36
in potato products (dehydrated), **Ch 16**, p 43
in pureed infant food, **Ch 16**, p 42
in raisins, **Ch 16**, p 35
in rice flours (powders), extruded rice products, and rice paper, **Ch 16**, p 24
in sauces containing soy sauce, thickeners and spices, **Ch 16**, p 40
in sauerkraut, **Ch 16**, p 43
in shelled nuts, **Ch 16**, p 18
in shrimp (canned), **Ch 16**, p 32
in soy flour, **Ch 16**, p 25
in spices and condiments, **Ch 16**, pp 44–53
in spirulina powders and tablets, **Ch 16**, pp 54–55
in starch, **Ch 16**, p 25
in sugars and sugar products, **Ch 16**, p 36–37
in syrups, **Ch 16**, p 37
in tamarind pulp, **Ch 16**, p 53
in tea, **Ch 16**, pp 12–13
in tofu, **Ch 16**, pp 38–39
in wheat germ, **Ch 16**, p 23
in wheat gluten, **Ch 16**, p 25
in white breads, **Ch 16**, p 27
in white flour, **Ch 16**, pp 23–24
in whole wheat cereals, **Ch 16**, p 28
in whole wheat flour, **Ch 16**, pp 22–23
- Filtration methods**
dairy products, filth in, **Ch 16**, pp 16–17
food dressings, filth in, **Ch 16**, p 53
pepsin digestibility of animal protein feeds, **Ch 4**, pp 39–40
sugars, filth in, **Ch 16**, p 37
syrups, molasses, and honey, filth in, **Ch 16**, p 37
- Fingerprint detection, Ch 24, p 1**
- Finished drinking water**
chlorinated acidic pesticide residues in, **Ch 10**, pp 106–113
ethylene thiourea residues in, **Ch 10**, pp 104–106
N-methylcarbamoyloximes and *N*-methylcarbamates in, **Ch 10**, pp 52–55
nitrogen- and phosphorus-containing pesticide residues in, **Ch 10**, pp 41–47
pesticides in, **Ch 10**, pp 99–104
- Fish and other marine products**
ammonia in crabmeat, **Ch 35**, pp 8–9
ash of seafood, **Ch 35**, p 8
boric acid in caviar, **Ch 47**, pp 17–18
boron in caviar, **Ch 47**, pp 15–16
cadaverine in canned tuna and mahimahi, **Ch 35**, pp 20–23
cooking seafood products, **Ch 35**, p 2
detection of frozen and thawed shucked oysters, **Ch 35**, pp 4–6
domoic acid in mussels, **Ch 35**, p 11
drained liquid from shucked oysters, **Ch 35**, p 6
drained weight of frozen crabmeat, **Ch 35**, p 7
drained weight of frozen shrimp and crabmeat, **Ch 35**, p 6
ethanol in canned salmon, **Ch 35**, pp 26–27
fat (crude) or acetone extract in fish meal, **Ch 4**, p 41
fat in fish meal, **Ch 35**, pp 12–13
fat in seafood, **Ch 35**, p 11
fatty acids in encapsulated fish oils, **Ch 41**, pp 27–29
fatty acids (volatile) in seafood, **Ch 35**, pp 13–15
filth from fish paste, **Ch 16**, p 32
filth from fish sauce (Bagoong), **Ch 16**, p 32
filth in canned crabmeat, **Ch 16**, p 30
filth in canned fish and fish products, **Ch 16**, pp 30–31
filth in canned shrimp, **Ch 16**, p 32
filth in fish products containing spice, **Ch 16**, p 31
fish flesh content in frozen coated fish products, **Ch 35**, pp 2–4
fish oil and marine animal oil detection, **Ch 41**, p 55
histamine in seafood, **Ch 35**, pp 15–19
identification of canned Pacific salmon, **Ch 35**, pp 32–34
identification of cooked and frozen crabmeat, **Ch 35**, pp 31–32
identification of fish species, **Ch 35**, pp 27–31
indole in crabmeat, oysters, and shrimp, **Ch 35**, pp 19–20
indole in shrimp, **Ch 35**, pp 19–20, 23–25
lead in fish, **Ch 9**, pp 31–32
Listeria in crab, **Ch 17**, pp 229–234
Listeria in shrimp, **Ch 17**, pp 232–234, 241–250
Listeria spp. in fish fillets, **Ch 17**, pp 234–240
mercury in fish, **Ch 9**, pp 36–37
mercury (methyl) in fish and shellfish, **Ch 9**, pp 37–40
minced fish flesh in mixed fillet-minced cod blocks, **Ch 35**, pp 7–8
mold in tomato sauce packing medium, **Ch 16**, p 76
net contents of frozen seafood, **Ch 35**, pp 1–2
nitrogen (total) in seafood, **Ch 35**, p 8
N-nitrosamines in minced fish-meat and surimi-meat frankfurters, **Ch 39**, pp 12–13
organochlorine pesticide residues in, **Ch 10**, pp 26–27
paralytic shellfish poison, **Ch 35**, p 27
parasites in fish muscle, **Ch 35**, p 27
PCBs in, **Ch 10**, pp 26–27
poliovirus 1 in oysters, **Ch 17**, pp 268–269
potassium in seafood, **Ch 35**, pp 10–11
putrescine in canned tuna, **Ch 35**, pp 20–23
Salmonella in cod, **Ch 16**, pp 8–11
Salmonella in prawns, **Ch 17**, pp 169–171
Salmonella in shrimp, **Ch 16**, pp 8–11; **Ch 17**, pp 164–166, 210–212
Salmonella in tilapia, **Ch 17**, pp 205–210
salt in seafood, **Ch 35**, pp 9–10
sample treatment and preparation, **Ch 35**, p 1
seafood in seafood cocktail, **Ch 35**, p 7
shell in canned clams, **Ch 16**, p 30
shell in canned crabmeat, **Ch 16**, p 30
shell in canned oysters, **Ch 16**, p 30
shrimp in shrimp cocktail, **Ch 35**, p 7
sodium in seafood, **Ch 35**, pp 10–11
solids (total) in seafood, **Ch 35**, p 8
total viable count in whitefish filets, automated enumeration, **Ch 16**, pp 6–8
trimethylamine nitrogen in seafood, **Ch 35**, p 9
Vibrio cholerae in oysters, **Ch 17**, pp 263–265
volatile bases in fish, **Ch 35**, pp 34–36
volume of shucked oysters, clams, or scallops, **Ch 35**, p 6
- Fish feeds. see Feeds**
- Fish meal**
fat (crude) in, **Ch 35**, pp 12–13
Salmonella in, **Ch 17**, pp 169–171
- Fish oils**
encapsulated, fatty acids in, **Ch 41**, pp 27–29
methyl and ethyl esters, **Ch 41**, pp 27–29
- Flagellar test tube test**
Salmonella in foods, **Ch 17**, pp 141–142
- Flame atomic absorption spectrophotometric methods**
zinc in serum, **Ch 14**, pp 2–3
- Flame emission spectrometric methods**
sodium and potassium in dried milk, **Ch 33**, pp 74–75
- Flame photometric-atomic absorption spectrophotometric methods**
calcium, potassium, and sodium in electrolyte replenishers, **Ch 18**, p 8
- Flame photometric methods**
potassium in distilled liquors, **Ch 26**, pp 6–7
potassium in fertilizers, **Ch 2**, pp 24–28
potassium in fruits and fruit products, **Ch 37**, pp 7–8
potassium in plants, **Ch 3**, p 13
potassium in seafood, **Ch 35**, pp 10–11

- potassium in tobacco, **Ch 3**, pp 34–35
sodium in distilled liquors, **Ch 26**, p 7
sodium in fertilizers, **Ch 2**, p 39
sodium in plants, **Ch 3**, p 13
sodium in seafood, **Ch 35**, pp 10–11
- Flame spectrophotometric methods**
potassium in wines, **Ch 28**, p 9
sodium in fruits and fruit products,
Ch 37, p 8
sodium in wines, **Ch 28**, p 9
- Flaming red color additive**, **Ch 46**, p 9
- Flavonol aglycones**
in *Ginkgo biloba* dietary supplement
crude materials and finished
products, **Ch 51**, pp 19–24
- Flavor extracts and toilet preparations.**
see also **Flavors**
alcohol in, **Ch 36**, p 25
ammonium glycyrrhizinate in, **Ch 36**,
pp 27–28
citral in, **Ch 36**, p 26
essential oil in, **Ch 36**, p 25
glycyrrhizic acid or acid salts in licorice
products, **Ch 36**, p 28
beta-ionone in, **Ch 36**, pp 26–27
licorice extracts and products, **Ch 36**,
pp 28–29
optical-crystallographic properties of
beta-ionone-*m*-nitrobenzhydrazide,
Ch 36, p 27
raspberry concentrates, beta-ionone in,
Ch 36, pp 26–27
sugars in licorice extracts, **Ch 36**, p 29
- Flavoring additives**
in vanilla extract, **Ch 36**, pp 10–11
- Flavors**
alcohol in, **Ch 36**, p 1
almond extract, **Ch 36**, pp 22–24
β-asarone in wines, **Ch 28**, p 18
cassia, cinnamon, and clove extracts,
Ch 36, pp 24–25
coumarin in wines, **Ch 28**, p 19
flavor extracts and toilet preparations,
Ch 36, pp 25–29
lemon, orange, and lime extract,
flavors, and oils, **Ch 36**, pp 15–22
vanilla extract and its substitutes,
Ch 36, pp 1–15
in wines, **Ch 28**, pp 18–19
- Flaxseed oil**
identification of, **Ch 41**, p 68
- Flexible barrier materials**
extractives from, **Ch 48**, pp 4–5
- Florisol cleanup**
organochlorine and organophosphorus
pesticide residues, **Ch 10**, p 7
- Flotation methods**
alimentary pastes, filth in, **Ch 16**,
pp 27–28
allspice, filth in, **Ch 16**, p 47
aphids in hops, **Ch 16**, p 12
apple butter, filth in, **Ch 16**, p 33
barley cereal, filth in, **Ch 16**, pp 28–29
bean curd (dried), filth in, **Ch 16**,
pp 39–40
bean paste, filth in, **Ch 16**, pp 37–38
blackberries and raspberries (frozen),
thrips and other insects in, **Ch 16**,
pp 33–34
breeding of frozen food products, filth
in, **Ch 16**, p 27
brine, filth in corn meal (white and
yellow), **Ch 16**, pp 21–22
broccoli (canned), filth in, **Ch 16**,
pp 40–41
candy, filth in, **Ch 16**, pp 36–37
canned crabmeat, filth in, **Ch 16**, p 30
capsicums, filth in, **Ch 16**, p 48
cardamon, filth in, **Ch 16**, p 48
celery seed, filth in, **Ch 16**, p 48
cinnamon (ground), filth in, **Ch 16**,
pp 48–49
cocoa, chocolate, and press cake, filth
in, **Ch 16**, p 11
coffee (ground) and coffee substitutes,
filth in, **Ch 16**, pp 11–12
coriander, filth in, **Ch 16**, p 48
corn (canned), foreign matter in, **Ch 16**,
p 41
corn cereals, filth in, **Ch 16**, p 28
corn chip products, filth in, **Ch 16**, p 28
cracked wheat and flours, filth in,
Ch 16, p 21
cracking, insect infestation (internal) of
grains and seeds, **Ch 16**, p 21
cracking, insect infestation (internal) of
oats, **Ch 16**, p 20
cracking, insect infestation (internal) of
wheat, **Ch 16**, pp 19–20
fish (canned) and fish products, filth in,
Ch 16, pp 30–31
fish paste, filth from, **Ch 16**, p 32
fish products containing spice, filth in,
Ch 16, p 31
fish sauce (Bagoong), filth from, **Ch 16**,
p 32
garlic powder, filth in, **Ch 16**, p 49
ginger, filth in, **Ch 16**, p 48
grains and seeds, filth (external) in,
Ch 16, p 19
gums (plant and crude), filth in, **Ch 16**,
pp 53–54
high bran content breads, filth in,
Ch 16, p 26
high-fat baked products, filth in, **Ch 16**,
p 27
horseradish (prepared), filth in, **Ch 16**,
p 53
infant cereal, filth in, **Ch 16**, pp 28–29
leaves of alfalfa, papaya, peppermint,
and spearmint, filth in, **Ch 16**, p 47
marjoram (unground), filth in, **Ch 16**,
pp 50–51
mustard (prepared), filth in, **Ch 16**, p 53
nutmeg, filth in, **Ch 16**, p 51
oatmeal, filth in, **Ch 16**, pp 28–29
onion powder, filth in, **Ch 16**, p 49
oregano, filth in, **Ch 16**, p 51
pancreatin digestion, filth in baked
goods with fruit and nut tissues,
Ch 16, p 26
papain (crude and refined), filth in,
Ch 16, p 54
peanut butter, filth and extraneous
materials in, **Ch 16**, p 19
potato chips, filth in, **Ch 16**, p 36
potato products (dehydrated), filth in,
Ch 16, p 43
rice cereals, filth in, **Ch 16**, p 28
rice flours (powders), extruded rice
products, and rice paper, filth in,
Ch 16, p 24
sage (rubbed), filth in, **Ch 16**, pp 49–50
sauces containing soy sauce,
thickeners and spices, filth in,
Ch 16, p 40
shelled nuts, filth in, **Ch 16**, p 18
shrimp (canned), filth in, **Ch 16**, p 32
soy flour, filth in, **Ch 16**, p 25
spices and condiments, filth in, **Ch 16**,
pp 44–47
spices (whole), filth in, **Ch 16**, p 44
spirulina powders and tablets, filth in,
Ch 16, pp 54–55
tea, filth in, **Ch 16**, p 13
weevils in beans and peas, **Ch 16**, p 37
wheat germ, filth in, **Ch 16**, p 23
wheat gluten, filth in, **Ch 16**, p 25
white breads, filth in, **Ch 16**, p 27
white flour, filth (pre- and post-milling)
in, **Ch 16**, p 23
white pepper, filth in, **Ch 16**, p 48
whole wheat cereals, filth in, **Ch 16**,
p 28
whole wheat flour, filth in, **Ch 16**,
pp 22–23
- Flour.** *see also* **Soy flour; Wheat flour; White flour**
alpha-amylase in, **Ch 32**, p 22
corn, filth in, **Ch 16**, p 25
filth in, **Ch 16**, pp 21–25
insect eggs in, **Ch 16**, p 24
insect excreta in, **Ch 16**, pp 24, 70–71
proteolytic activity of, **Ch 32**, pp 25–26
rice, filth in, **Ch 16**, p 24
starchy, in meat, **Ch 39**, p 17
uric acid from insect excrement in,
Ch 16, pp 70–71
whole wheat, filth in, **Ch 16**, pp 22–23
- Flour injection analysis methods**
sulfite in foods and beverages, **Ch 47**,
pp 35–37
sulfite in wines, **Ch 47**, p 37
- Fluazifop-butyl**
in pesticide formulations, **Ch 7**,
pp 96–97
- Flucytosine**
in drug capsules, **Ch 18**, pp 55–56
- Fluid fertilizers.** *see* **Fertilizers**
- Fluometuron**
in pesticide formulations, **Ch 7**,
pp 33–34
in water, **Ch 10**, pp 99–104
- Fluorescein color additive**
analysis of, **Ch 46**, p 9
- Fluorescein sodium**
in drugs, **Ch 18**, pp 43–44
- Fluorescence detection**
paralytic shellfish poisoning toxins in
shellfish, **Ch 49**, pp 89–102

- ractopamine in swine, bovine, and turkey tissues, **Ch 23**, pp 26–29
- Fluorescence quenching method**
fluorides in food, **Ch 47**, p 20
- Fluorescent antibody screening method**
Salmonella in foods, **Ch 17**, pp 142–144
- Fluoride**
in drug tablets and solutions, **Ch 18**, p 10
in food, **Ch 47**, p 20
in hazardous substances, **Ch 8**, pp 1–2
in plants, **Ch 3**, pp 18–23
in water, **Ch 11**, pp 12–13, 29–31
in wine, **Ch 28**, pp 7–8
- Fluoride-selective electrode method**
fluoride in drug tablets and solutions, **Ch 18**, p 10
- Fluoride selective ion electrode standard addition method**
fluoride in wine, **Ch 28**, pp 7–8
- Fluorine**
in animal feed, **Ch 4**, p 63
on apples and pears, **Ch 9**, p 24
in baking powders, **Ch 25**, p 5
in foods, **Ch 9**, pp 24–28
microchemical determination, **Ch 12**, pp 6–7
in pesticide formulations, (present as sodium fluosilicate), **Ch 7**, p 7
in pesticide formulations, (total), **Ch 7**, pp 5–7
- Fluorogenic assay**
for glucuronidase, **Ch 17**, p 50
- Fluorogenic monoclonal enzyme immunoassay screening method**
Salmonella in foods, **Ch 17**, p 161
- Fluorometric methods**
alkaline phosphatase activity in fluid dairy products, **Ch 33**, pp 45–46
amprolium in feeds, **Ch 5**, p 5
buquinolate in feeds, **Ch 5**, pp 8–9
decoquinolate in animal tissues, **Ch 23**, pp 6–7
decoquinolate in feeds, **Ch 5**, pp 10–11
ethoxyquin in animal feed, **Ch 4**, p 73
fluorescein sodium in drugs, **Ch 18**, pp 43–44
histamine in seafoods, **Ch 35**, pp 17–19
indole in shrimp, **Ch 35**, p 25
pyoverdine in eggs, **Ch 34**, p 13
quinacrine hydrochloride in drugs, **Ch 20**, pp 17–18
reserpine in drugs, **Ch 20**, pp 20–21
riboflavin in foods and vitamin preparations, **Ch 45**, pp 14–15
riboflavin in ready-to-feed milk-based infant formula, **Ch 50**, p 8
selenium in feeds and premixes, **Ch 4**, pp 66–69
selenium in foods, **Ch 9**, pp 43–44
selenium in plants and pet foods, **Ch 3**, pp 25–26
sterols in macaroni products, **Ch 32**, p 75
thiamine in foods, **Ch 45**, p 14
- thiamine in grain products, **Ch 45**, p 13
thiamine in human and pet foods, **Ch 45**, pp 11–13
thiamine in milk-based infant formula, **Ch 50**, pp 10–11
vitamin C in food, **Ch 45**, pp 24–25
- Flurazepam hydrochloride**
in bulk drug and capsules, **Ch 22**, pp 3–4
- Fluridone**
in finished drinking water, **Ch 10**, pp 41–47
- Fluvalinate**
in agricultural products, **Ch 10**, pp 94–96
- Fly eggs**
in canned and comminuted tomato products, **Ch 16**, pp 43–44
in citrus juices (canned), **Ch 16**, p 35
in pineapple juices (canned), **Ch 16**, p 35
in pureed infant food, **Ch 16**, p 42
- Fly sprays**
organic thiocyanate in, **Ch 7**, pp 134–135
- Fmoc-Su derivatization**
glucosamine in raw materials and dietary supplements, **Ch 51**, pp 10–13
- Foam collapse rate**
of beer, **Ch 27**, pp 11–12
- Foam flashing method**
foam collapse rate of beer, **Ch 27**, p 12
- Folate**
in cereal foods, **Ch 45**, pp 68–73
in infant formula, **Ch 50**, pp 24–26
in infant formula and adult nutritionals, **Ch 50**, pp 40–44
in infant formula and adult/pediatric nutritional formula, **Ch 50**, pp 38–40
- Folic acid**
in infant formula, **Ch 50**, pp 24–26
microbiological assays, **Ch 45**, pp 55–58
in vitamin preparations, **Ch 45**, pp 59–60
- Folin micro method**
glucose in sugars and syrups, **Ch 44**, p 10
- Folpet**
in pesticide formulations, **Ch 7**, p 97
- Food allergen**
validation procedures for quantitative food allergen ELISA methods: community guidance and best practices, **App M**
- Food additives (direct)**
acetone peroxides in baking premixes, **Ch 47**, pp 44–45
antioxidants, **Ch 47**, pp 1–11
brominated vegetable oils in nonalcoholic beverages, **Ch 47**, pp 45–46
chemical preservatives, **Ch 47**, pp 11–41
- cyclohexylamine in cyclamates and artificially sweetened products, **Ch 47**, pp 49–51
cyclohexylsulfamate salts in nonalcoholic beverages, **Ch 47**, p 48
dulcin in food, **Ch 47**, p 51
emulsifying agents, **Ch 47**, pp 41–43
enzymes, **Ch 47**, pp 43–44
ethylene dichloride and trichloroethylene in spice oleoresins, **Ch 47**, p 56
fumaric acid in food, **Ch 47**, p 1
monosodium glutamate in food, **Ch 47**, pp 55–56
5-nitro-2-propoxyaniline in food, **Ch 47**, pp 51–52
nonnutritive sweeteners in nonalcoholic beverages, **Ch 47**, p 47
polydimethylsiloxane in pineapple juice, **Ch 47**, pp 52–53
saccharin in food, **Ch 47**, pp 53–55
saccharin in nonalcoholic beverages, **Ch 47**, p 55
sodium cyclamate and calcium cyclamate in canned fruit, **Ch 47**, p 48
sorbitol in food, **Ch 47**, pp 46–47
- Food additives (indirect)**
acrylonitrile in food, **Ch 48**, pp 6–7
benzo[a]pyrene in food, **Ch 48**, pp 1–4
3-chloro-1,2-propanediol in foods and food ingredients, **Ch 48**, pp 9–10
extractives from flexible barrier materials, **Ch 48**, pp 4–5
extractives from rubber articles, **Ch 48**, p 5
N-nitrosamines in baby bottle rubber nipples, **Ch 48**, pp 8–9
polycyclic aromatic hydrocarbons in food, **Ch 48**, pp 1–4
- Food and Agriculture Organization/World Health Organization.** *see* **FAO/WHO-AOAC methods**
- Food Chemicals Codex method.** *see* **AOAC-Food Chemicals Codex method**
- Food Chemicals Codex-U.S. Pharmacopeia-AOAC method**
tocopherol isomers in mixed tocopherols concentrate, **Ch 45**, pp 44–45
- Food containers**
excrement on, **Ch 16**, pp 69–70
urine stains on, **Ch 16**, pp 61–65
- Food dressings**
acidity of, **Ch 43**, p 9
alginates in, **Ch 43**, p 11
fat in, **Ch 43**, pp 9–10
filth in, **Ch 16**, p 53
gums in French dressing, **Ch 43**, p 10
gums in mayonnaise, **Ch 43**, p 10
gums in salad dressings, **Ch 43**, pp 10–11
nitrogen (total) in, **Ch 43**, p 9
oil in, **Ch 43**, p 10
phosphorus in, **Ch 43**, p 9

- polysorbate 60 in, **Ch 47**, pp 41–42
sample preparation, **Ch 43**, p 8
solids (total) in, **Ch 43**, p 8
starch in, **Ch 43**, pp 11–12
sucrose in, **Ch 43**, p 9
sugars (reducing) in, **Ch 43**, p 9
- Food extracts**
vitamin B₆ in, **Ch 45**, pp 66–68
- Food gums**
hydroxypropyl methylcellulose in food and food products, **Ch 32**, pp 27–31
methylcellulose in food and food products, **Ch 32**, pp 27–31
- Foods. see also Pet foods; specific foods**
aerobic plate counts, **Ch 17**, pp 9–12
aflatoxins in, **Ch 49**, pp 5–6
antimony in, **Ch 9**, p 22
antioxidant activity in, **Ch 47**, pp 8–11
arsenic in, **Ch 9**, pp 1–3, 22
Bacillus cereus in, **Ch 17**, pp 124–125
bacteria in, **Ch 17**, pp 6–7
barium-140 in, **Ch 13**, pp 6–8
C. botulinum and its toxins in, **Ch 17**, pp 115–117
C. perfringens in, **Ch 17**, pp 117–120
cadmium in, **Ch 9**, pp 1–5, 16–23
canned, low-acid, commercial sterility of, **Ch 17**, pp 110–114
cesium-134 in, **Ch 13**, pp 8–10
cesium-137 in, **Ch 13**, pp 6–10
cholecalciferol (vitamin D₃) in, **Ch 45**, pp 35–37
cholesterol in, **Ch 45**, pp 89–91, 104–105
coliform counts, **Ch 17**, p 32
coliforms in, detection and confirmed quantitation, **Ch 17**, pp 36–39
coliforms in, rapid enumeration of, **Ch 17**, p 32–26
color additives in, **Ch 46**, pp 1–14
confirmed total coliforms in, **Ch 17**, pp 41–43
copper in, **Ch 9**, pp 14–16, pp 16–23
detection and quantification of yeasts and molds in, **Ch 17**, pp 21–26
dry, *Salmonella* in, **Ch 17**, pp 171–172
E. coli in, **Ch 17**, pp 32, 26–29, 41–46, 137–141
Enterobacteriaceae in, **Ch 17**, pp 46–49, 137–141
Escherichia coli O157:H7 in, **Ch 17**, pp 50–63, 65–67, 78–86
excrement on, **Ch 16**, pp 69–70
fat in, **Ch 45**, pp 85–86
fecal coliforms in, **Ch 17**, pp 44–45
fiber (dietary) in, **Ch 32**, pp 5–12
fluorine in, **Ch 9**, pp 24–28
fructans in, **Ch 45**, pp 91–97
trans-galactooligosaccharides in selected products, **Ch 45**, pp 110–113
gliaden as a measure of gluten in, **Ch 32**, pp 15–17, 41–43
iodine-131 in, **Ch 13**, pp 6–8
iron in, **Ch 9**, pp 14–22
L. monocytogenes in, **Ch 17**, pp 242–257
lead in, **Ch 9**, pp 1–6, 16–22, 28–35
Listeria in, **Ch 17**, pp 234–253, 258–262
manganese in, **Ch 9**, p 35
mercury in, **Ch 9**, pp 35–43
microbiological methods, **Ch 17**, pp 4–5
mold counts in, **Ch 17**, pp 17–21
mold in, **Ch 17**, pp 21–26
niacin and niacinamide in, **Ch 45**, pp 17–18, 20–21
nickel in, **Ch 9**, pp 14–15, 43
pesticide residues in nonfatty foods, **Ch 10**, pp 12–17
phosphorus (total) in, **Ch 45**, pp 50–52
phytate in, **Ch 32**, p 78
polydextrose in, **Ch 45**, pp 98–100
processed, *Salmonella* in, **Ch 17**, pp 130–132
processed and prepared, enumeration of *S. aureus* in, **Ch 17**, pp 101–103
protein digestibility of, **Ch 45**, pp 82–83
raw, highly contaminated, *Salmonella* in, **Ch 17**, pp 132–133
riboflavin in, **Ch 45**, pp 14–17
S. aureus in, **Ch 17**, pp 89–90, 99–101
S. aureus isolated from, **Ch 17**, pp 98–99
Salmonella in, **Ch 17**, pp 128–130, 134–166, 169–171, 173–219
selenium in, **Ch 9**, pp 1–3, 43–44
soluble dietary fiber in, **Ch 45**, pp 102–103
soy, isoflavones in, **Ch 45**, pp 119–128
for special dietary use, sodium in, **Ch 45**, p 85
Staphylococcal enterotoxin in, **Ch 17**, pp 90–97
sulfur amino acids in, **Ch 45**, p 88
thiamine in, **Ch 45**, pp 11–14
tin in, **Ch 9**, pp 44–45
titanium in cheese, **Ch 9**, p 45
 α -tocopherol acetate in, **Ch 45**, pp 38–41, 43–44
 α -tocopherol in, **Ch 45**, pp 38–41
RRR- or *all-rac-alpha*-tocopherol in, **Ch 45**, pp 41–43
total aerobic microorganisms, detection and quantification of, **Ch 17**, pp 12–16
total coliforms in, **Ch 17**, pp 44–46
total dietary fiber in, **Ch 45**, pp 100–101, 103, 105–110, 130–136
tryptophan in, **Ch 45**, pp 87–88
urine stains on, **Ch 16**, pp 61–65
vitamin A in, **Ch 45**, pp 6–9, 52–55
vitamin C in, **Ch 45**, pp 24–25
yeast counts in, **Ch 17**, pp 17–21
yeast in, **Ch 17**, pp 21–26
zinc in, **Ch 9**, pp 1–3, 16–22, 45–46
- Forages. see also Feeds**
fat (crude) in, **Ch 4**, pp 41–44
fiber (acid detergent) in, **Ch 4**, pp 32–33
moisture in, **Ch 4**, pp 2–8
nitrate in, **Ch 14**, pp 5–7
protein (crude) in, **Ch 4**, pp 32–36
- Foreign matter. see also Extraneous materials**
in brewer's grits, **Ch 16**, p 21
in canned corn, **Ch 16**, p 41
in drugs (leafy and crude), **Ch 16**, p 54
isolation techniques, **Ch 16**, pp 1–4
in spices and condiments, **Ch 16**, p 44
- Forensic sciences**
fingerprint detection, **Ch 24**, p 1
glass fragment characterization and matching, **Ch 24**, pp 1–3
mineral wool insulation properties, **Ch 24**, p 3
voice print identification, **Ch 24**, pp 3–4
- Formaldehyde**
in food, **Ch 47**, p 21
in maple syrup, **Ch 44**, pp 40–41
in pesticide formulations, **Ch 7**, pp 132–133
in seed disinfectants, **Ch 7**, p 133
- Formaldehyde fertilizers. see Urea-formaldehyde fertilizers**
- Formaldehyde titration method**
nitrogen (ammoniacal) in fertilizers, **Ch 2**, p 15
- Formamide. see Methanol-formamide**
- Formic acid**
in food, **Ch 47**, p 21
in seafood, **Ch 35**, pp 13–14
- Formothion**
in pesticide formulations, **Ch 7**, p 111
- Fortified foods**
calcium, copper, iron, magnesium, manganese, potassium, phosphorus, sodium, and zinc in fortified products, **Ch 50**, pp 65–72
vitamin A in fortified fluid milk, **Ch 45**, pp 3–6
vitamin B₁₂ in fortified bovine milk-based and fortified soya-based infant formula powders, **Ch 50**, pp 36–38
vitamin D in fortified milk and milk powder, **Ch 45**, p 33
- FOSS artificial neural network calibration model**
fat, moisture, and protein in meat and meat products, **Ch 39**, pp 25–27
- FOSS FoodScan near-infrared spectroscopic methods**
fat, moisture, and protein in meat and meat products, **Ch 39**, pp 25–27
- Fossomatic method**
somatic cells in milk, **Ch 17**, pp 270–271
- Fowler modification**
Canadian lead number of maple products, **Ch 44**, p 39
- Frankfurters**
Listeria in, **Ch 17**, pp 229–234
N-nitrosamines in minced fish-meal and surimi-meat frankfurters, **Ch 39**, pp 12–13
Salmonella in, **Ch 17**, pp 205–210
- Freezing point**
of milk, **Ch 33**, pp 5–7

French dressing

- filth in, **Ch 16**, p 53
- gums in, **Ch 43**, p 10

Fritted glass crucible method

- fiber (crude) in animal feed and pet food, **Ch 4**, p 47

Frozen desserts. *see* **Ice cream and frozen desserts**

Frozen foods. *see also* **Frozen fruits; Vegetable products (frozen)**

- breeding of, filth in, **Ch 16**, p 27
- drained weight of frozen crabmeat, **Ch 35**, pp 6–7
- drained weight of frozen shrimp, **Ch 35**, p 6
- E. coli* in, **Ch 17**, p 50
- fish flesh content in frozen coated fish products, **Ch 35**, pp 2–4
- microbiological methods, **Ch 17**, pp 4–5
- net contents of frozen seafoods, **Ch 35**, pp 1–2
- poultry, *Salmonella* in, **Ch 17**, pp 203–205
- soil in fruits and vegetables, **Ch 16**, pp 35–36
- soil in spinach, **Ch 16**, p 42

Frozen fruits

- drained weight of, **Ch 37**, p 2
- fill of container of, **Ch 37**, pp 1–2
- fruit content of frozen fruit-sugar mixtures, **Ch 37**, p 2
- insects in blackberries and raspberries, **Ch 16**, pp 33–34
- mold in strawberries, **Ch 16**, p 75
- net contents of, **Ch 37**, p 1
- soil in, **Ch 16**, pp 35–36
- solids (soluble) in frozen concentrate for lemonade, **Ch 37**, p 7
- thawing, **Ch 37**, p 2
- thiourea in frozen peaches, **Ch 47**, pp 40–41

Fructans

- in food products, **Ch 44**, p 53; **Ch 45**, pp 91–97

Fructose

- in cane and beet final molasses, **Ch 44**, pp 21–23
- in corn syrup, **Ch 44**, pp 52–53
- in fruit juices, **Ch 37**, p 15
- high fructose starch syrup in honey, **Ch 44**, pp 32–33
- in honey, **Ch 44**, pp 28–32
- in milk chocolate, **Ch 31**, p 13
- in plants, **Ch 3**, p 27
- in presweetened cereals, **Ch 32**, pp 62–63
- in raw cane sugar, **Ch 44**, pp 12–15
- in sugars and syrups, **Ch 44**, pp 11–12
- in wine, **Ch 28**, pp 5–6

Fruits and fruit products

- acidity (titratable) of fruit products, **Ch 37**, pp 10–11
- acidity (volatile) of fruit products, **Ch 37**, p 11
- alcohol in fruit products, **Ch 37**, p 4
- alcohol precipitate in fruit products, **Ch 37**, pp 9–10

anthocyanin pigment content of fruit juices, beverages, natural colorants and wines, **Ch 37**, pp 37–39

anthocyanins in fruit juices, **Ch 37**, pp 19–20

ash of, **Ch 37**, pp 7, 9

azinphos-methyl pesticide residues in, **Ch 10**, pp 58–59

beet sugar in fruit juices, **Ch 37**, pp 27–31

benzoic acid in juices, **Ch 47**, p 14

benzoic acid in orange juice, **Ch 37**, pp 24–25

betaine in orange juice, **Ch 37**, p 10

biphenyl pesticide residues in citrus fruits, **Ch 10**, pp 61–62

calcium in, **Ch 37**, p 8

captan pesticide residues in, **Ch 10**, p 63

carbaryl residues in apples, **Ch 10**, p 65

carbohydrates in fruit juices, **Ch 37**, p 15

carbon stable isotope ratio of apple cider vinegar, **Ch 37**, pp 25–26

carbon stable isotope ratio of apple juice, **Ch 37**, pp 21–22

carbon stable isotope ratio of ethanol derived from fruit juices and maple syrups, **Ch 37**, pp 33–37

carbon stable isotope ratio of orange juice, **Ch 37**, p 22

chlorine (total) in fruit products, **Ch 37**, p 9

citric acid in, **Ch 37**, p 11

citric acid in cranberry juice cocktail and apple juice, **Ch 37**, p 14

dichlone residues in, **Ch 10**, pp 69–70

dodine pesticide residues in, **Ch 10**, p 72

drained weight of frozen fruits, **Ch 37**, p 2

essential oil in, **Ch 37**, p 18

ethylenethiourea pesticide residues in, **Ch 10**, pp 74–76

extraneous materials in, **Ch 16**, pp 33–36, 74–79

fiber (dietary) in, **Ch 32**, pp 5–12

fill of container of frozen fruit, **Ch 37**, pp 1–2

filth in apple butter, **Ch 16**, p 33

filth in baked goods with fruit tissues, **Ch 16**, p 26

filth in canned citrus juices, **Ch 16**, p 35

filth in canned pineapple juices, **Ch 16**, p 35

filth in dried apple chops, **Ch 16**, p 33

filth in fig paste, **Ch 16**, p 34–35

filth in fruit paste, **Ch 16**, p 34–35

filth in jams and jellies, **Ch 16**, p 35

filth in raisins, **Ch 16**, p 35

fluorine on apples and pears, **Ch 9**, p 24

fruit content of frozen fruit-sugar mixtures, **Ch 37**, p 2

glucose (commercial) in, **Ch 37**, p 18

glycerol in grape juice, **Ch 28**, p 4

glyodin residues in apples and pears, **Ch 10**, p 76

isocitric acid in, **Ch 37**, p 11

L. monocytogenes in, **Ch 17**, pp 253–256

lactic acid in, **Ch 37**, p 14

lead in juices, **Ch 9**, pp 30–31

lead on apples and pears, **Ch 9**, p 29

lemon juice, **Ch 37**, pp 20–21

maggots in blueberries and cherries, **Ch 16**, p 34

magnesium in, **Ch 37**, p 8

maleic hydrazide residues in, **Ch 10**, pp 85–86

malic acid in, **Ch 37**, pp 11–13, 16

D-malic acid in apple juice, **Ch 37**, pp 17–18

malic acid in cranberry juice cocktail and apple juice, **Ch 37**, p 14

L-malic in, **Ch 37**, pp 11–12, 16

L-malic/total malic acid ratio in apple juice, **Ch 37**, pp 15–16

malvidin glucosides in grape juice, **Ch 37**, p 20

manganese in, **Ch 37**, p 8

methoxychlor residues in, **Ch 10**, p 87

N-methylcarbamate insecticide and metabolite residues in grapes, **Ch 10**, pp 55–58

N-methylcarbamate insecticide residues, **Ch 10**, pp 51–52

moisture in dried fruits, **Ch 37**, p 4

moisture in prunes and raisins, **Ch 37**, pp 4–6

mold in, **Ch 16**, pp 74–75

mold in apple butter, **Ch 16**, p 74

mold in canned juices, **Ch 16**, p 74

mold in canned pineapple juices, **Ch 16**, p 74

mold in citrus juices, **Ch 16**, p 74

mold in comminuted fruits, **Ch 16**, pp 78–79

mold in cranberry sauce, **Ch 16**, p 74

mold in drupelet berries, **Ch 16**, p 74

mold in frozen strawberries, **Ch 16**, p 75

mold in nectars, purees, and pastes, **Ch 16**, pp 74–75

naphthyleneacetic acid residues in apples, **Ch 10**, pp 89–90

naringin and neohesperidin in orange juice, **Ch 37**, pp 31–33

net contents of frozen fruits, **Ch 37**, p 1

nicotine residues, **Ch 10**, pp 90–91

oil (recoverable) in, **Ch 37**, p 19

orange pulp wash and/or added water in processed Florida orange juice, **Ch 37**, pp 22–24

organic acids (foreign) in fruit juices, **Ch 37**, pp 14–15

organochlorine and organophosphorus pesticide residues in strawberries, **Ch 10**, pp 10–12

organochlorine pesticide residues in, **Ch 10**, pp 32–33

organophosphorus pesticide residues, **Ch 10**, pp 35–39

- patulin in apple juice, **Ch 49**, pp 75–80
 patulin in apple puree, **Ch 49**, pp 78–80
 pectic acid in, **Ch 37**, p 10
 phosphorus in, **Ch 37**, pp 8–9
 polydimethylsiloxane in pineapple juice, **Ch 47**, pp 52–53
 potassium in, **Ch 37**, pp 7–8
 protein in, **Ch 37**, p 10
 quinic acid in cranberry juice cocktail and apple juice, **Ch 37**, p 14
Salmonella in, **Ch 17**, pp 216–219
Salmonella in cantaloupe, **Ch 16**, pp 8–11
Salmonella in orange juice, **Ch 16**, pp 8–11; **Ch 17**, pp 205–210
 sample preparation, **Ch 37**, pp 2–3
 sampling of, **Ch 37**, p 1
 seeds in berry fruits, **Ch 37**, pp 6–7
 sodium cyclamate and calcium cyclamate in canned fruit, **Ch 47**, p 48
 sodium in, **Ch 37**, p 8
 soil in frozen products, **Ch 16**, pp 35–36
 solids (soluble) in, **Ch 37**, p 7
 solids (soluble) in citrus fruit juices, **Ch 37**, p 7
 solids (soluble) in frozen concentrate for lemonade, **Ch 37**, p 7
 solids (total) in, **Ch 37**, p 6
 solids (water-insoluble) in, **Ch 37**, p 6
 starch in, **Ch 37**, p 18
 sucrose in, **Ch 37**, p 18
 sugar-beet-derived syrups in frozen concentrated orange juice, **Ch 37**, pp 26–27
 sugars (reducing) in, **Ch 37**, p 18
 sulfur in ash of, **Ch 37**, p 9
 sulfur (total) in fruit products, **Ch 37**, p 9
 sulfurous acid in dried fruit, **Ch 47**, p 31
 synthetic pyrethroids in, **Ch 10**, pp 94–96
 tartaric acid in, **Ch 37**, p 11
 thawing frozen fruits, **Ch 37**, p 2
 thiourea in frozen peaches, **Ch 47**, pp 40–41
 thiourea in orange peel, **Ch 47**, p 41
 thiram residues in, **Ch 10**, pp 96–99
 thrips and other insects in frozen blackberries and raspberries, **Ch 16**, pp 33–34
 viscosity of fruit products, **Ch 37**, pp 3–4
- Fumaric acid**
 in food, **Ch 47**, p 1
- Fumigant pesticide mixtures**, **Ch 7**, pp 24–25
- Fumigant pesticide residues**
 volatile, in grain, **Ch 10**, p 50
- Fumonisin**
 in corn, **Ch 49**, pp 56–58
 in corn and corn flakes, **Ch 49**, pp 58–61
 total, in corn, **Ch 49**, pp 61–63
- Fungi**
 in eggs and egg products, **Ch 17**, p 3
- Fungicidal activity**
 of disinfectants, **Ch 6**, pp 23–24
- Fungicides**
 aldicarb in, **Ch 7**, p 25
 aminocarb technical and pesticide formulations, **Ch 7**, pp 25–26
 anilazine in, **Ch 7**, pp 26–27
 bendiocarb in, **Ch 7**, p 27
 benomyl in, **Ch 7**, p 28
 carbaryl in, **Ch 7**, pp 28–29
 carbofuran in, **Ch 7**, p 29
 chlorothalonil technical and formulated materials, **Ch 7**, pp 43–45
 chlorotoluron in, **Ch 7**, pp 29–31
 chloroxuron in, **Ch 7**, pp 29–31
 copper, copper (water-soluble) in, **Ch 7**, p 12
 dithianon in technical products and formulations, **Ch 7**, pp 31–32
 dithiocarbamates in, **Ch 7**, p 32
 fluometuron in, **Ch 7**, pp 33–34
 hexachlorobenzene technical and formulated materials, **Ch 7**, pp 43–45
 methiocarb, **Ch 7**, p 34
 methomyl in insecticidal formulations, **Ch 7**, pp 41–42
 metoxuron in, **Ch 7**, pp 29–31
 pirimicarb in, **Ch 7**, pp 34–35
 propoxur technical and pesticide formulations, **Ch 7**, pp 35–36
 tebuconazole in, **Ch 7**, pp 36–37
 thiocarbamates in herbicide formulations, **Ch 7**, p 38
 thiodicarb in technical products and formulations, **Ch 7**, pp 38–39
 thiram in pesticide formulations, **Ch 7**, pp 39–40
 triadimefon technical and pesticide formulations, **Ch 7**, pp 40–41
- Furazolidone**
 in animal feed, **Ch 4**, p 73; **Ch 5**, pp 14–17
 in feed premixes, **Ch 5**, pp 14–15
- Furfural**
 in distilled liquors, **Ch 26**, p 14
- Fusel oil**
 in cordials and liqueurs, **Ch 26**, p 20
 in distilled liquors, **Ch 26**, pp 11–12
- Fusion method**
 total color in color additives, **Ch 46**, p 13
- Galactan**
 in animal feed, **Ch 4**, p 60
- trans-Galactooligosaccharides**
 in selected food products, **Ch 45**, pp 110–113
- Galactose**
 in sugars and syrups, **Ch 44**, p 15
- β-Galactosidase**
 in industrial enzyme preparations, **Ch 33**, p 57
- Gamma ray method**
 radioactivity of substances, **Ch 13**, p 1
- Gamma-ray spectroscopic methods**
 barium-140 in milk and other foods, **Ch 13**, pp 6–8
 cesium-134 in foods, **Ch 13**, pp 8–10
 cesium-137 in foods, **Ch 13**, pp 8–10
 cesium-137 in milk and other foods, **Ch 13**, pp 6–8
 iodine-131 in milk and other foods, **Ch 13**, pp 6–8
- Garlic**
 filth in, **Ch 16**, pp 44–47
- Garlic powder**
 filth in, **Ch 16**, pp 44–47, 49
Salmonella in, **Ch 17**, pp 128–132
- Gas chromatographic—microextraction method**
 1,2-dibromoethane and 1,2-dibromo-3-chloropropane in water, **Ch 10**, pp 113–116
- Gas chromatographic-colorimetric-gravimetric method**
 total dietary fiber in foods and food products, **Ch 45**, pp 105–110
- Gas chromatographic/mass-selective detection methods**
 ethyl carbamate in alcoholic beverages and soy sauce, **Ch 28**, pp 15–17
 glyphosate and aminomethylphosphoric acid (AMPA) in crops, **Ch 10**, pp 78–83
- Gas chromatographic/mass spectrometric methods**
 3-chloro-1,2-propanediol in foods and food ingredients, **Ch 48**, pp 9–10
 pesticide residues in foods, **Ch 10**, pp 17–26
 pesticide residues in nonfatty foods, **Ch 10**, pp 12–17
 pesticide residues in soft drinks and sports drinks, **Ch 10**, pp 125–136
 sulfamethazine in swine tissues, **Ch 23**, pp 11–13
- Gas chromatographic methods. see also Capillary gas chromatographic methods**
 acephate in technical material and soluble powder pesticide formulations, **Ch 7**, pp 129–130
 acetone and alcohols in drugs, **Ch 18**, p 2
 acrylonitrile in food, **Ch 48**, pp 6–7
 alachlor in pesticide formulations, **Ch 7**, pp 69–70
 alcohol in almond extract, **Ch 36**, p 22
 alcohol in cassia, cinnamon, and clove extracts, **Ch 36**, p 24
 alcohol in flavors, **Ch 36**, p 1
 alcohol in lemon, orange, and lime extracts, **Ch 36**, pp 16
 alcohol in peppermint, spearmint, and wintergreen extracts, **Ch 36**, p 24
 alcohol in wines, **Ch 28**, p 3
 alcohols (higher) in distilled liquors, **Ch 26**, pp 12–14
d-trans-allethrin in pesticide formulations, **Ch 7**, pp 57–58
 ammonium glycyrrhizinate in flavor extracts, **Ch 36**, pp 27–28
 amphetamine in drugs, **Ch 18**, p 27

- animal fats in vegetable oils and fats, **Ch 41**, pp 50–52
- β -asarone in wines, **Ch 28**, p 18
- benfluralin in pesticide formulations, **Ch 7**, p 78
- benzoic acid in food, **Ch 47**, pp 13–14
- γ -BHC in technical BHC, pesticide formulations, and lindane shampoos and lotions, **Ch 7**, pp 75–76
- brominated vegetable oils in nonalcoholic beverages, **Ch 47**, pp 45–46
- bromoxynil octanoate in pesticide formulations, **Ch 7**, pp 78–79
- butachlor in pesticide formulations, **Ch 7**, p 79
- butylated hydroxyanisole and butylated hydroxytoluene in cereals, **Ch 47**, pp 5–6
- butyric acid in fats containing butterfat, **Ch 41**, pp 44–45
- cadaverine in canned tuna and mahimahi, **Ch 35**, pp 20–23
- caffeine in tea, **Ch 30**, pp 11–12
- campesterol, stigmasterol, and beta-sitosterol in saw palmetto raw materials and dietary supplements, **Ch 51**, pp 24–27
- camphor in drugs, **Ch 20**, p 30
- captan in pesticide formulations, **Ch 7**, pp 79–80
- carbohydrates in fruit juices, **Ch 37**, p 15
- chick edema factor in oils and fats, **Ch 41**, pp 56–57
- chlordimeform in pesticide formulations, **Ch 7**, pp 84–85
- chlorinated acidic pesticide residues in finished drinking water, **Ch 10**, pp 106–113
- chlorobutanol in drugs, **Ch 18**, pp 3–4
- cholesterol in foods, **Ch 45**, pp 104–105
- cholesterol in multicomponent foods, **Ch 45**, pp 89–91
- clopidol in animal tissues, **Ch 23**, pp 2–4
- cocaine hydrochloride in drug powders, **Ch 22**, p 2
- coumarin in wines, **Ch 28**, p 19
- cypermethrin in pesticide formulations, **Ch 7**, p 59
- DCPA in pesticide formulations, **Ch 7**, p 87
- DDT in technical products and pesticide formulations, **Ch 7**, pp 87–88
- denaturants (volatile) in alcoholic products, **Ch 8**, p 1
- deoxynivalenol in wheat, **Ch 49**, pp 55–56
- dexamethasone in drug substance and elixirs, **Ch 21**, pp 10–11
- diazinon in pesticide formulations, **Ch 7**, pp 106–107
- dichlobenil in pesticide formulations, **Ch 7**, p 92
- diethylcarbonate in wines, **Ch 28**, p 18
- dihydroanethole in nonalcoholic beverages, **Ch 29**, pp 4–5
- dihydrosafrole in nonalcoholic beverages, **Ch 29**, pp 4–5
- disulfoton in pesticide formulations, **Ch 7**, pp 107–108
- docosenoic acid in oils and fats, **Ch 41**, pp 30–31
- endosulfan in pesticide formulations, **Ch 7**, pp 95–96
- erucic acid in oils and fats, **Ch 41**, pp 29–30
- ethanol in beer, **Ch 27**, p 5
- ethchlorvynol in drugs, **Ch 19**, pp 18–19
- ethyl acetate in distilled liquors, **Ch 26**, pp 12–14
- ethyl alcohol in cosmetics, **Ch 15**, pp 1–2
- ethyl parathion in microencapsulated pesticide formulations, **Ch 7**, pp 124–125
- ethylal (perthane) residues, **Ch 10**, pp 72–73
- ethylene dibromide in grains, **Ch 10**, pp 73–74
- ethylene dichloride and trichloroethylene in spice oleoresins, **Ch 47**, p 56
- ethylene thiourea residues in water, **Ch 10**, pp 104–106
- ethylenethiourea pesticide residues, **Ch 10**, pp 74–76
- fat in cereal products, **Ch 32**, pp 45–49
- trans* fatty acid isomers in margarines, **Ch 41**, pp 41–42
- fatty acids in eggs, **Ch 34**, pp 11–12
- fatty acids in encapsulated fish oils and fish oil methyl and ethyl esters, **Ch 41**, pp 27–29
- fatty acids in seafood, **Ch 35**, p 15
- fentithion technical and pesticide formulations, **Ch 7**, p 109
- fensulfothion in pesticide formulations, **Ch 7**, pp 109–110
- fentin in fentin-maneb pesticide formulations, **Ch 7**, pp 13–14
- fluazifop-butyl in pesticide formulations, **Ch 7**, pp 96–97
- fluometuron in pesticide formulations, **Ch 7**, pp 33–34
- formothion in pesticide formulations, **Ch 7**, p 111
- fumigant pesticide mixtures, **Ch 7**, pp 24–25
- glycerol in cigarette filler and ground tobacco, **Ch 3**, p 35
- headspace, ethanol in canned salmon, **Ch 35**, pp 26–27
- heptachlor in AG chlordane, **Ch 7**, p 84
- heptachlor in pesticide formulations, **Ch 7**, p 98
- hexachlorobenzene in adipose tissue, **Ch 10**, p 84
- hexachlorobenzene in fatty products, **Ch 10**, pp 83–84
- hydrazine in maleic hydrazide technical and pesticide formulations, **Ch 7**, pp 54–56
- hydrolytic extraction, fat in foods, **Ch 41**, pp 20–25
- beta-hydroxybutyric, lactic, and succinic acids in eggs, **Ch 34**, pp 7–9
- identification of *Bacillus anthracis* from culture, **Ch 17**, pp 275–277
- indole in shrimp, **Ch 35**, pp 23–25
- ipronidazole in feeds, **Ch 5**, p 18
- isofenphos technical in pesticide formulations, **Ch 7**, pp 117–118
- isosafole in nonalcoholic beverages, **Ch 29**, pp 4–5
- linoleic acid in ready-to-feed milk-based infant formula, **Ch 50**, pp 19–20
- malathion in pesticide formulations, **Ch 7**, pp 118–119
- melengestrol acetate in animal tissues, **Ch 23**, pp 8–10
- melengestrol acetate in feed supplements, **Ch 5**, pp 18–20
- menadione sodium bisulfite in feed premixes, **Ch 45**, pp 48–49
- menthol in cigarette filler, **Ch 3**, pp 40–41
- mercury (methyl) in fish and shellfish, **Ch 9**, pp 37–40
- methanol in distilled liquors, **Ch 26**, pp 15–16
- methanol in hazardous substances, **Ch 8**, p 3
- methaqualone in drug powders, **Ch 22**, p 5
- methyl esters of fatty acids in oils and fats, **Ch 41**, pp 25–26
- methyl parathion in microencapsulated pesticide formulations, **Ch 7**, pp 124–125
- methyl parathion in pesticide formulations, **Ch 7**, p 123
- methyl salicylate in nonalcoholic beverages, **Ch 29**, pp 4–5
- N*-methylcarbamate insecticide residues, **Ch 10**, pp 51–52
- metolachlor in pesticide formulations, **Ch 7**, pp 100–101
- metribuzin in pesticide formulations, **Ch 7**, pp 48–49
- mirex in adipose tissue, **Ch 10**, p 84
- mirex in fatty products, **Ch 10**, pp 83–84
- mono- and diglycerides in fats and oils, **Ch 41**, pp 62–64
- multiresidue, synthetic pyrethroids in agricultural products, **Ch 10**, pp 94–96
- nicotine in environmental tobacco smoke, **Ch 3**, pp 37–39
- nicotine on Cambridge filter pads, **Ch 3**, p 37
- nikethamide in drugs, **Ch 20**, pp 26–27
- nitrogen- and phosphorus-containing pesticide residues in finished drinking water, **Ch 10**, pp 41–47

- N*-nitrosamines in baby bottle rubber nipples, **Ch 48**, pp 8–9
- N*-nitrosodibutylamine in latex infant pacifiers, **Ch 8**, pp 3–5
- N*-nitrosodimethylamine in beer, **Ch 27**, pp 17–21
- N*-nitrosodimethylamine in nonfat dry milk, **Ch 33**, pp 73–74
- nonvanillin vanilla volatiles in vanilla extract, **Ch 36**, pp 12–13
- N*-octyl bicycloheptene dicarboximide in pesticide formulations, **Ch 7**, pp 67–68
- organic acids in vanilla extract, **Ch 36**, p 12
- organochlorine pesticide residues, **Ch 10**, pp 3–5, 7–8, 10–12, 32
- organochlorine pesticide residues in fish, **Ch 10**, pp 26–27
- organochlorine pesticide residues in water, **Ch 10**, pp 27–32
- organophosphorus pesticide residues, **Ch 10**, pp 3–5, 7–8, 10–12
- paraaldehyde in drugs, **Ch 19**, p 19
- parathion in pesticide formulations, **Ch 7**, p 121
- PCBs (as Aroclor 1254) in serum, **Ch 10**, pp 33–35
- PCBs in fish, **Ch 10**, pp 26–27
- PCBs in paper and paperboard, **Ch 10**, p 33
- PCNB in pesticide formulations, **Ch 7**, p 101
- pentachlorophenol in gelatin, **Ch 10**, pp 92–93
- permethrin in pesticide formulations, **Ch 7**, p 61
- phencyclidine in drug powders, **Ch 22**, p 6
- phenothiazine in drugs, **Ch 19**, p 32
- piperonyl butoxide in pesticide formulations, **Ch 7**, pp 66–67
- pirimicarb in pesticide formulations, **Ch 7**, pp 34–35
- pirimiphos-methyl in technical products and pesticide formulations, **Ch 7**, pp 125–126
- polymers and oxidation products of heated vegetable oils, **Ch 41**, p 31
- propachlor in pesticide formulations, **Ch 7**, p 102
- propylene glycol in cigarette filler and ground tobacco, **Ch 3**, p 35
- propylene glycol in cosmetics, **Ch 15**, pp 2–3
- putrescine in canned tuna, **Ch 35**, pp 20–23
- pyrethrins in pesticide formulations, **Ch 7**, pp 66–67
- ronnel in feeds, **Ch 5**, p 30
- safrole in nonalcoholic beverages, **Ch 29**, pp 4–5
- beta-sitosterol in butter oil, **Ch 41**, pp 49–50
- sorbic acid in food, **Ch 47**, pp 13–14
- sorbitol in food, **Ch 47**, pp 46–47
- sporeforming organisms in low-acid canned foods, **Ch 17**, pp 113–114
- sulfamethazine in swine tissues, **Ch 23**, pp 13–14
- sulprofos in pesticide formulations, **Ch 7**, pp 127–128
- synthetic pyrethroids in agricultural products, **Ch 10**, pp 94–96
- terbutylazine in pesticide formulations, **Ch 7**, p 50
- tetradifon (technical) and pesticide formulations, **Ch 7**, p 103
- thiocarbamates in herbicide formulations, **Ch 7**, p 38
- α-tocopherol acetate in supplemental vitamin E concentrates, **Ch 45**, pp 45–46
- tocopherol isomers in mixed tocopherols concentrate, **Ch 45**, pp 44–45
- triazine in pesticide formulations, **Ch 7**, pp 50–52
- triethylene glycol in cigarette filler and ground tobacco, **Ch 3**, p 35
- trifluralin in pesticide formulations, **Ch 7**, p 78
- triglycerides in oils and fats, **Ch 41**, pp 46–47
- vegetable fat in butterfat, **Ch 41**, pp 48–49
- Vibrio vulnificus* identification, **Ch 17**, pp 265–267
- vitamin E in drugs, **Ch 45**, pp 46–47
- volatile fumigants in grain, **Ch 10**, p 50
- water in cosmetics, **Ch 15**, pp 1–2
- Gas chromatographic/thermal energy analyzer methods**
- ethyl carbamate in distilled spirits, **Ch 26**, pp 18–19
- N*-nitrosamines in minced fish-meat and surimi-meat frankfurters, **Ch 39**, pp 12–13
- Gasometric determination**
- carbon dioxide (total) in baking powders, **Ch 25**, p 1
- Gauze**
- iodoform on, **Ch 18**, pp 4–5
- Geiger-Muller Counter**
- radioactivity of substances, **Ch 13**, p 1
- Gel permeation chromatographic method**
- organochlorine pesticide residues in animal fats, **Ch 10**, p 27
- polymerized triglycerides in oils and fats, **Ch 41**, pp 67–68
- Gelatin**
- acidity in dessert powders, **Ch 38**, p 2
- ash of, **Ch 38**, p 1
- in cottage cheese, **Ch 33**, p 90
- in cream, **Ch 33**, p 66
- dessert powders, **Ch 38**, pp 1–3
- in evaporated milk, **Ch 33**, p 70
- glucose in, **Ch 38**, p 2
- in ice cream and frozen desserts, **Ch 33**, p 98
- jelly strength of, **Ch 38**, p 1
- jelly strength of gelatin dessert powders, **Ch 38**, p 2
- in milk, **Ch 33**, p 35
- moisture in, **Ch 38**, pp 1–2
- nitrogen in, **Ch 38**, p 1
- pentachlorophenol in, **Ch 10**, pp 92–93
- phosphorus in, **Ch 38**, p 1
- in roasted coffee, **Ch 30**, pp 3–4
- sample preparation, **Ch 38**, p 1
- sucrose in, **Ch 38**, p 2
- Gene Quence® DNA hybridization**
- Salmonella* in foods, **Ch 17**, pp 212–216
- GENE-TRAK method**
- Listeria* spp. in dairy products, seafoods, and meats, **Ch 17**, pp 229–232
- Salmonella* in foods, **Ch 17**, pp 161–164
- Geotrichum mold count**, **Ch 16**, pp 77–79
- Gerber methods**
- fat content of raw and pasteurized whole milk, **Ch 33**, pp 21–23
- Germicidal action**
- of disinfectants, **Ch 6**, pp 24–32
- Germicidal equivalent concentrations**
- chlorine (available) in disinfectants, **Ch 6**, pp 22–23
- Germicidal spray products**
- as disinfectants, **Ch 6**, pp 28–32
- Ginger**
- afatoxins and ochratoxin A in, **Ch 49**, pp 43–47
- extract, **Ch 36**, p 24
- filth in, **Ch 16**, pp 44–48
- volatile oil and resin in, **Ch 43**, p 5
- Ginkgo biloba**
- flavonol aglycones in crude materials and finished products, **Ch 51**, pp 19–24
- Ginseng**
- afatoxins and ochratoxin A in, **Ch 49**, pp 43–47
- Glass**
- fragment characterization and matching, **Ch 24**, pp 1–3
- in meat scraps, **Ch 16**, p 30
- in peanut butter, **Ch 16**, p 19
- Glass electrode methods**
- acidity of fruit products, **Ch 37**, p 11
- Glazing substances**
- in roasted coffee, **Ch 30**, pp 3–4
- Gliaden**
- as a measure of gluten in foods, **Ch 32**, pp 15–17, 41–43
- beta-D-Glucans**
- in oat and barley fractions and ready-to-eat cereals, **Ch 32**, pp 58–62
- in oats, **Ch 32**, pp 64–66
- Glucoamylase**
- activity in industrial enzyme preparations, **Ch 45**, pp 49–50
- Glucoamylase method**
- starch in cereals, **Ch 32**, p 55

Glucosamine

in raw materials and dietary supplements, **Ch 51**, pp 10–13

Glucose

in brewing sugars and syrups, **Ch 27**, p 38
in cacao products, **Ch 31**, pp 14–15
in cane and beet final molasses, **Ch 44**, pp 21–23
in corn syrups, **Ch 44**, pp 52–53
in corn syrups and dextrose products, **Ch 44**, pp 51–52
in eggs, **Ch 34**, pp 5–6
in fruit juices, **Ch 37**, p 15
in gelatin, **Ch 38**, p 2
in honey, **Ch 44**, pp 28–32
in milk chocolate, **Ch 31**, p 13
in plants, **Ch 3**, p 27
in presweetened cereals, **Ch 32**, pp 62–63
in raw cane sugar, **Ch 44**, pp 12–15
in starch dessert powders, **Ch 38**, p 3
in sugars and syrups, **Ch 44**, pp 8, 10–11
in wines, **Ch 28**, pp 5–6

Glucose (commercial)

in confectionery, **Ch 44**, p 24
in fruits and fruit products, **Ch 37**, p 18
in honey, **Ch 44**, p 32
in maple products, **Ch 44**, p 38
in nonalcoholic beverages, **Ch 29**, p 6
in roasted coffee, **Ch 30**, pp 3–4
in sugars and syrups, **Ch 44**, p 8

Glucose oxidase method

glucose in corn syrups and sugars, **Ch 44**, pp 51–52

Glucosides

cyanogenetic, in feeds, **Ch 49**, p 123

Glucuronidase

fluorogenic assay, **Ch 17**, p 50

Glutamic acid

in feeds, **Ch 4**, pp 9–19

Gluten

in foods, **Ch 32**, pp 15–17, 41–43

Glycarbylamide

in feeds, **Ch 5**, p 17

Glycerides

in monoglyceride concentrates, **Ch 41**, pp 58–59
saturated hydrocarbons in, **Ch 41**, p 56
in shortening, **Ch 41**, pp 61–62

Glycerol

in beer, **Ch 27**, p 6
in cased cigarette cut filler and ground tobacco, **Ch 3**, p 35
in cordials and liqueurs, **Ch 26**, p 21
in eggs, **Ch 34**, pp 6–7
in ground tobacco, **Ch 3**, p 35
in lemon, lime, and orange extracts, **Ch 36**, p 17
in shredded coconut, **Ch 40**, p 3
in vanilla extract, **Ch 36**, pp 1–2
in vinegar, **Ch 43**, p 13
in wines, **Ch 28**, pp 3–4

Glycine

in feeds, **Ch 4**, pp 9–19

Glycoalkaloids

in potato tubers, **Ch 49**, pp 124–126

Glycyrrhizic acid

in licorice products, **Ch 36**, p 28

Glyodin

in apples and pears, **Ch 10**, p 76

Glyoxylic acid test

protein in animal feed, **Ch 4**, p 24

Glyphosate

in crops, **Ch 10**, pp 78–83
in environmental water, **Ch 10**, pp 77–78
technical and pesticide formulations, **Ch 7**, pp 111–113
in water soluble granular pesticide formulations, **Ch 7**, pp 113–116

Goldenseal

hydrastine and berberine in raw materials, extracts, and dietary supplements, **Ch 51**, pp 31–33

Grains

alpha-amylase in, **Ch 32**, p 22
ash of, **Ch 32**, p 44
brewers', **Ch 27**, pp 9, 41–42
brewer's grits, filth in, **Ch 16**, p 22
brewer's grits, foreign matter in, **Ch 16**, p 21
corn flour, filth in, **Ch 16**, p 25
corn meal (white and yellow), filth in, **Ch 16**, pp 21–22
cracked wheat and flours, filth in, **Ch 16**, p 21
crude fat in, **Ch 32**, p 44
ether extract in, **Ch 32**, p 44
ethylene dibromide in, **Ch 10**, pp 50, 73–74
extraneous materials in, **Ch 16**, pp 19–25
fat acidity, **Ch 32**, p 54
fat (crude) in, **Ch 4**, pp 41–44
fiber (crude) in, **Ch 32**, p 44
filth (external) in, **Ch 16**, p 19
flour, insect eggs in, **Ch 16**, p 24
flour, insect excreta in, **Ch 16**, p 24
insect infestation (internal) of, **Ch 16**, p 21
iron in degerminated, bolted, whole corn meal, **Ch 32**, p 44
mammalian feces in products, **Ch 16**, pp 67–68
moisture in, **Ch 4**, pp 5–8; **Ch 32** p 44
oats, insect infestation (internal) of, **Ch 16**, p 20
protein (crude) in, **Ch 4**, pp 34–36
protein in, **Ch 32**, pp 44–45, 49–50
rice flours (powders), extruded rice products, and rice paper, filth in, **Ch 16**, p 24
sample preparation, **Ch 32**, p 44
soy flour, filth in, **Ch 16**, p 25
starch, filth in, **Ch 16**, p 25
thiamine in products, **Ch 45**, p 13
urine on, **Ch 16**, p 63
volatile fumigants in, **Ch 10**, p 50
wheat, insect infestation (internal) of, **Ch 16**, pp 19–20
wheat germ, filth in, **Ch 16**, p 23

wheat gluten, filth in, **Ch 16**, p 25
white flour, filth (pre-and post-milling) in, **Ch 16**, p 23
whole wheat flour, filth in, **Ch 16**, pp 22–23

Gram-negative identification method

Salmonella, *E. coli*, and *Enterobacteriaceae*, **Ch 17**, pp 279–280

Gram-positive identification method

Listeria and *Staphylococcus* spp. identification, **Ch 17**, pp 280–282

Grape juice

glycerol in, **Ch 28**, p 4

Grapes

azinphos-methyl pesticide residues in, **Ch 10**, pp 58–59
malvidin glucosides in juice, **Ch 37**, p 20
N-methylcarbamate insecticide and metabolite residues, **Ch 10**, pp 55–58

Graphite furnace atomic absorption spectrophotometric methods

copper, iron, and nickel in edible oils and fats, **Ch 9**, pp 14–15
lead and cadmium in ceramic foodware, **Ch 9**, pp 8–14
lead in edible oils and fats, **Ch 41**, pp 9–11
lead in sugars and syrups, **Ch 9**, pp 33–35

Gravimetric methods

alcohol extract of spices, **Ch 43**, p 2
alcohol precipitate in fruit products, **Ch 37**, p 9
aloin in drugs, **Ch 20**, p 31
aluminum in deodorants, **Ch 15**, pp 6–7
aluminum in water, **Ch 11**, pp 14–15
aluminum oxide in liming materials, **Ch 1**, p 5
amphetamine drugs, **Ch 18**, p 27
ash of cheese, **Ch 33**, p 82
ash of milk, **Ch 33**, p 10
ash of nuts and nut products, **Ch 40**, p 2
ash of spices, **Ch 43**, p 2
aspirin in tablets, **Ch 19**, p 12
barbiturates in drugs, **Ch 19**, p 14
barium in water, **Ch 11**, p 19
benzaldehyde in almond extract, **Ch 36**, pp 22–23
bismuth compounds in drugs, **Ch 18**, pp 5–6
calcium in liming materials, **Ch 1**, p 5
calcium in water, **Ch 11**, p 15
camphor in spirits, **Ch 20**, p 30
camphor (monobromated) in drug tablets, **Ch 20**, p 30
carbromal in drugs, **Ch 19**, p 14
Carius combustion, sulfur determination, **Ch 12**, p 11
catalytic combustion, sulfur determination, **Ch 12**, p 12
chloride in plants, **Ch 3**, pp 16–17
chlorides in deodorants, **Ch 15**, p 9
chlorobutanol in drugs, **Ch 18**, p 3

- citric acid in cheese, **Ch 33**, pp 88–89
 citric acid in milk, **Ch 33**, p 8
 cyclohexylsulfamate salts in nonalcoholic beverages, **Ch 47**, p 48
 enzymatic, dietary fiber containing supplemented resistant maltodextrin, **Ch 45**, pp 113–116
 enzymatic, soluble dietary fiber in foods, **Ch 45**, pp 102–103
 enzymatic, total dietary fiber in foods, **Ch 45**, pp 100–101, 130–136
 ephedrine in water-soluble jellies, syrups, and solutions of ephedrine salts, **Ch 20**, p 9
 ether extract of plants, **Ch 3**, p 28
 ether extract of prepared mustard, **Ch 43**, p 7
 extractives from rubber articles, **Ch 48**, p 6
 fat (crude) in nuts and nut products, **Ch 40**, p 1
 fat (crude) or ether extract in pet food, **Ch 4**, pp 40–41
 fatty acids in cream, **Ch 33**, p 65
 fatty acids (water-insoluble) in butter, **Ch 33**, pp 78–79
 ferric oxide in liming materials, **Ch 1**, p 5
 fibrous material in frozen green beans, **Ch 42**, p 12
 iodoform drug substance, **Ch 18**, p 4
 iodoform in ointments, **Ch 18**, p 4
 iron in water, **Ch 11**, p 14
 jalap in drugs, **Ch 20**, p 33
 lactose in cream, **Ch 33**, p 66
 lactose in milk, **Ch 33**, p 17
 lead in pesticide formulations, **Ch 7**, p 4
 magnesium (acid-soluble) in fertilizers, **Ch 2**, p 37
 magnesium in liming materials, **Ch 1**, pp 5–6
 magnesium in plants, **Ch 3**, p 11
 magnesium in water, **Ch 11**, p 16
 Meissl-Hiller, invert sugar in sugars and syrups, **Ch 44**, p 10
 mercury in drugs, **Ch 18**, pp 15–16
 mercury in organic mercurial seed disinfectants, **Ch 7**, p 23
 methyl anthranilate in nonalcoholic beverages, **Ch 29**, pp 5–6
 methylene chloride extract of spices, **Ch 43**, p 2
 moisture in cacao products, **Ch 31**, p 1
 moisture in fig bars and raisin filled crackers, **Ch 32**, p 72
 moisture in malt, **Ch 27**, pp 25–26
 moisture in tobacco, **Ch 3**, pp 33–34
 non-enzymatic, total dietary fiber in foods and food products with 2% or less starch, **Ch 45**, p 103
 oxygen determination, **Ch 12**, pp 7–9
 pentobarbital in drugs, **Ch 19**, p 14
 phenolphthalein in chocolate drug preparations, **Ch 19**, pp 5–6
 phenolphthalein in drug emulsions, **Ch 19**, p 6
 phenolphthalein in tablets, **Ch 19**, p 12
 phosphorus in baking powders, **Ch 25**, p 6
 phosphorus in fruits and fruit products, **Ch 37**, p 9
 phosphorus pentoxide in liming materials, **Ch 1**, p 5
 piperazine in drugs, **Ch 18**, p 44
 podophyllum in drugs, **Ch 20**, p 31
 polysorbate 60 in shortening, oils, and dressings, **Ch 47**, pp 41–42
 potassium in fruits and fruit products, **Ch 37**, p 7
 potassium in plants, **Ch 3**, pp 12–13
 pyrene in D&C Green No. 8, **Ch 46**, p 15
 quinolinium molybdophosphate, phosphorus (available) in fertilizers, **Ch 2**, p 11
 quinolinium molybdophosphate, phosphorus (citrate-insoluble) in fertilizers, **Ch 2**, p 10
 quinolinium molybdophosphate, phosphorus in plants, **Ch 3**, p 23
 quinolinium molybdophosphate, phosphorus (total) in fertilizers, **Ch 2**, pp 6–7
 quinolinium molybdophosphate, phosphorus (water-soluble) in fertilizers, **Ch 2**, p 9
 sabadilla alkaloids in pesticide formulations, **Ch 7**, p 68
 saccharin in food, **Ch 47**, pp 53–54
 sand in plants, **Ch 3**, p 1
 selenium in plants, **Ch 3**, pp 24–25
 silica in liming materials, **Ch 1**, pp 4–5
 silica in plants, **Ch 3**, p 1
 silica in water, **Ch 11**, pp 13–14
 sodium in plants, **Ch 3**, pp 12–13
 soil in frozen fruits and vegetables, **Ch 16**, pp 35–36
 solids (alcohol-insoluble) in canned peas, **Ch 42**, p 4
 solids (alcohol-insoluble) in frozen peas, **Ch 42**, p 11
 solids in prepared mustard, **Ch 43**, p 7
 solids in vinegar, **Ch 43**, p 13
 solids (insoluble) in canned vegetables, **Ch 42**, p 4
 solids (total) in canned vegetables, **Ch 42**, p 4
 solids (total) in frozen spinach, **Ch 42**, p 11
 solids (total) in ice cream and frozen desserts, **Ch 33**, p 96
 solids (total) in seafood, **Ch 35**, p 8
 sulfate in water, **Ch 11**, p 24
 sulfates in deodorants, **Ch 15**, p 9
 sulfur in ash of fruit products, **Ch 37**, p 9
 sulfur in fertilizers, **Ch 2**, pp 39–40
 sulfur in fruit products, **Ch 37**, p 9
 sulfur (soluble) in lime sulfur pesticide formulations, **Ch 7**, pp 18–19
 theophylline in drugs, **Ch 20**, p 8
 tin in foods, **Ch 9**, p 44
 titanium dioxide in liming materials, **Ch 1**, p 5
 total color in color additives, **Ch 46**, p 12
 total dietary fiber in foods and food products, **Ch 45**, pp 105–110
 volatile matter in color additives, **Ch 46**, p 13
 zinc in deodorants, **Ch 15**, pp 6–7
 zinc in fertilizers, **Ch 2**, p 40
 zinc in pesticide formulations, **Ch 7**, pp 4–5
- Green beans**
 fibrous material in frozen green beans, **Ch 42**, p 12
Listeria in, **Ch 17**, pp 241–250
N-methylcarbamate residues in, **Ch 10**, pp 51–52
 organophosphorus pesticide residues in, **Ch 10**, pp 35–36
- Green No. 3**
 analysis of, **Ch 46**, p 5
 in foods, **Ch 46**, pp 3–4
- Green No. 5, Ch 46**, p 7
- Green No. 6, Ch 46**, p 7
- Green No. 8**
 analysis of, **Ch 46**, p 7
 pyrene in, **Ch 46**, p 15
- Grinding method**
 sample preparation of hops for chemical analysis, **Ch 27**, p 34
- Griseofulvin**
 in feeds, **Ch 5**, p 46
- Grote reagent test**
 thiourea in orange juice, **Ch 47**, p 39
- Ground beef**
 filth in, **Ch 16**, pp 32–33
L. monocytogenes in, **Ch 17**, pp 253–256
 preservatives in, **Ch 47**, pp 14–15
Salmonella in, **Ch 17**, pp 205–210, 212–216
 total viable count in, automated enumeration, **Ch 16**, pp 6–8
 viruses in, **Ch 17**, p 268
- Groundwater**
 chromium (dissolved hexavalent) in, **Ch 9**, pp 60–62
 2,4-DNT in, **Ch 11**, pp 27–28
 HMX in, **Ch 11**, pp 27–28
 RDX in, **Ch 11**, pp 27–28
 TNT in, **Ch 11**, pp 27–28
- Growth bioassay**
 thiamine hydrochloride in vitamin preparations, **Ch 45**, pp 73–74
- Guaiacol**
 in drugs, **Ch 19**, p 4
- Guafenesin**
 in drugs, **Ch 19**, pp 3–4
- Guanosine 5'-monophosphate**
 in infant formula and adult nutritional formula, **Ch 50**, pp 84–86
- Guar gum**
Salmonella in, **Ch 17**, pp 190–193
- Guinea green B color additive**
 in foods, **Ch 46**, pp 1–2

Gums

- chewing, filth in, **Ch 16**, p 37
- in drugs, **Ch 20**, p 33
- in French dressing, **Ch 43**, p 10
- hydroxypropyl methylcellulose in food and food products, **Ch 32**, pp 27–31
- in ice cream and frozen desserts, **Ch 33**, pp 97–98
- in mayonnaise, **Ch 43**, p 10
- methylcellulose in food and food products, **Ch 32**, pp 27–31
- plant and crude, filth in, **Ch 16**, pp 53–54
- in salad dressings, **Ch 43**, pp 10–11
- in soft curd cheese, **Ch 33**, p 90

Gustafson method

- ash of wheat flour, **Ch 32**, p 2

Gutzeit method

- arsenic in foods, **Ch 9**, p 22

Hair preparations

- 2,5-diaminotoluene in, **Ch 15**, p 13
- dithiodiglycolic acid in cold permanent waves, **Ch 15**, pp 14–15
- paraphenylenediamine in, **Ch 15**, p 13
- potassium bromate in cold wave neutralizers, **Ch 15**, pp 13–14
- pyrogallol in dyes, **Ch 15**, p 14
- resorcinol in lotions, **Ch 15**, p 14
- salicylic acid in lotions, **Ch 15**, p 14
- sodium perborate in cold wave neutralizers, **Ch 15**, pp 13–14
- thioglycolate solutions in cold permanent waves, **Ch 15**, p 14

Halogenated drugs, Ch 18, pp 3–5

Halogens

- in color additives, **Ch 46**, pp 25–26

Halphen test

- cottonseed oil in oils and fats, **Ch 41**, p 52
- cyclopropene in oils, **Ch 41**, pp 52–53

Hamburger. see Ground beef

Hanus method

- iodine absorption number of oils and fats, **Ch 41**, pp 6–7

Hard surface carrier test methods

- for disinfectants, **Ch 6**, pp 10–13, 18

Hardness

- of water, **Ch 11**, pp 14–15

Hazardous substances

- carbonate in soda lye, **Ch 8**, p 1
- denaturants (volatile) in alcoholic products, **Ch 8**, p 1
- fluorides in, **Ch 8**, pp 1–2
- hydroxide in soda lye, **Ch 8**, p 1
- lead in paint, **Ch 8**, pp 2–3
- methanol in, **Ch 8**, p 3
- N-nitrosodibutylamine in latex infant pacifiers, **Ch 8**, pp 3–5
- phenol in, **Ch 8**, pp 5–6

Haze

- of beer after chilling, **Ch 27**, p 2

Head-space gas chromatographic method

- ethanol in canned salmon, **Ch 35**, pp 26–27

Hehner-Fulton test

- formaldehyde in food, **Ch 47**, p 21

Hehner number

- for oils and fats, **Ch 41**, p 12

HeLa cell culture

- invasiveness of mammalian cells by *E. coli*, **Ch 17**, pp 67–69

Helindone pink CN color additive

- analysis of, **Ch 46**, p 8

Helium leak test

- bacterial contamination in low-acid canned foods, **Ch 17**, pp 111–112

Heptachlor

- in AG chlordane, **Ch 7**, p 84
- multiresidue methods, **Ch 10**, pp 1–10
- in pesticide formulations, **Ch 7**, pp 97–98
- in water, **Ch 10**, pp 27–32

Heptachlor epoxide

- multiresidue methods, **Ch 10**, pp 1–10
- in water, **Ch 10**, pp 27–32

Herbicides

- amitrole in, **Ch 7**, pp 45–46
- bentazon in, **Ch 7**, p 46
- cyanazine in, **Ch 7**, pp 46–48
- diquat in, **Ch 7**, p 48
- ester forms of hormone-type formulations, **Ch 7**, p 8
- maleic hydrazide, **Ch 7**, pp 52–56
- metribuzin in, **Ch 7**, pp 48–49
- paraquat in, **Ch 7**, pp 49
- terbutylazine in, **Ch 7**, p 50
- thiocarbamates in, **Ch 7**, p 38
- triazine in, **Ch 7**, pp 50–52

Heroin

- in drug tablets and powders, **Ch 22**, p 4
- procaine in presence of, **Ch 18**, pp 31–32

Hexachlorobenzene

- in adipose tissue, **Ch 10**, p 84
- in fatty products, **Ch 10**, pp 83–84
- in technical and formulated pesticide materials, **Ch 7**, pp 43–45
- in water, **Ch 10**, pp 27–32

Hexachlorocyclohexane

- in soft drinks and sports drinks, **Ch 10**, pp 125–136

Hexachlorocyclopentadiene

- in technical chlordane, **Ch 7**, p 83

Hexachlorophene

- in deodorants, **Ch 15**, pp 9–10

Hexane

- Randall/Soxtec extraction method, fat (crude) in feeds, cereal grains, and forages, **Ch 4**, pp 43–44

Hexane distillation

- fatty acids (total) in oils and fats, **Ch 41**, pp 13–14

Hexazinone

- in finished drinking water, **Ch 10**, pp 41–47

Hexestrol

- in drugs, **Ch 21**, p 5

Hexylresorcinol

- in drugs, **Ch 19**, p 4

HGAA method. see Hydride generation atomic absorption method

HGMF. see Hydrophobic grid membrane filter methods

High fructose corn syrup

- in honey, **Ch 44**, pp 32–33

High-performance anion-exchange chromatography methods

- trace glucose and fructose in raw cane sugar, **Ch 44**, pp 12–15

High-performance liquid chromatography

- aflatoxin B₁ in baby food, **Ch 49**, pp 37–40
- coenzyme Q10 content in raw materials and dietary supplements, **Ch 51**, pp 33–35
- ephedrine and pseudoephedrine in botanicals and dietary supplements, **Ch 51**, pp 5–7
- flavonol aglycones in *Ginkgo biloba* dietary supplement crude materials and finished products, **Ch 51**, pp 19–24
- glucosamine in raw materials and dietary supplements, **Ch 51**, pp 10–13
- hydrastine and berberine in goldenseal raw materials, extracts, and dietary supplements, **Ch 51**, pp 31–33
- isoflavones in dietary supplements, supplement ingredients, and soy foods, **Ch 45**, pp 121–128
- lycopene in dietary supplements and raw materials, **Ch 51**, pp 35–39
- lysine, methionine, and threonine in feed grade amino acids and premixes, **Ch 4**, pp 20–24
- ochratoxin A in barley, **Ch 49**, pp 71–73
- ochratoxin A roasted coffee, **Ch 49**, pp 65–67
- ractopamine in swine, bovine, and turkey tissues, **Ch 23**, pp 26–29
- reversed-phase, β -carotene in supplements and raw materials, **Ch 51**, pp 13–19
- vitamin B₁₂ in infant formula powder and adult nutritionals, **Ch 50**, pp 50–57

Hiltner method

- aldehydes in lemon and orange oils, **Ch 36**, p 20

Histamine

- in seafood, **Ch 35**, pp 15–19

Histidine

- in feeds, **Ch 4**, pp 9–19

HMX. see 1,3,5,7-Tetranitro-1,3,5,7-tetra-terazocine

Holiday-Velasco minicolumn method

- aflatoxins in corn and peanuts, **Ch 49**, pp 6–7

Homotropine

- in drug tablets, **Ch 20**, p 6

Honey

- acidity of, **Ch 44**, p 37
- ash of, **Ch 44**, pp 26–27
- C-4 plant sugars in, **Ch 44**, pp 33–36

- cane syrup products in, **Ch 44**, p 33
color classification, **Ch 44**, p 26
corn syrup products in, **Ch 44**, p 33
dextrin in, **Ch 44**, pp 28–30
diastatic activity of, **Ch 44**, p 36
filth in, **Ch 16**, p 37
fructose in, **Ch 44**, pp 28–32
glucose in, **Ch 44**, pp 28–32
high fructose starch syrup in, **Ch 44**, pp 32–33
hydroxymethylfurfural in, **Ch 44**, p 32
maltose in, **Ch 44**, pp 28–30
moisture in, **Ch 44**, p 26
nitrogen in, **Ch 44**, p 27
polarization of, **Ch 44**, p 28
proline in, **Ch 44**, pp 27–28
reducing disaccharides as maltose, **Ch 44**, p 30
refractive index, **Ch 44**, p 27
sample preparation, **Ch 44**, p 25
separation of sugars in, **Ch 44**, pp 28–32
sucrose in, **Ch 44**, pp 28–32
sugars (reducing) in, **Ch 44**, p 28
- Hop pellets**
essential oil in, **Ch 27**, pp 35–36
- Hopkins-Cole test**
protein in animal feed, **Ch 4**, p 24
- Hops**
acids in, **Ch 27**, p 35
aphids in, **Ch 16**, p 12; **Ch 27**, p 34
essential oil in, **Ch 27**, pp 35–36
moisture in, **Ch 27**, pp 34–35
sample preparation for chemical analysis, **Ch 27**, p 34
sampling of, **Ch 27**, p 34
- Horseradish, prepared**
filth in, **Ch 16**, p 53
- Hortvet method**
water (added) in cream, **Ch 33**, p 66
water (added) in milk, **Ch 33**, pp 30–33
- Hot leach atomic absorption method**
cadmium and lead in cookware, **Ch 9**, pp 5–6
- Hot water digestion method**
sucrose in sugar beets, **Ch 44**, pp 47–48
- Howard mold counting method**, **Ch 16**, pp 71–76
- HPLC**. *see* **High-performance liquid chromatography**
- Hydralazine hydrochloride**
in drug tablets, **Ch 18**, pp 57–58
- Hydrastine**
in goldenseal raw materials, extracts, and dietary supplements, **Ch 51**, pp 31–33
- Hydrazine**
in maleic hydrazide technical and pesticide formulations, **Ch 7**, pp 54–56
- Hydrazine method**
nitrites in tablets, **Ch 18**, p 17
- Hydrazine sulfate distillation method**
arsenic (total) in pesticide formulations, **Ch 7**, p 2
- Hydrazino-gamma-undecalactone**
in cordials and liqueurs, **Ch 26**, p 21
- Hydride generation atomic absorption method**
selenium in feeds and premixes, **Ch 4**, pp 69–71
- Hydrobromic acid method**
amino acids in feeds, **Ch 4**, pp 13–17
- Hydrocarbons**. *see also* **Polycyclic aromatic hydrocarbons**
chlorinated, in drugs, **Ch 18**, p 3
saturated, in glycerides, **Ch 41**, p 56
- Hydrochloric acid**
standard solution, **App A**, pp 3–5
- Hydrochloric acid inversion**
sucrose in plants, **Ch 3**, p 28
- Hydrochlorothiazide**
in drugs, **Ch 19**, pp 27–30
- Hydrocodone**
in drugs, **Ch 20**, p 4
- Hydrocortisone**
in drugs, **Ch 21**, pp 8–9
- Hydrocyanic acid**
in almond extract, **Ch 36**, pp 23–24
in animal feed, **Ch 4**, p 75
in beans, **Ch 49**, pp 123–124
- Hydroflumethazide**
in drugs, **Ch 19**, pp 29–30
- Hydrofluoric acid test**
fluorides in food, **Ch 47**, p 20
- Hydrogen**
microchemical determination, **Ch 12**, pp 3–6
site-specific deuterium/hydrogen ratios in vanilla, **Ch 36**, pp 13–15
- Hydrogen-ion activity**. *see* **pH**
- Hydrogen peroxide**
in milk, **Ch 47**, p 21
- Hydrogen peroxide method**
formaldehyde in pesticide formulations, **Ch 7**, pp 132–133
- Hydrogen sulfide**
in water, **Ch 11**, p 13
- Hydrolysis methods**. *see also* **Acid hydrolysis methods**
sulfanilamide in drugs, **Ch 19**, p 25
- Hydrolytic extraction gas chromatographic method**
fat in foods, **Ch 41**, pp 20–25
- Hydrometer methods**
alcohol by volume in distilled liquors, **Ch 26**, pp 3–4
dry substance in corn syrups and sugars, **Ch 44**, p 49
- Hydrophilic interaction chromatography/tandem mass spectrometry**
nucleotides in infant formula and adult nutritional formula, **Ch 50**, pp 84–86
- Hydrophobic grid membrane filter methods**
aerobic plate count in foods, **Ch 17**, pp 9–11
E. coli in foods, **Ch 17**, pp 44–45
E. coli O157:H7 counts in foods, **Ch 17**, pp 60–63
- fecal coliforms in foods, **Ch 17**, pp 44–45
mold counts in foods, **Ch 17**, pp 17–19
Salmonella in foods, **Ch 17**, pp 144–146
total coliforms in foods, **Ch 17**, pp 44–45
yeast counts in foods, **Ch 17**, pp 17–19
- Hydrophobic grid membrane filter/MUG method**
total coliform and *E. coli* counts in foods, **Ch 17**, pp 45–46
- Hydroxide**
in soda lye, **Ch 8**, p 1
- p-Hydroxybenzaldehyde**
in vanilla extract and artificial vanilla flavor, **Ch 36**, pp 2–4
- p-Hydroxybenzoic acid**
in vanilla extract and artificial vanilla flavor, **Ch 36**, pp 2–4
- beta-Hydroxybutyric acid**
in eggs, **Ch 34**, pp 7–9
- 3-Hydroxycarbofuran**
in finished drinking water, **Ch 10**, pp 52–55
in grapes and potatoes, **Ch 10**, pp 55–58
- 5-Hydroxydicamba**
in finished drinking water, **Ch 10**, pp 106–113
- Hydroxyl value**
of oils and fats, **Ch 41**, p 6
- Hydroxylamine method**
aldehydes in lemon oil, **Ch 36**, p 21
- Hydroxymethylfurfural**
in honey, **Ch 44**, p 32
- Hydroxyproline**
in meat and meat products, **Ch 39**, pp 15–16
- Hydroxypropyl methylcellulose**
in food and food products, **Ch 32**, pp 27–31
- Hygromycin B**
in feeds, **Ch 5**, p 69
- Hypnotic drugs**, **Ch 19**, pp 13–20
- Hypochlorites**
in milk, **Ch 33**, pp 35–36
- Hypophosphites**
in syrups, **Ch 18**, p 10
- Ice cream and frozen desserts**
alginates in chocolate frozen desserts, **Ch 33**, p 98
color additives in, **Ch 33**, p 98
fat in, **Ch 33**, p 97
gelatin in, **Ch 33**, p 98
gums in, **Ch 33**, pp 97–98
lactic acid in, **Ch 33**, p 97
Listeria in, **Ch 17**, pp 220–223, 234–250
phosphatase in, **Ch 33**, p 98
protein in, **Ch 33**, p 97
Salmonella in, **Ch 16**, pp 8–11; **Ch 17**, pp 181–190
sample preparation, **Ch 33**, p 96
separation of fat from ice cream, **Ch 33**, p 97
solids (total) in, **Ch 33**, p 96

- p-toluenesulfonamide residues in, **Ch 33**, pp 98–100
weight per unit volume of packaged ice cream, **Ch 33**, pp 95–96
- ICUMSA-AOAC method**
sugars in cane and beet final molasses, **Ch 44**, pp 21–23
- IDF-AOAC methods**
L. monocytogenes in milk and dairy products, **Ch 17**, pp 220–223
- IDF-ISO-AOAC methods**
acid value of butterfat, **Ch 33**, p 77
aflatoxin M₁ in milk, **Ch 33**, p 38
alkaline phosphatase activity in fluid dairy products, **Ch 33**, pp 45–46
chloride in cheese, **Ch 33**, p 84
citric acid in cheese, **Ch 33**, p 89
copper in milk and milk products, **Ch 33**, p 38
fat in butter, **Ch 33**, p 76
fat in cheese, **Ch 33**, p 87
fat in cream, **Ch 33**, pp 66, 69–70
fat in dried milk, **Ch 33**, p 73
fat in evaporated milk, **Ch 33**, p 70
fat in ice cream and frozen desserts, **Ch 33**, p 97
fat in milk, **Ch 33**, pp 18–19
fat in sweetened condensed milk, **Ch 33**, p 71
fat in whey cheese, **Ch 33**, p 87
freezing point of milk, **Ch 33**, pp 5–7
moisture in butter, **Ch 33**, p 76
mold in butter, **Ch 33**, p 80
nitrogen (total) in milk, **Ch 33**, pp 10–12
organochlorine and organophosphorus pesticide residues in milk, **Ch 33**, p 38
phosphorus in cheese and processed cheese products, **Ch 33**, pp 94–95
protein in milk, **Ch 33**, p 15
protein nitrogen content of milk, **Ch 33**, pp 13–14
refractive index of butterfat, **Ch 33**, p 77
salt in butter, **Ch 33**, pp 76–77
sample preparation for evaporated milk, **Ch 33**, p 70
sodium and potassium in dried milk, **Ch 33**, pp 74–75
solids (total) in cream, **Ch 33**, p 66
solids (total) in evaporated milk, **Ch 33**, p 70
solids (total) in milk, **Ch 33**, pp 39–40
sucrose in sweetened condensed milk, **Ch 33**, p 71
toxicity of aflatoxin B₁, **Ch 49**, p 34
vegetable fat in butterfat, **Ch 41**, pp 47–49
water (added) in milk, **Ch 33**, pp 33–34
- IFJU method.** *see* **AOAC-IUPAC-IFJU method**
- Imazalil**
in foods, **Ch 10**, pp 17–26
- imidacloprid**
in foods, **Ch 10**, pp 17–26
in liquid and solid pesticide formulations, **Ch 7**, pp 116–117
- Immersion refractometer method**
methanol in distilled liquors, **Ch 26**, p 15
- Immiscible solvent method**
color additives in foods, **Ch 46**, p 1
- Immuno-concentration *Salmonella* methods**
Salmonella in foods, **Ch 17**, pp 193–202
- Immunoaffinity column methods**
aflatoxin B₁ and total aflatoxins in foods, **Ch 49**, pp 34–37
aflatoxin B₁ in baby food, **Ch 49**, pp 37–40
aflatoxin B₁ in cattle feed, **Ch 49**, pp 40–43
aflatoxin M₁ in liquid milk, **Ch 49**, pp 52–54
aflatoxins and ochratoxin A in ginseng and ginger, **Ch 49**, pp 43–47
aflatoxins in corn, raw peanuts, and peanut butter, **Ch 49**, pp 21–23
fumonisins in corn and corn flakes, **Ch 49**, pp 58–61
ochratoxin A green coffee, **Ch 49**, pp 67–69
ochratoxin A in barley, **Ch 49**, pp 71–73
ochratoxin A in wine and beer, **Ch 49**, pp 73–75
ochratoxin A roasted coffee, **Ch 49**, pp 65–67
vitamin B₁₂ in infant formula and adult nutritional, **Ch 50**, pp 48–52
- Immunoassays**
Assurance GDS, *E. coli* O157:H7 in selected foods, **Ch 17**, pp 65–67
Assurance Gold, *Salmonella* in foods, **Ch 17**, pp 181–185
assurance polyclonal enzyme, *L. monocytogenes* and related *Listeria* spp. in selected foods, **Ch 17**, pp 241–244
based on monoclonal antibody to potentially celiac toxic amino acid prolamin sequences, gliadin as a measure of gluten in foods, **Ch 32**, pp 41–43
colorimetric monoclonal, *L. monocytogenes* in dairy products, seafoods, and meats, **Ch 17**, pp 232–234
colorimetric monoclonal antibody enzyme, gliadin as a measure of gluten in foods, **Ch 32**, pp 15–17
colorimetric monoclonal methods, *Salmonella* in foods, **Ch 17**, pp 146–153, 161
colorimetric polyclonal methods, *Listeria* in foods, **Ch 17**, pp 234–240
colorimetric polyclonal methods, *Salmonella* in foods, **Ch 17**, pp 153–156, 176–181
fluorogenic monoclonal screening methods, *Salmonella* in foods, **Ch 17**, p 161
magnetic particle, atrazine in water, **Ch 10**, pp 47–50
polyclonal enzyme method, *Salmonella* in foods, **Ch 17**, pp 156–158
polyvalent enzyme, Staphylococcal enterotoxins in selected foods, **Ch 17**, pp 94–97
Salmonella ULTIMA™ immunoassay, **Ch 17**, pp 176–181
Salmonella visual immunoassay, **Ch 17**, pp 176–181, 185–190
VIDAS SET 2, Staphylococcal enterotoxins in foods, **Ch 17**, pp 106–109
- Immunodiffusion (1-2 Test) method**
motile *Salmonella* in foods, **Ch 17**, pp 164–166
- ImmunoDot screen cup method**
aflatoxins in corn, cottonseed, peanuts, and peanut butter, **Ch 49**, pp 7–9
- Immunoenrichment-based screening method**
rapid colorimetric, *Salmonella* in foods, **Ch 17**, pp 181–185
- Immunofluorescent assays**
enzyme-linked, *Salmonella* in foods, **Ch 17**, pp 158–160
Listeria in foods, **Ch 17**, pp 250–253
- Immunosorbent assays**
enzyme-linked, soy protein in raw and heat-processed meat products, **Ch 39**, pp 17–21
Salmonella in foods, **Ch 17**, pp 173–176
- Incubation methods**
biochemical oxygen demand of water, **Ch 11**, pp 3–5
- Index of refraction**
of cacao fat, **Ch 31**, p 10
oils and fats, **Ch 41**, pp 3–4
- Indiana sampling bottle method**
sampling of fluid fertilizers, **Ch 2**, pp 1–2
- Indicating strip method**
salt (chlorine as sodium chloride) in seafood, **Ch 35**, p 10
- Indicator methods**
acidity of fruit products, **Ch 37**, pp 10–11
- Indicator titrimetric methods**
acidity of beer, **Ch 27**, pp 6–7
neutralizing value for liming materials, **Ch 1**, pp 1–2
- Indicators**
for colorimetric pH comparisons, **App A**, p 3
- Indigo color additive**
analysis of, **Ch 46**, p 7
- Indigo test**
monochloroacetic acid in liquids and preservatives, **Ch 47**, pp 21–22
- Indigotine color additive**
analysis of, **Ch 46**, p 5
in foods, **Ch 46**, pp 1–2
- Indirect methods**
lignin in plants, **Ch 3**, p 31
sulfur (sulfide) in lime sulfur pesticide formulations, **Ch 7**, p 19

Indole

in crabmeat, oysters, and shrimp,
Ch 35, pp 19–20

in shrimp, **Ch 35**, pp 19–20, 23–25

Inductively coupled plasma-atomic emission methods

metals in solid wastes, **Ch 9**, pp 46–50

Inductively coupled plasma-emission spectroscopic methods

minerals in infant formula, **Ch 50**, pp 17–18

Inductively coupled plasma-mass spectrometric method

chromium, selenium, and molybdenum in infant formula and adult nutritional products, **Ch 50**, pp 80–82

trace elements in waters and wastewaters, **Ch 9**, pp 50–60

Inductively coupled plasma-optical emission spectrometry

arsenic, cadmium, cobalt, chromium, lead, molybdenum, nickel, and selenium in fertilizers, **Ch 2**, pp 42, 51–52

calcium, copper, iron, magnesium, manganese, potassium, phosphorus, sodium, and zinc in fortified products, **Ch 50**, pp 65–72

Inductively coupled plasma-spectroscopic methods

metals and other elements in plants and pet foods, **Ch 3**, pp 6–7

Industrial chemical residues. see Pesticide residues**Industrial enzyme preparations**

glucoamylase activity in, **Ch 45**, pp 49–50

neutral lactase activity in, **Ch 33**, p 57

Industrial wastewater. see Wastewater**Infant foods**

aflatoxin B₁ in, **Ch 49**, pp 37–40

mixed dry cereal, light filth in, **Ch 16**, pp 28–29

mold in purees, **Ch 16**, p 75

nitrate in, **Ch 50**, pp 12–13

pureed, filth in, **Ch 16**, p 42

Infant formulas

ash of, **Ch 50**, p 18

calcium in, **Ch 50**, pp 15–18

carbohydrate in, **Ch 50**, p 18

chloride in milk-based formula, **Ch 50**, p 12

choline in, **Ch 50**, pp 30–32

chromium, selenium, and molybdenum in, **Ch 50**, pp 80–82

cobalamin in milk-based formula, **Ch 50**, pp 22–24

copper in, **Ch 50**, pp 15–18

fat in, **Ch 50**, p 18

folate in, **Ch 50**, pp 24–26, 38–44

iodide in ready-to-feed milk-based formula, **Ch 50**, pp 14–15

iron in, **Ch 50**, pp 15–18

linoleic acid in ready-to-feed milk-based formula, **Ch 50**, pp 19–20

magnesium in, **Ch 50**, pp 15–18

manganese in, **Ch 50**, pp 15–18

minerals in, **Ch 50**, pp 15–17

5'-mononucleotides in, **Ch 50**, pp 82–84

myo-inositol (free and bound as phosphatidylinositol), **Ch 50**, pp 77–80

niacin and niacinamide in ready-to-feed milk-based formulas, **Ch 50**, p 21

nucleotides in, **Ch 50**, pp 84–86

nutrients in ready-to-feed milk-based formulas, **Ch 50**, p 1

pantothenic acid in milk-based formula, **Ch 50**, pp 26–28

phosphorus in, **Ch 50**, pp 13–14, 17–18

potassium in, **Ch 50**, pp 15–18

protein in, **Ch 50**, p 18

proximate analysis of milk-based formula, **Ch 50**, p 18

riboflavin in ready-to-feed milk-based formula, **Ch 50**, p 8

sampling of ready-to-feed milk-based formula, **Ch 50**, p 1

sodium in, **Ch 50**, pp 15–18

solids in, **Ch 50**, p 18

taurine in powdered formula, **Ch 50**, pp 8–10

thiamine in milk-based formula, **Ch 50**, pp 10–11

vitamin A in milk-based formula, **Ch 50**, pp 1–3, 44–48, 72–74

vitamin B₆ in ready-to-feed milk-based formulas, **Ch 50**, pp 20–21

vitamin B₆ in reconstituted formula, **Ch 50**, pp 34–36

vitamin B₁₂ in, **Ch 50**, pp 48–57, 75–77

vitamin B₁₂ in fortified bovine milk-based and fortified soya-based formula powders, **Ch 50**, pp 36–38

vitamin C in ready-to-feed milk-based formulas, **Ch 50**, pp 11–12

vitamin D in, **Ch 50**, pp 28–30, 57–59

vitamin D₂ and D₃ in, **Ch 50**, pp 59–65

vitamin D₃ in ready-to-feed milk based formula, **Ch 50**, pp 5–6

vitamin E in milk-based formula, **Ch 50**, pp 4–5

vitamin K in, **Ch 50**, pp 32–34

trans-vitamin K₁ in ready-to-feed milk-based formula, **Ch 50**, pp 6–8

zinc in, **Ch 50**, pp 15–18

Infant products

latex pacifiers, *N*-nitrosodibutylamine in, **Ch 8**, pp 3–5

N-nitrosamines in baby bottle rubber nipples, **Ch 48**, pp 8–9

Infrared methods

chlorobutanol in drugs, **Ch 18**, pp 3–4

organic carbon in water, **Ch 11**, pp 7–9

santonin in drug mixtures, **Ch 20**, p 32

Infrared spectrophotometric methods

aldicarb in pesticide formulations, **Ch 7**, p 25

azinphos-methyl in pesticide formulations, **Ch 7**, pp 104–105

benzene hexachloride in pesticide formulations, **Ch 7**, pp 76–77

carbaryl in pesticide formulations, **Ch 7**, pp 28–29

chlorinated hydrocarbons in drugs, **Ch 18**, p 3

cyclohexylamine in cyclamates and artificially sweetened products, **Ch 47**, pp 49–51

dicamba--2,4-D in pesticide formulations, **Ch 7**, pp 90–91

dicamba--MCPA in pesticide formulations, **Ch 7**, pp 90–91

dicamba in pesticide formulations, **Ch 7**, p 90

isolated *trans* unsaturated fatty acid content in partially hydrogenated fats, **Ch 41**, pp 39–41

trans isomers (isolated) in margarines and shortenings, **Ch 41**, pp 37–39

methazole in pesticide formulations, **Ch 7**, p 100

near-infrared, piperazine in drugs, **Ch 18**, p 44

nitrate esters in drugs, **Ch 18**, pp 34–35

nitroglycerin in drugs, **Ch 18**, p 34

octadecenoic isomers and general fatty acid composition in oils and fats, **Ch 41**, pp 33–37

pentaerythrityl tetranitrate and meprobamate in drugs, **Ch 18**, pp 38–39

Infrared spectroscopic methods

acetylcarbomal in drugs, **Ch 19**, p 13

aldrin in pesticide formulations, **Ch 7**, pp 72–73

atropine in drug tablets, **Ch 20**, p 6

bromisovalum in drugs, **Ch 19**, p 13

chlordane (AG) in granular pesticide formulations, **Ch 7**, pp 83–84

chlordane technical (AG), alpha and gamma isomers in, **Ch 7**, p 83

chlorobutanol in drugs, **Ch 18**, pp 3–4

DCEPA in pesticide formulations, **Ch 7**, p 87

DDT in pesticide formulations, **Ch 7**, pp 89–90

dexamethasone in drug substance and elixirs, **Ch 21**, p 10

dieldrin in pesticide formulations, **Ch 7**, pp 72–73

endrin in pesticide formulations, **Ch 7**, pp 72–73

ethisterone in drugs, **Ch 21**, p 8

fat, lactose, protein, and solids in milk, **Ch 33**, pp 26–30

gums in ice cream and frozen desserts, **Ch 33**, pp 97–98

hydrocortisone in drugs, **Ch 21**, pp 8–9

lactose in milk, **Ch 33**, p 17

meprobamate in drugs, **Ch 19**, p 20

methimazole in drugs, **Ch 19**, pp 30–31

mineral oil in baked products, **Ch 32**, p 71

phenaglycodol in drugs, **Ch 19**, p 20

phorate in pesticide formulations, **Ch 7**, p 126

protein in milk, **Ch 33**, p 15

- rotenone in Derris and Cubé powder,
Ch 7, pp 61–62
- Infusion method**
chicory in roasted coffee, Ch 30, p 3
- Inhalants**
ephedrine in, Ch 20, p 9
- Inorganic drugs**, Ch 18, pp 5–17
- Inorganic material**
added in phosphated flour, Ch 32, p 2
- Inorganic pesticides and adjuvants**,
Ch 7, pp 8–25
- Inorganic residues**
in nuts and nut products, Ch 40, p 2
- Inorganic salts**
in color additives, Ch 46, p 26
- Inosine 5'-monophosphate**
in infant formula and adult nutritional
formula, Ch 50, pp 84–86
- Insecticidal formulations**
methomyl in, Ch 7, pp 41–42
- Insects**
in apple chops, Ch 16, p 33
eggs in flour, Ch 16, p 24
excrement on food and containers,
Ch 16, p 70
excreta in condiment seeds, Ch 16,
p 49
excreta in flour, Ch 16, pp 24, 70–74
fly eggs in canned and comminuted
tomato products, Ch 16, pp 43–44
fly eggs in citrus juices (canned),
Ch 16, p 35
fly eggs in pineapple juices (canned),
Ch 16, p 35
fly eggs in pureed infant food, Ch 16,
p 42
in frozen blackberries and raspberries,
Ch 16, pp 33–34
infestation (internal) of grains and
seeds, Ch 16, p 21
infestation (internal) of oats, Ch 16,
p 20
infestation (internal) of wheat, Ch 16,
pp 19–20
in mushrooms, Ch 16, pp 42–43
penetration through packaging
materials, Ch 16, p 55
in tomato products, Ch 16, pp 43–44
- Insoluble acids**
in oils and fats, Ch 41, p 12
- Insoluble ash**
in baking powders, Ch 25, p 5
- Insoluble matter**
in color additives, Ch 46, p 13
- Intermediates**
in color additives, Ch 46, pp 14–21
- Internal standard stable carbon isotope
ratio method**
C-4 plant sugars in honey, Ch 44,
pp 33–36
- International Dairy Federation.** *see*
**IDF-AOAC methods; IDF-ISO-AOAC
methods**
- International Fruit Juice Union.** *see*
AOAC-IUPAC-IFJU method
- International Organization for
Standardization.** *see* **IDF-ISO-AOAC
methods; ISO-AOAC methods**
- International Union of Pure and Applied
Chemistry methods.** *see* **AOAC-
IUPAC methods; IUPAC-AOAC
methods**
- Inversion methods**
sucrose in plants, Ch 3, p 28
sugars (reducing) in fruits and fruit
products, Ch 37, p 18
- Invert sugar**
in maple products, Ch 44, p 38
in molasses, Ch 44, pp 19–20
in sugars and syrups, Ch 44, pp 9–10
- Invertase methods**
sucrose in plants, Ch 3, p 28
- Iodates**
in white and whole wheat flour, Ch 32,
pp 20–21
- Iodide**
in pasteurized liquid milk and skim milk
powder, Ch 33, pp 36–38
in ready-to-feed milk-based infant
formula, Ch 50, pp 14–15
in water, Ch 11, pp 24–25
- Iodine**
in color additives, Ch 46, p 25
in drugs, Ch 18, pp 10–11
in iodized salt, Ch 11, p 32
microchemical methods, Ch 12, pp 1–3
in mineral mixed feeds, Ch 4, pp 63–64
in ointments, Ch 18, p 11
in pasteurized liquid milk and skim milk
powder, Ch 33, pp 36–38
standard solution, App A, p 5
in thyroid drug tablets, Ch 21, p 14
in water, Ch 11, p 24
- Iodine-131**
in milk and other foods, Ch 13, pp 6–8,
10–12
- Iodine absorption number**
of cacao fat, Ch 31, p 10
of oils and fats, Ch 41, pp 6–7
- Iodine reaction method**
starch in brewing sugars and syrups,
Ch 27, p 37
starch (unconverted) in beer, Ch 27,
p 8
of wort, Ch 27, p 39
- Iodine value**
of fats and oils, Ch 41, pp 7–9
- Iodoform**
drug substance, Ch 18, p 4
on gauze, Ch 18, pp 4–5
in ointments, Ch 18, p 4
- Iodometric methods**
arsenic (total) in pesticide formulations,
Ch 7, p 3
hydrogen sulfide in water, Ch 11, p 13
- Ion chromatographic methods**
chromium (dissolved hexavalent) in
waters and wastewaters, Ch 9,
pp 60–62
inorganic anions in water, Ch 11,
pp 29–31
polydextrose in foods, Ch 45, pp 98–
100
sugars in cane and beet final molasses,
Ch 44, pp 21–23
- Ion exchange chromatographic
methods**
antihistamines in drug combinations,
Ch 18, p 18
fructans in food products, Ch 45,
pp 91–95
trans-galactooligosaccharides in
selected food products, Ch 45,
pp 110–113
sulfur amino acids in food, feed
ingredients, and processed foods,
Ch 45, p 88
tryptophan in foods and food and feed
ingredients, Ch 45, pp 87–88
- Ion exchange methods**
arsenic (total) in pesticide formulations,
Ch 7, p 3
boric acid in deodorants and
antiperspirants, Ch 15, pp 8–9
chlorothiazide in drugs, Ch 19, pp
28–29
malic acid in maple syrup, Ch 44, p 40
methyl dopa in drugs, Ch 19, pp 28–29
strontium-89 in milk, Ch 13, pp 3–6
strontium-90 in milk, Ch 13, pp 3–6
zincon, zinc in fertilizers, Ch 2, pp 40–
41
- Ion-exchange resins**
plant sample clarification, Ch 3, p 27
- Ion exclusion chromatographic
methods**
sulfites in food and beverages, Ch 47,
p 38
- Ion-pair column chromatographic
method**
phenylephrine hydrochloride in drugs,
Ch 18, pp 24–25
trimethobenzamide hydrochloride in
drugs, Ch 18, p 55
- Ion selective electrode method**
fluorine in animal feed, Ch 4, p 63
iodide in ready-to-feed milk-based
infant formula, Ch 50, pp 14–15
sodium in foods for special dietary use,
Ch 45, p 85
- beta-Ionone**
in flavor extracts and toilet
preparations, Ch 36, pp 26–27
- beta-Ionone-m-nitrobenzhydrazide**
optical-crystallographic properties of,
Ch 36, p 27
- Ionox-100**
in oils, fats, and butter oil, Ch 47,
pp 2–5
- Ipecac alkaloids**, Ch 20, pp 8–9
- Ipomea**
in drugs, Ch 20, p 33

Iprnidazole

in feeds, **Ch 5**, p 18

Iron. see also Ferric oxide

in animal feed, **Ch 4**, pp 60–61

in baking powders, **Ch 25**, p 5

in beer, **Ch 27**, pp 14–15

bioavailability of, **Ch 45**, pp 83–85

in bread, **Ch 32**, p 69

in degerminated, bolted, whole corn meal, **Ch 32**, p 44

in distilled liquors, **Ch 26**, p 8

in drugs, **Ch 18**, pp 11–12; **Ch 20**, pp 16–17

in edible oils and fats, **Ch 9**, pp 14–15

in enteral products, **Ch 50**, pp 15–17

in face powders, (total), **Ch 15**, pp 12–13

in fertilizers, **Ch 2**, pp 35–36

in foods, **Ch 9**, pp 16–22

in fortified food products, **Ch 50**, pp 65–72

in infant formulas, **Ch 50**, pp 15–18

in iron chelate concentrates, (chelated), **Ch 2**, pp 35–36

in liming materials, **Ch 1**, p 7

in macaroni products, **Ch 32**, p 73

in pet foods, **Ch 3**, pp 5–6; **Ch 4**, pp 60–61; **Ch 50**, pp 15–17

in plants, **Ch 3**, pp 2–7, 10–11

in solid wastes, **Ch 9**, pp 46–50

in vitamin preparations, **Ch 18**, pp 8–9

in water, **Ch 11**, pp 14, 16–17

in wheat flour, **Ch 32**, pp 2–4

in wines, **Ch 28**, pp 8–9

Iron-arsenic tablets

arsenic in, **Ch 18**, p 5

Iron chelate concentrates

iron in, **Ch 2**, pp 35–36

Iron methylarsenate

arsenic in, **Ch 18**, p 5

Iron milk method

C. perfringens from shellfish, **Ch 17**, pp 120–121

Iron oxides

in face powders, **Ch 15**, p 13

Irrigation water, spent

Salmonella in, **Ch 16**, pp 8–11

Iso-alpha acids method

bitterness of beer, **Ch 27**, pp 16–17

ISO-AOAC methods

moisture in roasted coffee, **Ch 30**, p 5

Salmonella in fresh cheese, dried egg products, and fresh chilled and frozen poultry, **Ch 17**, pp 203–205

weight (apparent) per unit volume and specific gravity of fats and oils,

Ch 41, pp 2–3

ISO-GRID methods

E. coli O157:H7 counts in foods, **Ch 17**, pp 60–63

Salmonella in foods, **Ch 17**, pp 144–146

total coliform and *E. coli* counts in foods, **Ch 17**, pp 45–46

yeast and mold counts in foods, **Ch 17**, pp 17–19

ISO methods. see IDF-ISO-AOAC methods**ISO/TC34/SC11/N99-AOAC method**

moisture in oils and fats, **Ch 41**, p 1

Isobutyl alcohol

in distilled liquors, **Ch 26**, pp 12–14

Isocitric acid

in fruits and fruit products, **Ch 37**, p 11

Isoelectric focusing methods

thin layer polyacrylamide gel,

identification of cooked and frozen crabmeat, **Ch 35**, pp 31–32

thin layer polyacrylamide gel,

identification of fish species, **Ch 35**, pp 30–31

Isofenphos

in pesticide formulations, **Ch 7**, pp 117–118

Isoflavones

in dietary supplements, supplement ingredients, and soy foods, **Ch 45**, pp 121–128

in soy and selected foods containing soy, **Ch 45**, pp 119–121

Isolation techniques

for extraneous materials, **Ch 16**, pp 1–4

Isoleucine

in feeds, **Ch 4**, pp 9–19

Isomers

trans fatty acid, in margarines, **Ch 41**, pp 41–42

trans (isolated), in margarines and shortenings, **Ch 41**, pp 37–39

cis- and *trans*-octadecenoic, in hydrogenated vegetable oils and animal fats, **Ch 41**, pp 33–37

Isoniazid

in drugs, **Ch 19**, pp 2–3

Isopilocarpine

in drugs, **Ch 20**, p 26

Isopropanol

in cassia, cinnamon, and clove extracts, **Ch 36**, p 24

in distilled liquors, **Ch 26**, p 14

in lemon and orange flavors, **Ch 36**, p 17

in lemon extracts, **Ch 36**, pp 16–17

in peppermint, spearmint, and wintergreen extracts, **Ch 36**, p 24

Isoproturon

in soft drinks and sports drinks, **Ch 10**, pp 116–124

Isosafrole

in nonalcoholic beverages, **Ch 29**, pp 4–5

Isotope ratio mass spectrometry

carbon stable isotope ratio of ethanol derived from fruit juices and maple syrups, **Ch 37**, pp 33–37

IUPAC-AOAC methods. see also AOAC-IUPAC-IFJU method; AOAC-IUPAC methods

aflatoxins in cocoa beans, **Ch 49**, p 13

aflatoxins in peanuts and peanut products, **Ch 49**, pp 9–11

butyric acid in fats containing butterfat, **Ch 41**, pp 44–45

copper, iron and nickel in edible oils and fats, **Ch 9**, pp 14–15

copper in foods, **Ch 9**, p 23

erucic acid in oils and fats, **Ch 41**, pp 29–30

ochratoxins in barley, **Ch 49**, pp 63–64

phenolic antioxidants in oils, fats, and butter fats, **Ch 47**, pp 2–5

IUPAC-AOCS-AOAC methods

aflatoxins in coconut, copra, and copra meal, **Ch 49**, p 13

iodine value of fats and oils, **Ch 41**, pp 7–9

lead in edible oils and fats, **Ch 41**, pp 9–11

mono- and diglycerides in fats and oils, **Ch 41**, pp 62–64

polar components in frying fats, **Ch 41**, pp 31–32

polymerized triglycerides in oils and fats, **Ch 41**, pp 67–68

triglycerides (by partition numbers) in vegetable oils, **Ch 41**, pp 65–67

triglycerides in oils and fats, **Ch 41**, pp 46–47

Jackson-Mathews modification of Nyns selective method

fructose in sugars and syrups, **Ch 44**, p 12

Jalap

in drugs, **Ch 20**, p 33

Jalapeno pepper

ground, capsaicinoids in, **Ch 43**, pp 14–15

Jams and jellies

benzoic acid in, **Ch 47**, p 12

filth in, **Ch 16**, p 35

Jasmolin

in pesticide formulations, **Ch 7**, pp 65–66

Jelly strength

of gelatin, **Ch 38**, p 1

of gelatin dessert powders, **Ch 38**, p 2

Jones modification of Robertson method

nitrogen (nitrate) in fertilizers, **Ch 2**, p 16

Jones reduction method

nitrate and nitrite in cheese, **Ch 33**, pp 86–87

Jones reductor method

dithiondiglycolic acid in cold permanent waves, **Ch 15**, pp 14–15

Jorissen test

salicylic acid in food and beverages, **Ch 47**, p 28

Juices

anthocyanin pigment content of fruit juices, **Ch 37**, pp 37–39

anthocyanins in fruit juices, **Ch 37**, pp 19–20

apple, patulin in, **Ch 49**, pp 75–80

apple juice, carbon stable isotope ratio of, **Ch 37**, pp 21–22

apple juice, D-malic acid in, **Ch 37**, pp 17–18

- apple juice, L-malic and total malic acid ratio, **Ch 37**, pp 15–16
- apple juice, quinic, malic, and citric acids in, **Ch 37**, p 14
- ascorbic acid in, **Ch 45**, pp 22–23
- beet sugar in fruit juices, **Ch 37**, pp 27–31
- benzoic acid in, **Ch 47**, p 12
- canned, mold in, **Ch 16**, p 74
- carbohydrates in fruit juices, **Ch 37**, p 15
- carbon stable isotope ratio of ethanol derived from fruit juices and maple syrups, **Ch 37**, pp 33–37
- citrus, mold in, **Ch 16**, pp 74, 78
- citrus (canned), filth in, **Ch 16**, p 35
- citrus fruit, solids (soluble) in, **Ch 37**, p 7
- cranberry juice cocktail, quinic, malic, and citric acids in, **Ch 37**, p 14
- frozen concentrated orange juice, sugar-beet-derived syrups in, **Ch 37**, pp 26–27
- grape juice, malvidin glucosides in, **Ch 37**, p 20
- lead in, **Ch 9**, pp 30–31
- lemonade, solids (soluble) in frozen concentrate, **Ch 37**, p 7
- orange, benzoic acid in, **Ch 37**, pp 24–25; **Ch 47**, p 14
- orange, betaine in, **Ch 37**, p 10
- orange, carbon stable isotope ratio of, **Ch 37**, p 22
- orange, naringin and neohesperidin in, **Ch 37**, pp 31–33
- orange, *Salmonella* in, **Ch 16**, pp 8–11; **Ch 17**, pp 205–210
- orange, thiourea in, **Ch 47**, pp 39–40
- organic acids in fruit juices, **Ch 37**, pp 14–15
- pineapple, polydimethylsiloxane in, **Ch 47**, pp 52–53
- pineapple (canned), filth in, **Ch 16**, p 35
- pineapple (canned), mold in, **Ch 16**, p 74
- processed Florida orange juice, orange pulp wash and/or added water in, **Ch 37**, pp 22–24
- Kale**
- filth in, **Ch 16**, pp 41–42
- N*-methylcarbamate residues in, **Ch 10**, pp 51–52
- organophosphorus pesticide residues in, **Ch 10**, pp 36–39
- Karl Fischer method**
- moisture in animal feed, grain, and forage, **Ch 4**, pp 5–8
- moisture in cacao products, **Ch 31**, p 1
- moisture in oils and fats, **Ch 41**, p 1
- moisture in soft-moist and semi-moist pet food, **Ch 4**, pp 4–5
- water in dried vegetables, **Ch 42**, p 10
- 3-Ketocarbofuran**
- in water, **Ch 10**, pp 99–104
- Ketones**
- in distilled liquors, **Ch 26**, p 14
- Ketosteroids**
- in drugs, **Ch 21**, p 1
- Kirsten modification**
- Kleber method, aldehydes in lemon oil, **Ch 36**, p 21
- Kjeldahl methods**
- arsenic in foods, **Ch 9**, p 22
- automated, protein (crude) in animal feed and pet food, **Ch 4**, p 27
- copper catalyst, protein (crude) in animal feed and pet food, **Ch 4**, pp 31–32
- copper catalyst, protein in animal feed, **Ch 32**, p 14
- CuSO₄/TiO₂ mixed catalyst, protein (crude) in animal feed and pet food, **Ch 4**, p 25
- micro, nitrogen determination, **Ch 12**, p 7
- micro, nitrogen in wheat flour, **Ch 32**, p 14
- mixed catalyst, protein in animal feed, **Ch 32**, pp 14, 50
- nitrogen (casein) in milk, **Ch 33**, pp 58–59
- nitrogen in eggs, **Ch 34**, p 2
- nitrogen in food dressings, **Ch 43**, p 9
- nitrogen in laboratory wort, **Ch 27**, p 29
- nitrogen in meat, **Ch 39**, pp 5–6
- nitrogen in nonvolatile ether extract of pepper, **Ch 43**, p 2
- nitrogen in prepared mustard, **Ch 43**, p 7
- nitrogen in spices, **Ch 43**, p 2
- nitrogen in sugars and syrups, **Ch 44**, pp 3–4
- nitrogen in tobacco (nitrate-containing), **Ch 3**, p 34
- nitrogen (noncasein) in milk, **Ch 33**, p 57
- nitrogen (nonprotein) in whole milk, **Ch 33**, pp 12–13
- nitrogen (protein) in milk, **Ch 33**, pp 13–14
- nitrogen (total) in cheese, **Ch 33**, pp 84–85
- nitrogen (total) in fertilizers, **Ch 2**, pp 13–14
- nitrogen (total) in milk, **Ch 33**, pp 10–12
- nitrogen (total) in plants, **Ch 3**, p 28
- nitrogen (total) in water, **Ch 11**, pp 9–10
- phosphorus determination, **Ch 12**, pp 9–10
- protein (crude) in animal feed and pet food, **Ch 4**, pp 24–25, 27, 31–32
- protein (crude) in nuts and nut products, **Ch 40**, pp 1–2
- protein in beer, **Ch 27**, p 10
- protein in brewing sugars and syrups, **Ch 27**, p 37
- protein in dried milk, **Ch 33**, p 72
- protein in fruit products, **Ch 37**, p 10
- protein in grains, **Ch 32**, pp 49–50
- protein in ice cream and frozen desserts, **Ch 33**, p 97
- protein in laboratory malt, **Ch 27**, p 29
- protein in milk chocolate, **Ch 31**, p 12
- protein nitrogen in milk, **Ch 33**, pp 13–14
- thiocyanate (organic) in livestock or fly sprays, **Ch 7**, pp 134–135
- Klason lignin**
- in foods and food products, **Ch 45**, pp 105–110
- Kleber method**
- aldehydes in lemon oil, **Ch 36**, pp 20–21
- aldehydes in orange oil, **Ch 36**, pp 20–21
- Knapheide-Lamb method**
- iodine in mineral mixed feeds, **Ch 4**, pp 63–64
- Knorr alkalimeter method**
- carbon dioxide in liming materials, **Ch 1**, p 3
- Knorr tube method**
- fat in cacao products, **Ch 31**, pp 9–10
- Koettstorfer number**
- of oils and fats, **Ch 41**, p 12
- Kresoxim-methyl**
- in foods, **Ch 10**, pp 17–26
- beta-Lactam antibiotics**
- in milk, **Ch 23**, pp 20–22; **Ch 33**, pp 46–50
- Laboratory quality assurance, App E**
- Laboratory safety, App B**
- Lactase activity**
- in industrial enzyme preparations, **Ch 33**, p 57
- Lactic acid**
- in butterfat, **Ch 33**, p 78
- in canned vegetables, **Ch 42**, p 9
- in cream, **Ch 33**, p 65
- in dried milk, **Ch 33**, p 73
- in eggs, **Ch 34**, pp 7–9
- in evaporated milk, **Ch 33**, p 70
- in fruits and fruit products, **Ch 37**, p 14
- in ice cream and frozen desserts, **Ch 33**, p 97
- in milk and milk products, **Ch 33**, pp 8–10
- in sweetened condensed milk, **Ch 33**, p 71
- in wines, **Ch 28**, p 12
- Lactone**
- in honey, **Ch 44**, p 37
- Lactose**
- in bread, **Ch 32**, pp 70–71
- in cream, **Ch 33**, p 66
- in evaporated milk, **Ch 33**, p 70
- in meat, **Ch 39**, p 22
- in milk, **Ch 33**, pp 17–18, 26–30, 59–62
- in milk chocolate, **Ch 31**, pp 12–13
- procaine in presence of, **Ch 18**, pp 31–32
- in process cheese, **Ch 33**, pp 89–90
- purity in sugars and syrups, **Ch 44**, p 16
- in sugars and syrups, **Ch 44**, p 15
- in sweetened condensed milk, **Ch 33**, p 71
- Lake red C**
- analysis of, **Ch 46**, pp 6–8
- in D&C Red Nos. 8 and 9, **Ch 46**, p 15

- Lake red CBA, Ch 46, p 8**
- Lakes (color additives)**
analysis of, **Ch 46, pp 6, 10**
separation and identification of, **Ch 46, p 1**
- Lane-Eynon volumetric method**
fructose in sugars and syrups, **Ch 44, p 11**
glucose in sugars and syrups, **Ch 44, p 10**
invert sugar in sugars and syrups, **Ch 44, p 9**
lactose in sugars and syrups, **Ch 44, p 15**
maltose in sugars and syrups, **Ch 44, p 15**
reducing sugars in corn syrups and sugars, **Ch 44, p 51**
sugars in brewing sugars and syrups, **Ch 27, p 38**
total sugars in molasses as invert sugar, **Ch 44, pp 19–20**
- Langer method**
santonin in drug mixtures, **Ch 20, p 32**
- LaParola-Mariani test**
dulcin in food, **Ch 47, p 51**
- Lard**
foreign fats containing tristearin in, **Ch 41, pp 54–55**
- Lasalocid**
in feeds, **Ch 5, pp 46–47, 57–60, 69–70**
- Lasalocid sodium**
in feeds and premixes, **Ch 5, pp 57–60**
- Latex agglutination test method**
S. aureus isolated from foods, **Ch 17, pp 98–99**
- Laundry additive disinfectants**
bacteriostatic activity of, **Ch 6, pp 41–42**
- Lead**
on apples and pears, **Ch 9, p 29**
in baking powders, **Ch 25, p 5**
in ceramicware, **Ch 9, pp 6–14**
in color additives, **Ch 46, pp 22–23**
in cookware, **Ch 9, pp 5–6**
in earthenware, **Ch 9, p 14**
in edible oils and fats, **Ch 41, pp 9–11**
in evaporated milk, **Ch 9, pp 29–31; Ch 33, p 70**
in fertilizers, **Ch 2, pp 42, 49, 51–52**
in fish, **Ch 9, pp 31–32**
in foods, **Ch 9, pp 1–6, 16–22, 28–35**
in fruit juice, **Ch 9, pp 30–31**
in paint, **Ch 8, pp 2–3**
in pesticide formulations, **Ch 7, pp 4, 10, 16–17**
plant sample clarification, **Ch 3, p 27**
precautions, **Ch 9, p 28**
in salt, **Ch 11, p 32**
in solid wastes, **Ch 9, pp 46–50**
in sugars and syrups, **Ch 9, pp 33–35**
suitability of methods, **Ch 9, p 28**
in water, **Ch 11, pp 16–17, 25**
in waters and wastewaters, **Ch 9, pp 50–60**
- Lead arsenate**
Bordeaux mixture pesticide formulations with, **Ch 7, pp 16–17**
- Lead arsenate pesticides**
arsenic (total) in, **Ch 7, pp 9, 16**
arsenic (water-soluble) in, **Ch 7, pp 10, 16**
arsenious oxide (total) in, **Ch 7, pp 9–10**
carbon dioxide in, **Ch 7, pp 16–17**
copper in, **Ch 7, pp 16–17**
lead in, **Ch 7, pp 10, 16**
moisture in, **Ch 7, pp 9, 16**
- Lead chlorofluoride method**
fluorine (total) in pesticide formulations, **Ch 7, pp 5–6**
- Lead number**
of vanilla extract, **Ch 36, p 8**
- Lead salt-ether method**
saturated and unsaturated fatty acids in oils and fats, **Ch 41, p 16**
- Lecithin**
in cacao fat, **Ch 31, p 11**
- Lemon extract**
alcohol in, **Ch 36, p 16**
aldehydes in, **Ch 36, pp 18–19**
ash of, **Ch 36, p 19**
citral in, **Ch 36, p 19**
essential oil in, **Ch 36, p 25**
glycerol in, **Ch 36, p 17**
isopropanol in, **Ch 36, pp 16–17**
methanol in, **Ch 36, p 16**
oil of lemon in, **Ch 36, p 17**
solids (total) in, **Ch 36, p 19**
specific gravity of, **Ch 36, p 16**
sucrose in, **Ch 36, p 19**
- Lemon flavors**
isopropanol in, **Ch 36, p 17**
oil of lemon in, **Ch 36, pp 17–18**
- Lemon juice**
amino acids in, **Ch 37, pp 20–21**
malic acid in, **Ch 37, pp 20–21**
polyphenolics in, **Ch 37, pp 20–21**
recoverable oil in, **Ch 37, pp 20–21**
- Lemon oil**
aldehydes in, **Ch 36, pp 20–21**
esters in, **Ch 36, pp 21–22**
in extracts, **Ch 36, p 17**
in oil-base flavors, **Ch 36, pp 17–18**
optical rotation of, **Ch 36, pp 19–20**
physical constants of 10% distillate, **Ch 36, p 20**
pinene in, **Ch 36, p 22**
refractive index of, **Ch 36, p 19**
specific gravity of, **Ch 36, p 19**
spectrophotometric absorbance characteristics of, **Ch 36, p 20**
steam distillation residue, **Ch 36, p 20**
- Lemonade**
solids (soluble) in frozen concentrate, **Ch 37, p 7**
- Lettuce**
Listeria in, **Ch 17, pp 234–240**
organochlorine pesticide residues in, **Ch 10, pp 10–12**
organophosphorus pesticide residues in, **Ch 10, pp 10–12, 36–39**
- total viable count in, automated enumeration, **Ch 16, pp 6–8**
- Leucine**
in feeds, **Ch 4, pp 9–19**
- Levant worm seed**
santonin in, **Ch 20, p 32**
- Levo-malic acid**
in cordials and liqueurs, **Ch 26, p 21**
in nonalcoholic beverages, **Ch 29, p 1**
- Levodopa**
in solid dosage forms, **Ch 18, pp 56–57**
- Levodopa-carbidopa**
in solid dosage forms, **Ch 18, pp 56–57**
- Licorice**
glycyrrhizic acid or acid salts in, **Ch 36, p 28**
sugars in extracts, **Ch 36, p 29**
- Light green SF yellowish color additive**
in foods, **Ch 46, pp 1–2**
- Lignin**
in animal feed, **Ch 4, pp 48–49**
in plants, **Ch 3, pp 30–31**
- Lima beans**
calcium in canned products, **Ch 42, p 6**
- Lime extract**
alcohol in, **Ch 36, p 16**
aldehydes in, **Ch 36, pp 18–19**
ash of, **Ch 36, p 19**
glycerol in, **Ch 36, p 17**
methanol in, **Ch 36, p 16**
solids (total) in, **Ch 36, p 19**
specific gravity of, **Ch 36, p 16**
sucrose in, **Ch 36, p 19**
- Lime flavors**
oil of lime in, **Ch 36, pp 17–18**
- Lime oil**
in oil-base flavors, **Ch 36, pp 17–18**
- Lime sulfur pesticides**
calcium in, **Ch 7, p 19**
sulfur (soluble) in, **Ch 7, pp 18–19**
sulfur (sulfate) in, **Ch 7, p 19**
sulfur (sulfide) in, **Ch 7, p 19**
sulfur (thiosulfate) in, **Ch 7, p 19**
- Limestone**
sampling of, **Ch 1, p 1**
- Liming materials**
aluminum in, **Ch 1, p 7**
aluminum oxide in, **Ch 1, p 5**
calcium in, **Ch 1, pp 2, 5–6**
calcium silicate slags, **Ch 1, pp 3–4**
carbon dioxide in, **Ch 1, p 3**
caustic value, **Ch 1, pp 2–3**
chelometric elemental analyses, **Ch 1, p 6**
colorimetric elemental analyses, **Ch 1, pp 6–9**
elemental analysis, **Ch 1, pp 4–9**
ferric oxide in, **Ch 1, p 5**
gravimetric elemental analyses, **Ch 1, pp 4–5**
iron in, **Ch 1, p 7**
magnesium in, **Ch 1, pp 2, 5–6**
manganese in, **Ch 1, p 8**
mechanical analysis of, **Ch 1, p 1**
neutralizing value, **Ch 1, pp 1–2**
phosphorus in, **Ch 1, p 8**
phosphorus pentoxide in, **Ch 1, p 5**

- sample preparation, **Ch 1**, pp 1, 4, 6–7
sampling of, **Ch 1**, p 1
silica in, **Ch 1**, pp 4–5
silicon in, **Ch 1**, pp 8–9
titanium dioxide, **Ch 1**, p 5
titanium in, **Ch 1**, p 8
- d-Limonene**
in fruits and fruit products, **Ch 37**, p 19
- Lincomycin**
in feeds, **Ch 5**, pp 70–71
in milk, **Ch 33**, pp 50–52
- Lindane**
multiresidue methods, **Ch 10**, pp 1–10
in pesticide formulations, **Ch 7**, pp 73–76
residues, **Ch 10**, pp 59–61
in shampoos and lotions, **Ch 7**, pp 75–76
- Lindo-Gladding method**
potassium in fertilizers, **Ch 2**, pp 22–23
- Linoleic acid**
in oils and fats, **Ch 41**, pp 16–19
in ready-to-feed milk-based infant formula, **Ch 50**, pp 19–20
- Linolenic acid**
in oils and fats, **Ch 41**, pp 16–19
- Linuron**
in foods, **Ch 10**, pp 17–26
in water, **Ch 10**, pp 99–104
- Lipid phosphorus**
in eggs, **Ch 34**, p 3
in macaroni products, **Ch 32**, p 74
in wheat flour, **Ch 32**, pp 17–18
- Lipids**
in eggs, **Ch 34**, p 3
in macaroni products, **Ch 32**, p 74
in wheat flour, **Ch 32**, p 17
- Liqueurs.** *see* **Cordials and liqueurs**
- Liquid chromatographic-atomic absorption spectrophotometric method**
mercury (methyl) in seafood, **Ch 9**, pp 40–43
- Liquid chromatographic fluorometric method**
indole in shrimp, **Ch 35**, p 25
- Liquid chromatographic methods**
acetaminophen in drug tablets, **Ch 19**, p 8
Aconitum alkaloids in dietary supplements and raw botanical materials, **Ch 51**, pp 7–10
aflatoxin B₁ in cattle feed, **Ch 49**, pp 40–43
aflatoxin M₁ in fluid milk, **Ch 49**, pp 52–54
aflatoxins and ochratoxin A in ginseng and ginger, **Ch 49**, pp 43–47
aflatoxins in corn, raw peanuts, and peanut butter, **Ch 49**, pp 23–24
aflatoxins in corn and peanut butter, **Ch 49**, pp 19–21
aflatoxins in cottonseed products, **Ch 49**, pp 24–26
aflatoxins M₁ and M₂ in fluid milk, **Ch 49**, pp 51–52
allopurinol in drug tablets, **Ch 19**, pp 32–33
aminocarb technical and pesticide formulations, **Ch 7**, pp 25–26
aminomethylphosphonic acid in environmental water, **Ch 10**, pp 77–78
amitriptyline in tablets and injectables, **Ch 18**, p 33
amphetamine enantiomers in bulk drugs, syrups, and capsules, **Ch 22**, pp 1–2
anilazine in pesticide formulations, **Ch 7**, pp 26–27
aristolochic acid I in botanicals and dietary supplements potentially contaminated with aristolochic acid I, **Ch 51**, pp 27–31
arprinocid in feeds, **Ch 5**, pp 5–6
azinphos-methyl in pesticide formulations, **Ch 7**, pp 105–106
bacitracin in feed premixes, **Ch 5**, pp 44–45
bendiocarb in technical and wettable powder pesticide formulations, **Ch 7**, p 27
benomyl in pesticide formulations, **Ch 7**, p 28
bentazon in pesticide formulations, **Ch 7**, p 46
benzoate, caffeine, and saccharin in carbonated beverages, **Ch 29**, pp 2–3
benzoic acid in orange juice, **Ch 37**, pp 24–25; **Ch 47**, p 14
brodifacoum (technical) and pesticide formulations, **Ch 7**, pp 130–131
caffeine in cacao products, **Ch 31**, pp 16–17
capsaicinoids in capsicums and their extractives, **Ch 43**, pp 14–15
captan in pesticide formulations, **Ch 7**, p 80
carbofuran in pesticide formulations, **Ch 7**, p 29
chlorothiazide in drug tablets, **Ch 19**, pp 27–28
chlorpheniramine maleate in drug combinations, **Ch 20**, pp 10–11
chlorpropamide in drug tablets, **Ch 19**, p 23
chlorpyrifos in pesticide formulations, **Ch 7**, p 106
chlortetracycline in edible animal tissues, **Ch 23**, pp 22–26
cholecalciferol (vitamin D₃) in selected foods, **Ch 45**, pp 35–37
cloquinoxol in creams and ointments, **Ch 18**, pp 35–36
clopidol in chicken tissues, **Ch 23**, pp 4–6
colchicine in drugs, **Ch 20**, pp 11–12
cortisone acetate in bulk and dosage forms, **Ch 21**, pp 2–3
cyanazine in technical products and pesticide formulations, **Ch 7**, pp 46–48
cyfluthrin in pesticide formulations, **Ch 7**, pp 103–104
cyhexatin technical and pesticide formulations, **Ch 7**, pp 131–132
2,4-D in pesticide formulations, **Ch 7**, pp 85, 91–92, 101–102
dalapon (magnesium and/or sodium salt) in pesticide formulations, **Ch 7**, pp 86–87
decoquinat in feeds, **Ch 5**, pp 80–82
deltamethrin in technical products and pesticide formulations, **Ch 7**, p 60
dexamethasone acetate in bulk drug and suspensions, **Ch 21**, pp 11–12
dexamethasone in drug substance and elixirs, **Ch 21**, pp 9–10
diazepam in drug tablets, **Ch 22**, pp 2–3
dicamba in pesticide formulations, **Ch 7**, pp 91–92
dicofol in pesticide formulations, **Ch 7**, pp 93–94
dicumarol in drug tablets, **Ch 19**, pp 22–23
dietary fiber containing supplemented resistant maltodextrin, **Ch 45**, pp 113–118
dietary fiber (total) in foods, **Ch 45**, pp 130–136
diethylpropion hydrochloride in drug substance and tablets, **Ch 19**, pp 34–35
diflubenzuron in pesticide formulations, **Ch 7**, p 95
diquat and paraquat in potatoes, **Ch 10**, pp 70–72
dithianon in technical products and formulations, **Ch 7**, pp 31–32
domoic acid in mussels, **Ch 35**, p 11; **Ch 49**, pp 88–89
ephedrine and pseudoephedrine in botanicals and dietary supplements, **Ch 51**, pp 5–7
ethion in pesticide formulations, **Ch 7**, p 108
ethoxyquin in feeds, **Ch 4**, pp 73–75
ethyl vanillin in vanilla extract and artificial vanilla flavor, **Ch 36**, pp 2–4
fenbendazole in beef liver, **Ch 23**, pp 7–8
fensulfothion in pesticide formulations, **Ch 7**, pp 110–111
flucytosine in drug capsules, **Ch 18**, pp 55–56
flurazepam hydrochloride in bulk drug and capsules, **Ch 22**, pp 3–4
folpet in pesticide formulations, **Ch 7**, p 97
fructose, glucose, lactose, maltose, and sucrose in milk chocolate, **Ch 31**, p 13
fumonisins in corn, **Ch 49**, pp 56–58
furazolidone in feeds and premixes, **Ch 5**, pp 14–15
gel-permeation, polymerized triglycerides in oils and fats, **Ch 41**, pp 67–68

- glucose, fructose, sucrose, and maltose in presweetened cereals, **Ch 32**, pp 62–63
- glycerol in wine and grape juice, **Ch 28**, p 4
- glycoalkaloids in potato tubers, **Ch 49**, pp 124–126
- glycyrrhizic acid or acid salts in licorice products, **Ch 36**, p 28
- glyphosate in environmental water, **Ch 10**, pp 77–78
- glyphosate in water soluble granular pesticide formulations, **Ch 7**, pp 113–116
- glyphosate technical and pesticide formulations, **Ch 7**, pp 111–113
- hydrochlorothiazide in drug tablets, **Ch 19**, pp 27–28
- hydrocortisone in drugs, **Ch 21**, pp 8–9
- p*-hydroxybenzaldehyde in vanilla extract and artificial vanilla flavor, **Ch 36**, pp 2–4
- p*-hydroxybenzoic acid in vanilla extract and artificial vanilla flavor, **Ch 36**, pp 2–4
- immunoaffinity column, aflatoxin B₁ and total aflatoxins in foods, **Ch 49**, pp 34–37
- intermediates and reaction byproducts in FD&C Yellow No. 5, **Ch 46**, pp 17–18
- intermediates in FD&C Red No. 40, **Ch 46**, pp 16–17
- intermediates in FD&C Yellow No. 6, **Ch 46**, pp 18–21
- iodine (as iodide) in pasteurized liquid milk and skim milk powder, **Ch 33**, pp 36–38
- isoflavones in soy and selected foods containing soy, **Ch 45**, pp 119–121
- isopilocarpine in drugs, **Ch 20**, p 26
- lasalocid sodium in feeds and premixes, **Ch 5**, pp 57–60
- levodopa and levodopa-carbidopa in solid dosage forms, **Ch 18**, pp 56–57
- maleic hydrazide in technical and pesticide formulations, **Ch 7**, pp 52–54
- malic acid in apple juice, **Ch 37**, pp 15–16
- D-malic acid in apple juice, **Ch 37**, pp 17–18
- MCPA ester and salt in pesticide formulations, **Ch 7**, pp 98–99
- MCPD in pesticide formulations, **Ch 7**, pp 91–92
- methamidophos in technical products and pesticide formulations, **Ch 7**, pp 119–120
- methazole in technical and pesticide formulations, **Ch 7**, pp 99–100
- methiocarb technical and pesticide formulations, **Ch 7**, p 34
- methocarbamol in drugs, **Ch 18**, pp 33–34
- methyl parathion in pesticide formulations, **Ch 7**, p 124
- N*-methylcarbamate insecticide and metabolite residues, **Ch 10**, pp 55–58
- N*-methylcarbamoyloximes and *N*-methylcarbamates in finished drinking water, **Ch 10**, pp 52–55
- methyl dopa in drug tablets, **Ch 19**, pp 27–28
- methyleneureas (water-soluble) in fertilizers, **Ch 2**, p 20
- monensin, narasin, and salinomycin in premixes, supplements and feeds, **Ch 5**, pp 51–57
- monensin in premix and animal feeds, **Ch 5**, pp 47–51
- 5'-mononucleotides in infant formula and adult/pediatric nutritional formula, **Ch 50**, pp 82–84
- morphine sulfate in bulk drug and injections, **Ch 20**, pp 5–6
- multiple tetracycline residues in milk, **Ch 33**, pp 52–57
- munition pesticide residues in soil, **Ch 10**, pp 136–138
- myo-inositol (free and bound as phosphatidylinositol) in infant formula and adult nutritionals, **Ch 50**, pp 77–80
- naringin and neohesperidin in orange juice, **Ch 37**, pp 31–33
- ochratoxin A green coffee, **Ch 49**, pp 67–69
- ochratoxin A in corn and barley, **Ch 49**, pp 69–71
- ochratoxin A in wine and beer, **Ch 49**, pp 73–75
- oxazepam in drug tablets and capsules, **Ch 22**, pp 5–6
- oxydemeton-methyl in pesticide formulations, **Ch 7**, pp 120–121
- oxytetracycline in edible animal tissues, **Ch 23**, pp 22–26
- oxytetracycline/oxytetracycline hydrochloride in feed, fish feed and animal remedies, **Ch 5**, pp 82–87
- oxythioquinox in pesticide formulations, **Ch 7**, pp 133–134
- paralytic shellfish poisoning toxins in shellfish, **Ch 49**, pp 89–102
- paralytic shellfish toxins in mussels, clams, oysters, and scallops, **Ch 49**, pp 105–116
- parathion in pesticide formulations, **Ch 7**, pp 121–122
- patulin in apple juice, **Ch 49**, pp 76–78
- patulin in clear and cloudy apple juices and apple puree, **Ch 49**, pp 78–80
- pentaerythryl tetranitrate in bulk drug triturates, capsules, and tablets, **Ch 18**, pp 37–38
- pesticide residues in water, **Ch 10**, pp 99–104
- phenolic antioxidants in oils, fats, and butter oil, **Ch 47**, pp 2–5
- phenols and phenates in disinfectant formulations, **Ch 6**, pp 3–6
- phenprocoumon in drug tablets, **Ch 19**, pp 22–23
- phosphamidon in technical and formulated pesticide products, **Ch 7**, pp 126–127
- picloram in pesticide formulations, **Ch 7**, pp 101–102
- pilocarpic acid in drugs, **Ch 20**, p 26
- pilocarpine in drugs, **Ch 20**, p 26
- prednisolone in tablets and bulk drugs, **Ch 21**, pp 13–14
- primidone in drug tablets, **Ch 19**, pp 33–34
- propoxur technical and pesticide formulations, **Ch 7**, pp 35–36
- protein G affinity, bovine immunoglobulin G analysis in bovine colostrum, milk powders, and dietary supplements of bovine origin, **Ch 33**, pp 62–64
- pseudoephedrine HCl in drug combinations, **Ch 20**, pp 10–11
- purity of lactose in sugars and syrups, **Ch 44**, p 16
- quinic, malic, and citric acids in cranberry juice cocktail and apple juice, **Ch 37**, p 14
- reserpine and rescinnamine in *Rauwolfia serpentina* powders and tablets, **Ch 20**, pp 23–25
- retinyl palmitate (vitamin A) in fortified fluid milk, **Ch 45**, pp 3–6
- reversed-phase, imidacloprid in liquid and solid pesticide formulations, **Ch 7**, pp 116–117
- reversed-phase, methomyl in insecticidal formulations, **Ch 7**, pp 41–42
- rotenone in pesticide formulations, **Ch 7**, pp 62–63
- saccharides (major) in corn syrup, **Ch 44**, pp 52–53
- saccharides (minor) in dextrose products, **Ch 44**, p 53
- separation of sugars in honey, **Ch 44**, pp 31–32
- sugars in licorice extracts, **Ch 36**, p 29
- sulfamethazine in feeds, **Ch 5**, pp 40–44
- sulfamethazine residues in raw bovine milk, **Ch 23**, pp 14–15
- sulfamethoxazole in drug tablets, **Ch 19**, pp 25–26
- sulfisoxazole in drug tablets, solutions, and ointments, **Ch 19**, p 26
- sulfonamide residues in raw bovine milk, **Ch 23**, pp 15–18
- 2,4,5-T in pesticide formulations, **Ch 7**, p 102
- taurine in pet food, **Ch 4**, pp 19–20
- taurine in powdered milk and powdered infant formula, **Ch 50**, pp 8–10
- temephos in pesticide formulations, **Ch 7**, pp 128–129

- tetracycline in edible animal tissues, **Ch 23**, pp 22–26
- theobromine in cacao products, **Ch 31**, pp 16–17
- thiodicarb in technical products and formulations, **Ch 7**, pp 38–39
- TNT, RDX, HMX, and 2,4-DNT in wastewater and groundwater, **Ch 11**, pp 27–28
- p-toluenesulfonamide residues in ice cream, **Ch 33**, pp 98–100
- triadimefon technical and pesticide formulations, **Ch 7**, pp 40–41
- triamino-s-triazine in fertilizer mixes, **Ch 2**, pp 20–21
- triglycerides (by partition numbers) in vegetable oils, **Ch 41**, pp 65–67
- triprolidine HCl in drug combinations, **Ch 20**, pp 10–11
- urea in fertilizers, **Ch 2**, pp 19–20
- vanillic acid in vanilla extract and artificial vanilla flavor, **Ch 36**, pp 2–4
- vanillin in vanilla extract and artificial vanilla flavor, **Ch 36**, pp 2–4
- vitamin A in foods, **Ch 45**, pp 52–55
- vitamin A in infant formula and adult nutritionals, **Ch 50**, pp 72–74
- vitamin A in milk and milk-based infant formula, **Ch 50**, pp 1–3
- vitamin B₆ in reconstituted infant formula, **Ch 50**, pp 34–36
- vitamin D in fortified milk and milk powder, **Ch 45**, p 33
- vitamin D in infant formula and enteral products, **Ch 50**, pp 28–30
- vitamin D in mixed feeds, premixes and pet foods, **Ch 45**, pp 33–35
- vitamin D in multivitamin preparations, **Ch 45**, pp 30–32
- vitamin D in vitamin AD concentrates, **Ch 45**, pp 32–33
- vitamin D in vitamin preparations, **Ch 45**, pp 29–30
- vitamin D₃ in ready-to-feed milk based formula, **Ch 50**, pp 5–6
- vitamin E activity in milk-based infant formula, **Ch 50**, pp 4–5
- vitamin K in milk and infant formulas, **Ch 50**, pp 32–34
- trans-vitamin K₁ in ready-to-feed milk-based infant formula, **Ch 50**, pp 6–8
- warfarin sodium in drug tablets, **Ch 19**, pp 22–23
- α-zearalenone and zearalenone in corn, **Ch 49**, pp 83–84
- Liquid chromatographic with immunoaffinity column cleanup methods**
- fumonisin B₁ and B₂ in corn and corn flakes, **Ch 49**, pp 58–61
- vitamin B₁₂ in infant formula powder and adult nutritionals, **Ch 50**, pp 48–50
- Liquid chromatography/tandem mass spectrometry. see also Ultra performance liquid chromatography/tandem mass spectrometry**
- aristolochic acid I in botanicals and dietary supplements potentially contaminated with aristolochic acid I, **Ch 51**, pp 27–31
- ephedrine alkaloids in human urine and plasma, **Ch 51**, pp 1–5
- narasin and monensin in chicken, swine, and bovine tissues, **Ch 23**, pp 39–44
- pesticide residues in foods, **Ch 10**, pp 17–26
- pesticide residues (low-levels) in soft drinks and sports drinks, **Ch 10**, pp 116–124
- ractopamine (parent and total) in bovine, swine, and turkey tissues, **Ch 23**, pp 29–39
- vitamin D₂ and vitamin D₃ in infant formula and adult nutritionals, **Ch 50**, pp 62–65
- Listeria monocytogenes**
- in dairy products, **Ch 17**, pp 220–223, 232–234
- from environmental surfaces, **Ch 17**, pp 241–250
- in foods, **Ch 17**, pp 241–257
- in meats, **Ch 17**, pp 232–234
- in milk, **Ch 17**, pp 220–223
- in seafoods, **Ch 17**, pp 232–234
- Listeria spp.**
- biochemical identification methods, **Ch 17**, pp 223–229, 280–282
- in dairy products, **Ch 17**, pp 229–232
- from environmental surfaces, **Ch 17**, pp 241–250
- in foods, **Ch 17**, pp 234–253, 258–262
- in meats, **Ch 17**, pp 229–232
- in seafoods, **Ch 17**, pp 229–232
- Listeria-Tek**
- L. monocytogenes* in dairy products, seafoods, and meats, **Ch 17**, pp 232–234
- Lithium bromide**
- elixir of, **Ch 18**, p 9
- Lithol rubin BCA color additive, Ch 46**, p 7
- Liver**
- aflatoxins B₁ and M₁ in, **Ch 49**, pp 48–51
- arsenic in, **Ch 14**, p 1
- copper in, **Ch 14**, pp 1–2
- Livestock sprays**
- organic thiocyanate in, **Ch 7**, pp 134–135
- LOCATE assay**
- Salmonella* in foods, **Ch 17**, pp 173–176
- Loganberries**
- mold in, **Ch 16**, p 74
- Lotions. see Cosmetics**
- Lycopene**
- in dietary supplements and raw materials, **Ch 51**, pp 35–39
- Lysergic acid diethylamide**
- in drugs, **Ch 22**, pp 4–5
- Lysine**
- in feed grade amino acids and premixes, **Ch 4**, pp 20–24
- in feeds, **Ch 4**, pp 9–19
- in nutritional supplements, **Ch 45**, pp 86–87
- Macaroni products**
- ash of, **Ch 32**, p 73
- carotenoids in, **Ch 32**, pp 75–77
- coloring matter in, **Ch 32**, pp 75–76
- fat in, **Ch 32**, p 73
- fiber (crude) in, **Ch 32**, p 73
- iron in, **Ch 32**, p 73
- lipid and lipid phosphorus in, **Ch 32**, p 74
- moisture in, **Ch 32**, p 73
- nitrogen in, **Ch 32**, p 74
- pH of, **Ch 32**, p 74
- phytate in, **Ch 32**, p 78
- protein in, **Ch 32**, p 74
- sample preparation, **Ch 32**, p 73
- solids (total) in, **Ch 32**, p 73
- sterols in, **Ch 32**, pp 74–75
- tartrazine in, **Ch 32**, p 76
- unsaponifiable residue of, **Ch 32**, p 74
- vitamins in enriched products, **Ch 32**, p 73
- Mace**
- filth in, **Ch 16**, pp 44–47
- MacMichael viscosimeter method**
- viscosity of acidulated flour-water suspension, **Ch 32**, pp 26–27
- Macro methods**
- phosphorus in plants, **Ch 3**, p 24
- Macroscopic examination**
- foreign matter in canned corn, **Ch 16**, p 41
- of green coffee, **Ch 30**, p 1
- of roasted coffee, **Ch 30**, p 2
- Maggots. see also Insects**
- in blueberries, **Ch 16**, p 34
- in canned and comminuted tomato products, **Ch 16**, pp 43–44
- in cherries, **Ch 16**, p 34
- in citrus juices (canned), **Ch 16**, p 35
- in pineapple juices (canned), **Ch 16**, p 35
- in pureed infant food, **Ch 16**, p 42
- in tomato products, **Ch 16**, pp 43–44
- Magnesia cleanup**
- organochlorine and organophosphorus pesticide residues, **Ch 10**, p 7
- Magnesium**
- in cheese, **Ch 33**, pp 82–84
- in drugs, **Ch 18**, pp 6–7
- in enteral products, **Ch 50**, pp 15–17
- in face powders, **Ch 15**, pp 12–13
- in fertilizers, **Ch 2**, pp 36–37
- in fortified food products, **Ch 50**, pp 65–72
- in fruits and fruit products, **Ch 37**, p 8
- in infant formulas, **Ch 50**, pp 15–18
- in liming materials, **Ch 1**, pp 2, 5–6
- in pet foods, **Ch 3**, pp 5–7; **Ch 50**, pp 15–17
- in plants, **Ch 3**, pp 2–7, 11
- in salt, **Ch 11**, p 32

- in solid wastes, **Ch 9**, pp 46–50
in water, **Ch 11**, pp 16–17
- Magnesium acetate method**
ash of wheat flour, **Ch 32**, p 2
- Magnesium nitrate method**
sulfur in plants, **Ch 3**, p 26
- Magnesium oxide method**
nitrogen (ammoniacal) in fertilizers,
Ch 2, p 15
- Magnesium sulfate partitioning**
pesticide residues in foods, **Ch 10**,
pp 17–26
- Magnesium uranyl acetate test**
urine on grain, **Ch 16**, p 63
- Magnetic particle immunoassay**
atrazine in water, **Ch 10**, pp 47–50
- Mahimahi**
cadaverine in, **Ch 35**, pp 20–23
- Malaoxon**
in soft drinks and sports drinks, **Ch 10**,
pp 116–124
- Malathion**
confirmatory method, **Ch 10**, pp 39–40
in fruits and vegetables, **Ch 10**, pp
36–39
multiresidue methods, **Ch 10**, pp 1–10
in pesticide formulations, **Ch 7**, pp
118–119
residues of, **Ch 10**, pp 84–85
in soft drinks and sports drinks, **Ch 10**,
pp 125–136
- Maleic hydrazide**
hydrazine in technical and pesticide
formulations, **Ch 7**, pp 54–56
pesticide residues, **Ch 10**, pp 85–86
in technical and pesticide formulations,
Ch 7, pp 52–54
- Malic acid**
in cordials and liqueurs, **Ch 26**, p 21
in cranberry juice cocktail and apple
juice, **Ch 37**, p 14
in fruits and fruit products, **Ch 37**,
pp 11–13, 16
in lemon juice, **Ch 37**, pp 20–21
D-malic acid in apple juice, **Ch 37**,
pp 17–18
L-malic acid in fruits and fruit products,
Ch 37, pp 11–12, 16
L-malic and total malic acid ratio in
apple juice, **Ch 37**, pp 15–16
in maple syrup, **Ch 44**, p 40
in nonalcoholic beverages, **Ch 29**, p 1
in wines, **Ch 28**, p 11
- Malt**
alpha-amylase in, **Ch 27**, pp 30–31
black, color of, **Ch 27**, p 28
bushel weight, **Ch 27**, pp 24–25
caramel, extract and color of, **Ch 27**,
p 28
diastatic power of, **Ch 27**, pp 29–30
diastatic power of syrups, **Ch 27**, p 37
extract of, **Ch 27**, pp 26–28
laboratory wort, **Ch 27**, pp 28–29
milled, α -amylase in, **Ch 32**, pp 23–25
moisture in, **Ch 27**, pp 25–26
physical characteristics of kernels,
Ch 27, p 25
protein in laboratory malt, **Ch 27**, p 29
sample preparation, **Ch 27**, p 24
sampling, **Ch 27**, p 24
- Malt beverages and brewing materials**
barley, **Ch 27**, pp 23–24
beer, **Ch 27**, pp 1–23
brewers' grains, **Ch 27**, pp 41–42
cereal adjuncts, **Ch 27**, pp 31–33
hops, **Ch 27**, pp 34–36
malt, **Ch 27**, pp 24–31
sugars and syrups for brewing, **Ch 27**,
pp 36–38
wort, **Ch 27**, pp 38–39
yeast, **Ch 27**, pp 39–41
- Malt syrups**
diastatic power of, **Ch 27**, p 37
- Malted cereals**
alpha-amylase in, **Ch 32**, p 22
- Malted milk**
casein in, **Ch 33**, p 72
fat in, **Ch 33**, p 73
- Malted wheat flour**
proteolytic activity of, **Ch 32**, pp 25–26
- Malting barley, Ch 27, pp 23–24**
- Maltodextrin**
dietary fiber in foods, **Ch 45**, pp 113–
118
- Maltose**
diastatic activity of flour, **Ch 32**, p 21
in honey, **Ch 44**, pp 28–30
in milk chocolate, **Ch 31**, p 13
in presweetened cereals, **Ch 32**,
pp 62–63
in sugars and syrups, **Ch 44**, p 15
in wheat flour, **Ch 32**, pp 12–14
- Maltulose**
in corn syrup, **Ch 44**, pp 52–53
- Malvidin glucosides**
in grape juice, **Ch 37**, p 20
- Mammalian cells**
invasiveness by *E. coli*, **Ch 17**, pp 67–
69
- Mammalian feces**
alkaline phosphatase test, **Ch 16**,
pp 65–66
coprostanol in, **Ch 16**, p 69
in corn meal, **Ch 16**, p 66
in grain products, **Ch 16**, pp 67–68
in ground black pepper, **Ch 16**, p 68
- Mandelic acid**
in drugs, **Ch 19**, p 2
- Maneb. see also Fentin-maneb**
pesticides
in pesticide formulations, **Ch 7**, pp 13–
15, 32
- Manganese**
in animal feed, **Ch 4**, pp 60–61, 65
in enteral products, **Ch 50**, pp 15–17
in fertilizers, **Ch 2**, pp 38–39
in foods, **Ch 9**, p 35
in fortified food products, **Ch 50**,
pp 65–72
in fruits and fruit products, **Ch 37**, p 8
in infant formulas, **Ch 50**, pp 15–18
in liming materials, **Ch 1**, p 8
in pet foods, **Ch 3**, pp 5–7; **Ch 4**,
pp 60–61; **Ch 50**, pp 15–17
- in plants, **Ch 3**, pp 2–7, 11–12
in solid wastes, **Ch 9**, pp 46–50
in water, **Ch 11**, pp 16–17, 24
in waters and wastewaters, **Ch 9**,
pp 50–60
- Mannitol hexanitrate**
in drugs, **Ch 18**, pp 34–37
- Manometric methods**
carbon dioxide in beer, **Ch 27**, pp 10–
11
carbon dioxide in wines, **Ch 28**,
pp 13–14
- Maple products**
ash of, **Ch 44**, p 38
bacterial population of sap, **Ch 44**, p 42
beet or cane sugar in, **Ch 44**, pp 42–47
Canadian lead number of, **Ch 44**, p 39
carbon stable isotopes ratio of ethanol
derived from syrups, **Ch 37**,
pp 33–37
color classification, **Ch 44**, p 37
conductivity value of syrup, **Ch 44**,
pp 39–40
corn syrup and cane sugar in syrup,
Ch 44, pp 38–39
formaldehyde in syrup, **Ch 44**, pp 40–
41
glucose in, **Ch 44**, p 38
invert sugar in, **Ch 44**, p 38
malic acid in syrup, **Ch 44**, p 40
moisture in, **Ch 44**, p 37
polarization of, **Ch 44**, p 38
sample preparation, **Ch 44**, p 37
solids in, **Ch 44**, p 37
sucrose in, **Ch 44**, p 38
sugars (reducing) as invert sugar in,
Ch 44, p 38
Winton lead number of, **Ch 44**, p 39
yeast count for syrup, **Ch 44**, pp 41–42
- Margarines**
critical temperature of dissolution of oil,
Ch 33, p 77
trans fatty acid isomers in, **Ch 41**,
pp 41–42
trans isomers (isolated) in, **Ch 41**,
pp 37–39
vitamin A in, **Ch 45**, pp 1–3
- Marihuana**
in drug powders, **Ch 22**, p 5
- Marine products. see Fish and other**
marine products
- Marjoram**
filth in, **Ch 16**, pp 44–47, 50–51
- Marsh test**
colors (artificial) in distilled liquors,
Ch 26, p 2
- Martius Yellow**
in color additives, **Ch 46**, p 21
- Mass selective detection/gas**
chromatographic method
glyphosate and aminomethylphosphoric
acid (AMPA) in crops, **Ch 10**,
pp 78–83
- Mass selective detection method**
ethyl carbamate in alcoholic beverages
and soy sauce, **Ch 28**, pp 15–17

- Mass spectrometric-gas chromatographic methods**
sulfamethazine in swine tissues, **Ch 23**, pp 11–13
- Mass spectrometric-inductively coupled plasma method**
trace elements in waters and wastewaters, **Ch 9**, pp 50–60
- Mass spectrometric methods.** *see also* **Liquid chromatography/tandem mass spectrometry**
carbon isotope ratio, corn and cane sugar products in honey, **Ch 44**, pp 38–39
carbon isotope ratio, corn syrup and cane sugar in maple syrup, **Ch 44**, pp 34–35
carbon stable isotope ratio of apple juice, **Ch 37**, pp 21–22
carbon stable isotope ratio of ethanol derived from fruit juices and maple syrups, **Ch 37**, pp 33–37
carbon stable isotope ratio of orange juice, **Ch 37**, p 22
identification of aflatoxin B₁, **Ch 49**, pp 33–34
- Mass spectrometry/liquid chromatography method**
aristolochic acid I in botanicals and dietary supplements potentially contaminated with aristolochic acid I, **Ch 51**, pp 27–31
ephedrine alkaloids in human urine and plasma, **Ch 51**, pp 1–5
- Mathers test**
caramel in wines, **Ch 28**, p 13
colors (artificial) in distilled liquors, **Ch 26**, p 2
- Mayonnaise**
gums in, **Ch 43**, p 10
- MCPA ester and salt**
in pesticide formulations, **Ch 7**, pp 98–99
- MCPP**
in pesticide formulations, **Ch 7**, pp 91–92
- Meal**
alpha-amylase in, **Ch 32**, p 22
- Meat and meat products.** *see also* **Drugs and feed additives in animal tissues; Poultry and poultry products**
agar in, **Ch 39**, p 21
arsenic in, **Ch 9**, p 22; **Ch 39**, p 5
ash of, **Ch 39**, p 4
beef and poultry adulteration of meat products, **Ch 39**, pp 23–24
boric acid in, **Ch 47**, p 16
calcium in mechanically separated poultry and beef, **Ch 39**, pp 16–17
chlortetracycline in edible animal tissues, **Ch 23**, pp 22–26
confirmed *E. coli* counts in, **Ch 17**, pp 64–65
creatine in, **Ch 39**, pp 14–15
cured, nitrites in, **Ch 39**, pp 8–9
fat in meat and meat products, **Ch 39**, pp 2–3, 25–30
fenbendazole in beef liver, **Ch 23**, pp 7–8
glass in scraps, **Ch 16**, p 30
ground beef, filth in, **Ch 16**, pp 32–33
ground beef, *L. monocytogenes* in, **Ch 17**, pp 253–256
ground beef, *Salmonella* in, **Ch 17**, pp 205–210, 212–216
ground beef, total viable count in, automated enumeration, **Ch 16**, pp 6–8
ground beef, viruses in, **Ch 17**, p 268
ground pork, *Salmonella* in, **Ch 16**, pp 8–11
hydroxyproline, **Ch 39**, pp 15–16
L. monocytogenes in, **Ch 17**, pp 232–234, 241–257
lactose in, **Ch 39**, p 22
Listeria in pork, **Ch 17**, pp 229–232
Listeria spp. in, **Ch 17**, pp 229–232, 258–262
liver, aflatoxin B₁ and M₁ in, **Ch 49**, pp 48–51
meat extracts and similar products, **Ch 39**, pp 24–25
milk (nonfat, dry) in, **Ch 39**, p 21
moisture in, **Ch 39**, pp 1–2, 25–30
monensin in swine and bovine tissues, **Ch 23**, pp 39–44
narasin in swine and bovine tissues, **Ch 23**, pp 39–44
nitrates and nitrites in, **Ch 39**, pp 8–9
nitrogen in, **Ch 39**, pp 5–8, 13–14
N-nitrosamines in minced fish-meat and surimi-meat frankfurters, **Ch 39**, pp 14–13
N-nitrosamines (volatile) in fried bacon, **Ch 39**, pp 9–11
N-nitrosopyrrolidine in fried bacon, **Ch 39**, pp 11–12
oxytetracycline in edible animal tissues, **Ch 23**, pp 22–26
phosphorus in, **Ch 39**, pp 4–5
pork sausage, *Salmonella* in, **Ch 16**, pp 8–11
pork sausage (uncooked), filth in, **Ch 16**, pp 32–33
preservatives in ground beef, **Ch 47**, pp 14–15
protein (crude) in, **Ch 39**, pp 6–8, 25–27
protein in raw and processed meats, **Ch 39**, pp 30–31
ractopamine in swine and bovine tissues, **Ch 23**, pp 26–29
ractopamine (parent and total) in bovine and tissues, **Ch 23**, pp 29–39
S. aureus in, **Ch 17**, pp 105–106
Salmonella in, **Ch 17**, pp 169–171, 181–190, 205–210, 212–219
Salmonella in pork, **Ch 16**, pp 8–11; **Ch 17**, pp 181–190, 210–212
Salmonella in roast beef, **Ch 16**, pp 8–11
salt (chlorine as sodium chloride) in, **Ch 39**, p 4
sample preparation, **Ch 39**, p 1
soy protein in raw and heat-processed meat products, **Ch 39**, pp 17–21
soybean flour in, **Ch 39**, p 17
starch in, **Ch 39**, pp 22–23
starchy flour in, **Ch 39**, p 17
sulfamethazine in swine tissues, **Ch 23**, pp 11–14
sulfites in, **Ch 47**, pp 31–32
sulfonamide residues in swine, **Ch 23**, pp 18–19
sulfurous acid in, **Ch 47**, p 38
tetracycline in edible animal tissues, **Ch 23**, pp 22–26
water (added) in sausage, **Ch 39**, p 2
- Mechanical analyses**
of fertilizers, **Ch 2**, pp 3–4
liming materials, **Ch 1**, p 1
of peat, particle size range, **Ch 2**, p 53
- Medical diets.** *see* **Enteral products**
- Medium A-1 method**
fecal coliforms in shellfish growing waters, **Ch 17**, pp 39–41
- Medroxyprogesterone acetate**
in drugs, **Ch 21**, pp 6–7
- Meissl-Hiller gravimetric method**
invert sugar in sugars and syrups, **Ch 44**, p 10
- Melengestrol acetate**
in animal tissues, **Ch 23**, pp 8–10
in feed supplements, **Ch 5**, pp 18–20
- Melting point**
of aspirin, **Ch 19**, p 11
of cacao fat, **Ch 31**, p 10
of color additives, **Ch 46**, p 26
of fats and fatty acids, **Ch 41**, p 4
- Melting point method**
foreign fats containing tristearin in lard, **Ch 41**, pp 54–55
vegetable fat in butterfat, **Ch 41**, pp 47–48
- Membrane filter-deoxyribonucleic acid method**
somatic cells in milk, **Ch 17**, p 271
- Menadione sodium bisulfite**
in drugs, **Ch 19**, p 23
in feed premixes, **Ch 45**, pp 48–49
- Menthol**
in cigarette filler, **Ch 3**, pp 39–41
in drugs, **Ch 20**, p 31
- Meperidine**
in drugs, **Ch 18**, p 18
- Mephentermine**
in drugs, **Ch 18**, pp 18–19, 28
- Meprobamate**
in drugs, **Ch 19**, p 20
with pentaerythrityl tetranitrate in drugs, **Ch 18**, pp 38–39
- Merbromin**
in drugs, **Ch 18**, p 16
- Mercuric iodide**
mercury in, **Ch 18**, pp 15–16
- Mercuric nitrate**
mercury in ointments, **Ch 18**, p 17
- Mercuric nitrate method**
chloride in water, **Ch 11**, pp 11–12

Mercuric oxide treatment

acidity (volatile) of wines exclusive of SO_2 , **Ch 28**, p 11

Mercurous iodide

in tablets, **Ch 18**, p 17

Mercury

in drugs, **Ch 18**, pp 15–16

in fish, **Ch 9**, pp 36–37

in fish and shellfish, (methyl), **Ch 9**, pp 37–40

in foods, **Ch 9**, pp 35–43

in mercurial ointments, **Ch 18**, p 17

in mercury-containing drugs, **Ch 18**, pp 14–15

in ointments of mercuric nitrate, **Ch 18**, p 17

in organic mercurial seed disinfectants, **Ch 7**, pp 22–23

in seafood, (methyl), **Ch 9**, pp 40–43

in water, **Ch 11**, pp 18–19

Mercury reduction method

pyrethrin in pesticide formulations, **Ch 7**, pp 63–65

Merphos

in finished drinking water, **Ch 10**, pp 41–47

Mestranol

in drugs, **Ch 21**, pp 5–6

Metal chelate affinity-liquid**chromatographic method**

multiple tetracycline residues in milk, **Ch 33**, pp 52–57

Metals and other elements. see also specific elements

antimony in foods, **Ch 9**, p 22

arsenic in foods, **Ch 9**, pp 1–3, 22

in baking powders, **Ch 25**, p 5

cadmium in cookware, **Ch 9**, pp 5–14

cadmium in foods, **Ch 9**, pp 1–5, 16–23

chromium (dissolved hexavalent) in waters and wastewaters, **Ch 9**, pp 60–62

in color additives, **Ch 46**, pp 22–25

copper in edible oils and fats, **Ch 9**, pp 14–15

copper in foods, **Ch 9**, pp 16–23

copper in tea, **Ch 9**, pp 15–16

fluorine in foods, **Ch 9**, pp 24–28

fluorine on apples and pears, **Ch 9**, p 24

iron in edible oils and fats, **Ch 9**, pp 14–15

iron in foods, **Ch 9**, pp 16–22

lead, precautions, **Ch 9**, p 28

lead, suitability of methods, **Ch 9**, p 28

lead in cookware, **Ch 9**, pp 5–14

lead in evaporated milk, **Ch 9**, pp 29–31

lead in fish, **Ch 9**, pp 31–32

lead in foods, **Ch 9**, pp 1–5, 16–22, 28–35

lead in fruit juice, **Ch 9**, pp 30–31

lead in sugars and syrups, **Ch 9**, pp 33–35

lead on apples and pears, **Ch 9**, p 29

manganese in foods, **Ch 9**, p 35

mercury in fish, **Ch 9**, pp 36–37

mercury in foods, **Ch 9**, pp 35–43

mercury (methyl) in fish and shellfish, **Ch 9**, pp 37–40

mercury (methyl) in seafood, **Ch 9**, pp 40–43

multielement methods, **Ch 9**, pp 1–22

nickel in edible oils and fats, **Ch 9**, pp 14–15

nickel in tea, **Ch 9**, pp 15–16, 43

in pet foods, **Ch 3**, pp 5–7

in plants, **Ch 3**, pp 2–16

selenium in foods, **Ch 9**, pp 1–3, 43–44

single element methods, **Ch 9**, pp 22–62

in solid wastes, **Ch 9**, pp 46–50

tin in foods, **Ch 9**, pp 44–45

titanium in cheese, **Ch 9**, p 45; **Ch 33**, p 85

trace elements in waters and wastewaters, **Ch 9**, pp 50–60

in wastewaters, **Ch 9**, pp 50–60

in waters, **Ch 9**, pp 50–60

zinc in foods, **Ch 9**, pp 1–3, 16–22, 45–46

Methacycline

in milk, **Ch 33**, pp 52–57

Methamidophos

in foods, **Ch 10**, pp 17–26

in fruits and vegetables, **Ch 10**, pp 10–12

in technical products and pesticide formulations, **Ch 7**, pp 119–120

Methamphetamine

in drugs, **Ch 18**, p 28

Methanol

in cordials and liqueurs, **Ch 26**, p 20

in distilled liquors, **Ch 26**, pp 15–16

extraction into, moisture in animal feed, grain and forage, **Ch 4**, p 8

in hazardous substances, **Ch 8**, p 3

in lemon, orange, and lime extracts, **Ch 36**, p 16

in vanilla extract, **Ch 36**, p 9

Methanol-formamide

extraction into, moisture in animal feed, grain and forage, **Ch 4**, pp 6–7

Methapyrilene

codeine with, **Ch 20**, p 2

in expectorants, **Ch 18**, p 19

Methaqualone

in drug powders, **Ch 22**, p 5

Methazole

in technical and pesticide formulations, **Ch 7**, pp 99–100

Methenamine

in deodorants, **Ch 15**, p 10

in drugs, **Ch 18**, pp 41–42

in tablets, **Ch 18**, p 41

Methenamine mandelate

in drugs, **Ch 18**, pp 41–42

Methimazole

in drugs, **Ch 19**, pp 30–31

Methiocarb

in finished drinking water, **Ch 10**, pp 52–55

in grapes and potatoes, **Ch 10**, pp 55–58

technical and pesticide formulations, **Ch 7**, p 34

Methionine

in feed grade amino acids and premixes, **Ch 4**, pp 20–24

in feeds, **Ch 4**, pp 9–17

L-Methionine

in food and feed ingredients, **Ch 45**, p 88

Methocarbamol

in drugs, **Ch 18**, pp 33–34

Methomyl

in finished drinking water, **Ch 10**, pp 52–55

in foods, **Ch 10**, pp 17–26

in grapes and potatoes, **Ch 10**, pp 55–58

in insecticidal formulations, **Ch 7**, pp 41–42

Methoxychlor

multiresidue methods, **Ch 10**, pp 1–10

residues of, **Ch 10**, p 87

in water, **Ch 10**, pp 27–32

Methyclothiazide

in drugs, **Ch 19**, pp 29–30

Methyl-2,4,6-trinitrophenyl-nitramine

residues in soil, **Ch 10**, pp 136–138

Methyl anthranilate

in nonalcoholic beverages, **Ch 29**, pp 5–6

Methyl esters

of fatty acids in oils and fats, **Ch 41**, pp 19–20, 25–26

of fish oils, **Ch 41**, pp 27–29

Methyl paraoxon

in finished drinking water, **Ch 10**, pp 41–47

in soft drinks and sports drinks, **Ch 10**, pp 116–124

Methyl parathion

confirmatory method, **Ch 10**, pp 39–40

in fruits and vegetables, **Ch 10**, pp 36–39

multiresidue methods, **Ch 10**, pp 1–10

in pesticide formulations, **Ch 7**, pp 123–125

in soft drinks and sports drinks, **Ch 10**, pp 125–136

Methyl salicylate

in drugs, **Ch 19**, p 5

essential oil in extract, **Ch 36**, p 25

in nonalcoholic beverages, **Ch 29**, pp 4–5

N-Methylcarbamate pesticides

in finished drinking water, **Ch 10**, pp 52–55

in fruits and vegetables, **Ch 10**, pp 51–52

insecticide and metabolite residues, **Ch 10**, pp 55–58

N-Methylcarbamoyloximes pesticides

in finished drinking water, **Ch 10**, pp 52–55

Methylcellulose

in food and food products, **Ch 32**, pp 27–31

- Methyldopa**
in drugs, **Ch 19**, pp 27–29
- Methylene blue**
in drugs, **Ch 18**, p 43
- Methylene chloride**
extract of spices, **Ch 43**, p 2
- Methyleneureas**
in fertilizers, (water-soluble), **Ch 2**, p 20
- 2-(*p*-*tert*-butylphenoxy)-1-Methylethyl 2-chloroethyl sulfite pesticide residues**
colorimetric method, **Ch 10**, pp 62–63
- Metolachlor**
in finished drinking water, **Ch 10**, pp 41–47
in pesticide formulations, **Ch 7**, pp 100–101
- Metoxuron**
in pesticide formulations, **Ch 7**, pp 29–31
- Metribuzin**
in finished drinking water, **Ch 10**, pp 41–47
in pesticide formulations, **Ch 7**, pp 48–49
- Metribuzin DA**
in water, **Ch 10**, pp 99–104
- Metribuzin DK**
in water, **Ch 10**, pp 99–104
- Mevinphos**
in finished drinking water, **Ch 10**, pp 41–47
- MF-DNA method.** *see* **Membrane filter-deoxyribonucleic acid method**
- MKG-264**
in finished drinking water, **Ch 10**, pp 41–47
- Micro Bailey-Andrew method**
caffeine in roasted coffee, **Ch 30**, p 2
- MICRO-ID *Listeria* test**, **Ch 17**, pp 223–226
- Micro-Kjeldahl method**
nitrogen determination, **Ch 12**, p 7
nitrogen in wheat flour, **Ch 32**, p 14
- Micro methods**
glucose in plants, **Ch 3**, p 27
phosphorus in plants, **Ch 3**, p 24
- Microbial enzyme preparation**
 α -amylase in, **Ch 32**, pp 23–25
- Microbial fatty acid profile**
Vibrio vulnificus identification, **Ch 17**, pp 265–267
- Microbial ranking**
of porous packaging materials, **Ch 16**, pp 56–61
- Microbial receptor assay**
antimicrobial drugs in milk, **Ch 33**, pp 50–52
- Microbiological methods**
antibiotics in feeds, **Ch 5**, pp 60–63
AOAC INTERNATIONAL methods
committee guidelines for validation of microbiological methods for food and environmental surfaces, **App J** for *Bacillus*, **Ch 17**, pp 124–127
for *Bacillus anthracis*, **Ch 17**, pp 272–278
bacitracin in feed supplements, **Ch 5**, p 64
bacitracin in mixed feeds, **Ch 5**, pp 64–65
biological agents from nonporous surfaces, bulk sample collection and swab sample collection of visible powders, **Ch 17**, p 278
for chilled, frozen, precooked, or prepared foods, **Ch 17**, pp 4–26
chlortetracycline HCl in feeds, **Ch 5**, pp 66–68
for *Clostridium*, **Ch 17**, pp 115–123
for coliforms, **Ch 17**, pp 27–49
commercial sterility of canned, low-acid foods, **Ch 17**, pp 110–115
cylinder plate method, bacitracin in premix feeds, **Ch 5**, pp 63–64
disinfectant testing, **Ch 6**, pp 1–47
for *E. coli*, **Ch 17**, pp 32, 36–46, 50–88
for eggs and egg products, **Ch 17**, pp 1–3
erythromycin in feeds, **Ch 5**, pp 68–69
folic acid in infant formula, **Ch 50**, pp 24–26
hygromycin B in feeds, **Ch 5**, p 69
lasalocid in feeds, **Ch 5**, pp 69–70
lincomycin in feeds, **Ch 5**, pp 70–71
for *Listeria*, **Ch 17**, pp 220–262
monensin in feeds, **Ch 5**, pp 71–73
neomycin in feeds, **Ch 5**, pp 73–75
novobiocin in feeds, **Ch 5**, p 75
for nutmeats, **Ch 17**, pp 4–5
nystatin in feeds, **Ch 5**, pp 75–76
oleandomycin in feeds, **Ch 5**, p 76
oxytetracycline in feeds, **Ch 5**, pp 76–77
plate assay, bacitracin-MD in complete feed, **Ch 5**, pp 65–66
procaine penicillin in feeds, **Ch 5**, p 77
for *Salmonella*, **Ch 16**, pp 8–11; **Ch 17**, pp 128–219
screening methods, **Ch 17**, pp 279–282
for somatic cells, **Ch 17**, pp 270–271
spectinomycin in feeds, **Ch 5**, p 78
Stahl microbiological agar diffusion assay, neomycin in feeds, **Ch 5**, pp 74–75
for *Staphylococcus*, **Ch 17**, pp 89–109
streptomycin in feeds, **Ch 5**, pp 78–79
total viable count in food, automated enumeration, **Ch 16**, pp 6–8
turbidimetric, chlortetracycline HCl in feeds, **Ch 5**, pp 67–68
turbidimetric, monensin in feeds, **Ch 5**, pp 72–73
tylosin in feeds, **Ch 5**, p 79
for *Vibrio*, **Ch 17**, pp 263–267
for viruses, **Ch 17**, pp 268–269
vitamin B₆ in ready-to-feed milk-based infant formula, **Ch 50**, pp 20–21
vitamins and other nutrients, **Ch 45**, pp 55–73
- Microbiological-turbidimetric method**
niacin and niacinamide in ready-to-feed milk-based infant formula, **Ch 50**, p 21
pantothenic acid in milk-based infant formula, **Ch 50**, pp 26–28
- Microchemical methods**
alkaloids and related amines in drugs, **Ch 18**, pp 44–47
alkoxyl groups, **Ch 12**, pp 12–14
barbiturates in drugs, **Ch 18**, pp 47–48
bromine determination, **Ch 12**, pp 1–3
caffeine in drugs, **Ch 20**, p 7
carbon determination, **Ch 12**, pp 3–6
chlorine determination, **Ch 12**, pp 1–3
diacetylmorphine (heroin) in drug powder, **Ch 22**, p 4
fluorine determination, **Ch 12**, pp 6–7
hydrogen determination, **Ch 12**, pp 3–6
iodine determination, **Ch 12**, pp 1–3
molecular weight determination, **Ch 12**, p 1
nitrogen determination, **Ch 12**, pp 5–7
nitrogen in wheat flour, **Ch 32**, p 14
opium alkaloids, **Ch 20**, p 1
oxygen determination, **Ch 12**, pp 7–9
phenothiazine drugs, **Ch 18**, pp 47, 51
phosphorus determination, **Ch 12**, pp 9–10
quinine in drugs, **Ch 20**, p 16
sulfur determination, **Ch 12**, pp 10–13
sympathomimetic drugs, **Ch 18**, pp 51–52
synthetic drugs, **Ch 18**, pp 47, 49–51, 53
uric acid on food and containers, **Ch 16**, pp 69–70
xanthine group alkaloid drugs, **Ch 18**, p 53
- Microcrystalline identification**
phenothiazine drugs, **Ch 18**, pp 47, 51
- Microextraction—gas chromatographic method**
1,2-dibromoethane and 1,2-dibromo-3-chloropropane in water, **Ch 10**, pp 113–116
- Microfluorometric method**
vitamin C in vitamin preparations, **Ch 45**, pp 23–24
- Microplate-based ORAC-pyrogallol red assay**
estimation of antioxidant capacity, **Ch 47**, pp 7–8
- Microscopic methods**
adulterants in spices, **Ch 43**, pp 5–6
animal feed examination and identification, **Ch 4**, pp 71–73
barbiturates in drugs, **Ch 19**, p 14
of butter, **Ch 33**, p 80
chlortetracycline in feeds, **Ch 5**, p 45
counts in eggs and egg products, **Ch 17**, p 3
crystalline substances in drugs, **Ch 18**, pp 54–55
filth in raisins, **Ch 16**, p 35
identification of canned Pacific salmon, **Ch 35**, pp 32–34
insect penetration through packaging materials, **Ch 16**, p 55

Microslide gel double diffusion test

Staphylococcal enterotoxin in foods,
Ch 17, pp 90–94

Microwave digestion

arsenic, cadmium, cobalt, chromium,
lead, molybdenum, nickel, and
selenium in fertilizers, **Ch 2**, pp 42,
51–52

calcium, copper, iron, magnesium,
manganese, potassium,
phosphorus, sodium, and zinc in
fortified products, **Ch 50**, pp 65–72
lead, cadmium, zinc, copper, and iron
in foods, **Ch 9**, pp 16–19

Microwave drying methods

moisture and fat in meats, **Ch 39**,
pp 27–30

moisture in cheese, **Ch 33**, p 82

moisture in meat and poultry products,
Ch 39, pp 1–2

solids (total) in processed tomato
products, **Ch 42**, pp 4–5

Microwave-solvent extraction method

fat (crude) in meat and poultry
products, **Ch 39**, p 3

Mid-infrared spectroscopic method

fat, lactose, protein, and solids in milk,
Ch 33, pp 26–30

protein in milk, **Ch 33**, p 15

Milk. *see also* Condensed milk; Dried milk and its products; Evaporated milk; Infant formulas; Sweetened condensed milk

acidity of, **Ch 33**, p 7

aflatoxin M₁ in, **Ch 33**, p 38; **Ch 49**,
pp 47–48, 51–54

aflatoxin M₂ in, **Ch 49**, pp 51–52

albumin in, **Ch 33**, p 16

alkaline phosphatase activity, **Ch 33**,
pp 45–46

antimicrobial drugs in, **Ch 33**, pp 50–52

ash of, **Ch 33**, p 10

bacterial counts in, **Ch 17**, pp 27–28

bacterial counts in raw and pasteurized,
Ch 17, pp 7–9

barium-140 in, **Ch 13**, pp 6–8

casein in, **Ch 33**, p 16

cesium-137 in, **Ch 13**, pp 6–8

chloramines in, **Ch 33**, pp 35–36

choline in, **Ch 50**, pp 30–32

citric acid in, **Ch 33**, p 8

coliform counts in, **Ch 17**, pp 27–28

color additives in, **Ch 33**, p 38

copper in, **Ch 33**, p 38

ethylenethiourea pesticide residues in,
Ch 10, pp 74–76

fat in, **Ch 33**, pp 18–30

filth in, **Ch 16**, p 16

freezing point of, **Ch 33**, pp 5–7

gelatin in, **Ch 33**, p 35

hydrogen peroxide in, **Ch 47**, p 21

hypochlorites in, **Ch 33**, pp 35–36

iodine-131 in, **Ch 13**, pp 6–8, 10–12

iodine in pasteurized liquid milk and
skim milk powder, **Ch 33**, pp 36–38

L. monocytogenes in, **Ch 17**, pp 220–
223

beta-lactam antibiotics in, **Ch 23**,
pp 20–22; **Ch 33**, pp 46–50

lactic acid in, **Ch 33**, pp 8–10

lactose in, **Ch 33**, pp 17–18, 26–30,
59–62

Listeria in, **Ch 17**, pp 229–234

malted milk, **Ch 33**, pp 72–73

multiple tetracycline residues in, **Ch 33**,
pp 52–57

neutral lactase activity in industrial
enzyme preparations, **Ch 33**, p 57

nitrogen (casein) in, **Ch 33**, pp 58–59

nitrogen (noncasein) in, **Ch 33**, p 57

nitrogen (nonprotein) in, **Ch 33**,

pp 12–13

nitrogen (total) in, **Ch 33**, pp 10–12

organochlorine and organophosphorus

pesticide residues in, **Ch 33**, p 38

phosphatase in, **Ch 33**, pp 40–45

preservatives in, **Ch 33**, p 35

protein in, **Ch 33**, pp 14–15, 26–30

protein nitrogen content of, **Ch 33**,

pp 13–14

protein-reducing substances in, **Ch 33**,
p 16

quaternary ammonium compounds in,

Ch 47, pp 23–24, 27

raw, fat in, **Ch 33**, pp 19–26

retinyl palmitate (vitamin A) in, **Ch 45**,

pp 3–6

Salmonella in, **Ch 16**, pp 8–11; **Ch 17**,

pp 181–190

sample collection, **Ch 33**, pp 4–5

sample preparation, **Ch 33**, p 5

sampling, **Ch 33**, pp 2–3

sediment in, **Ch 16**, pp 13–16; **Ch 33**,

p 38

solids in, **Ch 33**, pp 10, 26–30, 39–40

somatic cell count in, **Ch 33**, p 7

somatic cells in, **Ch 17**, pp 270–271

specific gravity of, **Ch 33**, p 5

strontium-89 in, **Ch 13**, pp 3–6

strontium-90 in, **Ch 13**, pp 3–6

sulfamethazine residues in raw bovine

milk, **Ch 23**, pp 14–15

sulfonamide residues in raw bovine

milk, **Ch 23**, pp 15–18

total viable count in, automated

enumeration, **Ch 16**, pp 6–8

vitamin A in, **Ch 50**, pp 1–2

vitamin D in, **Ch 45**, pp 74–78

vitamin D in fortified milk and milk

powder, **Ch 45**, p 33

vitamin K in, **Ch 50**, pp 32–34

water (added) in, **Ch 33**, pp 30–35

Milk chocolate

coconut and palm kernel oils in cocoa

butter and fat extracted from, **Ch 31**,
p 11

fructose in, **Ch 31**, p 13

glucose in, **Ch 31**, p 13

lactose in, **Ch 31**, pp 12–13

maltose in, **Ch 31**, p 13

milk fat in, **Ch 31**, pp 11–12

protein in, **Ch 31**, p 12

sucrose in, **Ch 31**, p 13

Milk fat

in milk chocolate, **Ch 31**, pp 11–12

Millon test

protein in animal feed, **Ch 4**, p 24

Mine tailings

metals in, **Ch 9**, pp 46–50

Miner method

1-monoglycerides in fats, shortenings,
and monoglycerides, **Ch 41**,
pp 60–61

Mineral oil-soap emulsions, Ch 7,

pp 21–22

Mineral oil vacuum distillation-thermal energy analyzer method

N-nitrosamines (volatile) in fried bacon,
Ch 39, pp 9–11

Mineral oils

in baked products, **Ch 32**, p 71

in fats, **Ch 41**, pp 55–56

unsulfonated residue of, **Ch 7**, p 21

Mineral salts

in animal feed, **Ch 4**, p 60

Mineral soils

pH of, **Ch 2**, pp 56–58

Mineral wool insulation

properties, **Ch 24**, p 3

Minerals. *see also* Vitamins and other nutrients; specific minerals

in animal feed, **Ch 4**, pp 60–71

in animal feed, microscopy

identification of, **Ch 4**, pp 72–73

in enteral products, **Ch 50**, pp 15–17

in infant formula, **Ch 50**, pp 15–17

in pet foods, **Ch 4**, pp 60–61, 65–66;

Ch 50, pp 15–17

Minocycline

in milk, **Ch 33**, pp 52–57

Mint

filth in, **Ch 16**, pp 44–47

Mirex

in adipose tissue, **Ch 10**, p 84

in fatty products, **Ch 10**, pp 83–84

multiresidue methods, **Ch 10**, pp 1–10

Missouri sampling bottle method

sampling of fluid fertilizers, **Ch 2**,
pp 1–2

Mixed catalyst Kjeldahl method

CuSO₄/TiO₂, protein (crude) in animal
feed and pet food, **Ch 4**, p 25

Mixed color method

zinc in plants, **Ch 3**, pp 14–15

Modified Jones reduction method

nitrate and nitrite in cheese, **Ch 33**,
pp 86–87

Modified semi-solid Rappaport-

Vassiliadis medium

Salmonella in cocoa and chocolate,

Ch 17, pp 166–167

Salmonella in dried milk products,

Ch 17, pp 167–169; **Ch 33**, p 75

Mohler test

benzoic acid in food, **Ch 47**, p 11

Mohr method

silver nitrate standard solution, **App A**,
p 6

Moisture. *see also* Water

in animal feed, **Ch 4**, pp 1–2, 4–8

- in brewers' grains, **Ch 27**, pp 41–42
in butter, **Ch 33**, p 76
in cacao products, **Ch 31**, p 1
in cereal adjuncts, **Ch 27**, p 32
in cheese, **Ch 33**, pp 81–82
in confectionery, **Ch 44**, p 24
in corn syrups and sugars, **Ch 44**, pp 48–49
in dried fruits, **Ch 37**, p 4
in dried milk, **Ch 33**, p 72
in fig bars and raisin filled crackers, **Ch 32**, p 72
in forage, **Ch 4**, pp 2–8
in frozen french-fried potatoes, **Ch 42**, p 14
in gelatin, **Ch 38**, p 1
in gelatin dessert powders, **Ch 38**, pp 2–3
in grains, **Ch 4**, pp 5–8; **Ch 32**, p 44
in honey, **Ch 44**, p 26
in hops, **Ch 27**, pp 34–35
in macaroni products, **Ch 32**, p 73
in malt, **Ch 27**, pp 25–26
in malting barley, **Ch 27**, p 23
in maple products, **Ch 44**, p 37
in meat, **Ch 39**, pp 1–2
in meat and poultry products, **Ch 39**, pp 1–2
in meat extracts and similar products, **Ch 39**, pp 24–25
in mineral oil-soap emulsions, **Ch 7**, p 21
in molasses, **Ch 44**, pp 18–19
in nuts and nut products, **Ch 40**, p 1
in oils and fats, **Ch 41**, p 1
in peat, **Ch 2**, p 53
in pesticide formulations, **Ch 7**, pp 1–2, 8–11, 15–17, 21
in pet foods, soft-moist and semi-moist, **Ch 4**, pp 4–5
in plants, **Ch 3**, p 1
in prunes and raisins, **Ch 37**, pp 4–6
in roasted coffee, **Ch 30**, pp 4–5
in salt, **Ch 11**, p 31
in soaps, **Ch 7**, p 21
in soybean flour, **Ch 32**, p 63
in spices, **Ch 43**, pp 1–2
in starch dessert powders, **Ch 38**, pp 1–2
in sugars, **Ch 44**, p 1
in tea, **Ch 30**, p 12
in tobacco, **Ch 3**, pp 33–34
water in dried vegetables, **Ch 42**, p 10
in wheat flour, **Ch 32**, p 1
- Moisture meter method**
moisture in prunes and raisins, **Ch 37**, pp 4–6
- Mojonnier ether extraction method**
fat in cream, **Ch 33**, pp 69–70
fat in milk, **Ch 33**, pp 18–19
- Molasses and molasses products**
ash of, **Ch 44**, p 19
filth in, **Ch 16**, p 37
invert sugar in, **Ch 44**, p 20
moisture in, **Ch 44**, pp 18–19
nitrogen in, **Ch 44**, p 19
- reducing substances (unfermentable)
in, **Ch 44**, p 21
sampling of, **Ch 44**, p 18
specific gravity of, **Ch 44**, p 19
sucrose in, **Ch 44**, p 19
sugars (as invert sugar) in, **Ch 44**, pp 19–20
sugars in cane and beet final molasses, **Ch 44**, pp 21–23
- Mold**
in apple butter, **Ch 16**, p 74
in butter, **Ch 16**, p 76; **Ch 33**, p 80
in canned juices, **Ch 16**, pp 74, 78
in citrus juices, **Ch 16**, pp 74, 78
in comminuted fruits and vegetables, **Ch 16**, pp 78–79
counts in foods, **Ch 17**, pp 17–21
in cranberry sauce, **Ch 16**, p 74
in cream style corn, **Ch 16**, p 79
in drupelet berries, **Ch 16**, p 74
in foods, detection and quantification, **Ch 17**, pp 21–26
in fruit nectars, purees, and pastes, **Ch 16**, pp 74–75
Geotrichum mold counting, **Ch 16**, pp 77–79
in ground spices, **Ch 16**, p 76
Howard mold counting method, **Ch 16**, pp 71–76
in pineapple juice (canned), **Ch 16**, p 74
in pureed infant foods, **Ch 16**, p 75
in soft drinks, **Ch 16**, p 78
in strawberries (frozen), **Ch 16**, p 75
in tomato powder (dehydrated), **Ch 16**, p 76
in tomato products, **Ch 16**, p 75
in tomato sauce, **Ch 16**, p 76
in tomato sauce packing medium on fish, **Ch 16**, p 76
in tomato soup, **Ch 16**, p 75
in tomatoes, **Ch 16**, p 75
in vegetables, fruits, and canned juices, **Ch 16**, p 78
- Molecular weight**
thermoelectric-vapor pressure method, **Ch 12**, p 1
- Molinate**
in finished drinking water, **Ch 10**, pp 41–47
- Molybdenum**
in fertilizers, **Ch 2**, pp 42, 47, 51–52
in infant formula and adult nutritional products, **Ch 50**, pp 80–82
in plants, **Ch 3**, pp 2–3, 12
in solid wastes, **Ch 9**, pp 46–50
in waters and wastewaters, **Ch 9**, pp 50–60
- Molybdenum blue methods**
arsenic in foods, **Ch 9**, p 22
arsenic in meat, **Ch 39**, p 5
- Molybdophosphate.** see **Quinolinium molybdophosphate methods**
- Molybdophosphate methods**
alkalimetric ammonium, phosphorus in animal feed, **Ch 4**, p 65
- Molybdovanadate spectrophotometric method**
phosphorus in fruits and fruit products, **Ch 37**, pp 8–9
- Molybdovanadophosphate methods**
spectrophotometric, phosphorus (available) in fertilizers, **Ch 2**, p 11
spectrophotometric, phosphorus (citrate-insoluble) in fertilizers, **Ch 2**, p 10
spectrophotometric, phosphorus (total) in fertilizers, **Ch 2**, p 6
spectrophotometric, phosphorus (water-soluble) in fertilizers, **Ch 2**, p 9
- Monensin**
in chicken, swine, and bovine tissues, **Ch 23**, pp 39–44
in feed premixes, **Ch 5**, pp 47–57
in feeds, **Ch 5**, pp 47–57, 71–73
in supplements, **Ch 5**, pp 51–57
- Monier-Williams method**
sulfites in foods, **Ch 47**, pp 33–35
sulfurous acid in food, **Ch 47**, pp 30–31
- Monocalcium phosphate**
neutralizing value of, **Ch 25**, p 2
- Monochloroacetic acid**
in liquids and preservatives, **Ch 47**, pp 21–22
in nonalcoholic beverages, **Ch 29**, p 2
in nonalcoholic beverages and wines, **Ch 47**, pp 22–23
residues of, **Ch 10**, pp 87–88
- Monoclonal enzyme immunoassays**
based on antibody to potentially celiac toxic amino acid prolamin sequences, gliadin as a measure of gluten in foods, **Ch 32**, pp 41–43
gliadin as a measure of gluten in foods, **Ch 32**, pp 15–17
- Monoclonal enzyme-linked immunosorbent assays**
L. monocytogenes in dairy products, seafoods, and meats, **Ch 17**, pp 232–234
Salmonella in foods, **Ch 17**, pp 146–153
- Monocrotophos**
in fruits and vegetables, **Ch 10**, pp 10–12
in soft drinks and sports drinks, **Ch 10**, pp 116–124
- Monofluoroacetic acid**
residues of, **Ch 10**, pp 87–89
- Monoglycerides**
in fats and oils, **Ch 41**, pp 62–64
glycerides in concentrates, **Ch 41**, pp 58–59
1-monoglycerides in concentrates, **Ch 41**, pp 59–60
1-monoglycerides in fats, shortenings, and monoglycerides, **Ch 41**, pp 60–61
- 5'-Mononucleotides**
in infant formula and adult/pediatric nutritional formula, **Ch 50**, pp 82–84

- Monosodium glutamate**
in food, **Ch 47**, pp 55–56
- Monostearin**
in monoglyceride concentrates, **Ch 41**, pp 59–60
- Morphine**
in drugs, **Ch 19**, p 10; **Ch 20**, pp 7, 16
in opium and paregoric, **Ch 20**, pp 4–5
procaine in presence of, **Ch 18**, pp 31–32
- Morphine sulfate**
in bulk drug and injections, **Ch 20**, pp 5–6
- Most probable number method**
Bacillus cereus in foods, **Ch 17**, p 125
bacteria in chilled, frozen, precooked, or prepared foods, **Ch 17**, pp 4–5
bacteria in nut meats, **Ch 17**, pp 4–5
for coliform group and *E. coli*, **Ch 17**, pp 5–6
S. aureus in foods, **Ch 17**, pp 89–90
- Motility enrichment**
Salmonella in cocoa and chocolate, **Ch 17**, pp 166–167
Salmonella in dried milk products, **Ch 17**, pp 167–169; **Ch 33**, p 75
- Mouse adrenal cell assay**
E. coli enterotoxins, **Ch 17**, pp 76–78
- Mouse test**
paralytic shellfish poison, **Ch 49**, p 88
- MSRV.** see **Modified semi-solid Rappaport-Vassiliadis medium**
- MUG/Hydrophobic grid membrane filter method**
total coliform and *E. coli* counts in foods, **Ch 17**, pp 45–46
- Multielement methods**
arsenic, cadmium, lead, selenium, and zinc in foods, **Ch 9**, pp 1–3
cadmium and lead in cookware, **Ch 9**, pp 5–14
cadmium and lead in foods, **Ch 9**, pp 3–5
copper, iron, and nickel in edible oils and fats, **Ch 9**, pp 14–15
lead, cadmium, zinc, copper and iron in foods, **Ch 9**, pp 16–22
- Multifunction column method**
aflatoxins in corn, almonds, brazil nuts, peanuts, and pistachio nuts, **Ch 49**, pp 26–28
- Multiresidue methods**
organochlorine and organophosphorus pesticide residues in milk, **Ch 33**, p 38
organochlorine pesticide residues, **Ch 10**, pp 1–12
organophosphorus pesticide residues, **Ch 10**, pp 1–12
synthetic pyrethroids in agricultural products, **Ch 10**, pp 94–96
- Multivitamin preparations**
niacinamide in, **Ch 45**, p 21
vitamin D in, **Ch 45**, pp 30–31
- Munitions**
residues in soils, **Ch 10**, pp 136–138
- Munson-Walker method**
fructose in plants, **Ch 3**, p 27
fructose in sugars and syrups, **Ch 44**, p 11
glucose in sugars and syrups, **Ch 44**, p 10
invert sugar in sugars and syrups, **Ch 44**, pp 9–10
lactose in milk, **Ch 33**, p 17
lactose in sugars and syrups, **Ch 44**, p 15
maltose in sugars and syrups, **Ch 44**, p 15
reducing sugars in corn syrups and sugars, **Ch 44**, p 51
sugars (reducing), in plants, **Ch 3**, p 28
sugars (reducing) in nuts and nut products, **Ch 40**, p 2
sugars (total reducing) in brewing sugars and syrups, **Ch 27**, p 38
- Mushrooms**
filth in, **Ch 16**, pp 42–43
- Mussels**
domoic acid in, **Ch 49**, pp 88–89
paralytic shellfish toxins in, **Ch 49**, pp 105–116
- Mustard (dry)**
starch in, **Ch 43**, p 3
- Mustard greens**
filth in, **Ch 16**, pp 41–42
- Mustard (prepared)**
acidity of, **Ch 43**, p 7
chlorides in, **Ch 43**, p 7
ether extract of, **Ch 43**, p 7
fiber (crude) in, **Ch 43**, p 8
filth in, **Ch 16**, p 53
nitrogen in, **Ch 43**, p 7
sample preparation, **Ch 43**, p 7
solids in, **Ch 43**, p 7
starch in, **Ch 43**, pp 7–8
- Mustard seed**
filth in, **Ch 16**, pp 44–47
volatile oil in, **Ch 43**, p 5
- Mycobacterium smegmatis**
determining tuberculocidal activity of disinfectants, **Ch 6**, pp 37–38
- Mycosep method**
aflatoxins in corn, almonds, brazil nuts, peanuts, and pistachio nuts, **Ch 49**, pp 26–28
- Mycotoxins.** see also **Aflatoxins**
apparatus and reagents for analysis, **Ch 49**, pp 1–2
handling, **Ch 49**, p 1
- Mydriatic drugs,** **Ch 20**, p 7
- Myo-inositol**
in infant formula and adult nutritionals, **Ch 50**, pp 77–80
- Myotic drugs,** **Ch 20**, p 7
- Nabam**
in pesticide formulations, **Ch 7**, p 32
- Nalidixic acid**
in animal tissues, **Ch 23**, pp 10–11
- Naphthalene red B color additive**
analysis of, **Ch 46**, p 9
- β-Naphthol**
in color additives, **Ch 46**, p 14
- Naphthol yellow S color additive**
analysis of, **Ch 46**, p 10
in foods, **Ch 46**, pp 1–2
- Naphthyleneacetic acid**
in apples and potatoes, **Ch 10**, pp 89–90
- alpha-Naphthylthiourea**
in rodenticide formulations, **Ch 7**, p 24
- Napropamide**
in finished drinking water, **Ch 10**, pp 41–47
- Narasin**
in chicken, swine, and bovine tissues, **Ch 23**, pp 39–44
in premixes, supplements and feeds, **Ch 5**, pp 51–57
- Naringin**
in orange juice, **Ch 37**, pp 31–33
- National Cottonseed Products Association-AOAC method**
fatty acids (free) in crude and refined oils, **Ch 41**, pp 12–13
- Natural coloring matters,** **Ch 46**, p 5
- Natural products**
in drugs, **Ch 20**, pp 30–34
- Natural toxins**
aflatoxin M₁, **Ch 49**, pp 47–54
aflatoxins, **Ch 49**, pp 2–47
deoxynivalenol, **Ch 49**, pp 54–56
fumonisins, **Ch 49**, pp 56–63
mycotoxins, **Ch 49**, pp 1–2
ochratoxins, **Ch 49**, pp 63–75
patulin, **Ch 49**, pp 75–80
plant toxins, **Ch 49**, pp 123–126
seafood toxins, **Ch 49**, pp 86–123
sterigmatocystin, **Ch 49**, pp 80–82
zearalenone, **Ch 49**, pp 82–86
- Near-infrared spectroscopic methods**
fat, moisture, and protein in meat and meat products, **Ch 39**, pp 25–27
fiber (acid detergent) in forage, **Ch 4**, pp 32–33
moisture in forage, **Ch 4**, pp 2–4
piperazine in drugs, **Ch 18**, p 44
protein (crude) in forage, **Ch 4**, pp 32–33
protein in wheat, **Ch 32**, pp 50–54
water in dried vegetables, **Ch 42**, p 10
- Neburon**
in water, **Ch 10**, pp 99–104
- Neohesperidin**
in orange juice, **Ch 37**, pp 31–33
- Neomycin**
in feeds, **Ch 5**, pp 73–75
- Neostigmine**
in drugs, **Ch 20**, pp 15–16
- Neostigmine methylsulfate**
in drugs, **Ch 20**, p 16
- Nephelometric method**
haze of beer after chilling, **Ch 27**, p 2
- Nequinat**
in feeds, **Ch 5**, p 20
- Neutral lactase activity**
in industrial enzyme preparations, **Ch 33**, p 57

Neutral sugar residues

in foods and food products, **Ch 45**, pp 105–110

Neutralizing values

of baking chemicals, **Ch 25**, p 2; **Ch 32**, p 27

calcium silicate slags, **Ch 1**, pp 3–4
liming materials, **Ch 1**, pp 1–2

Niacin

in cereal products, **Ch 45**, pp 18–19

in drugs, foods, and feeds, **Ch 45**, pp 17–18, 20–21

microbiological assays, **Ch 45**, pp 55–58

in ready-to-feed milk-based infant formulas, **Ch 50**, p 21

in vitamin preparations, **Ch 45**, pp 60–61

Niacinamide

in cereal products, **Ch 45**, pp 18–19

in drugs, foods, and feeds, **Ch 45**, pp 17–18, 20–21

in multivitamin preparations, **Ch 45**, p 21

in ready-to-feed milk-based infant formulas, **Ch 50**, p 21

in vitamin preparations, **Ch 45**, pp 60–61

Nicarbazin

in feeds, **Ch 5**, pp 20–21

Nickel

in edible oils and fats, **Ch 9**, pp 14–15

in fertilizers, **Ch 2**, pp 42, 48, 51–52

in solid wastes, **Ch 9**, pp 46–50

in tea, **Ch 9**, pp 15–16, 43; **Ch 30**, p 12

in waters and wastewaters, **Ch 9**, pp 50–60

Nicotinamide

in ready-to-feed milk-based infant formulas, **Ch 50**, p 21

in vitamin preparations, **Ch 45**, pp 60–61

Nicotine

on Cambridge filter pads, **Ch 3**, p 37

in environmental tobacco smoke, **Ch 3**, pp 37–39

in feeds, **Ch 5**, p 21

residues of, **Ch 10**, pp 90–91

in tobacco, **Ch 3**, pp 35–37

in tobacco products, **Ch 7**, pp 68–69

Nicotinic acid

in ready-to-feed milk-based infant formulas, **Ch 50**, p 21

in vitamin preparations, **Ch 45**, pp 60–61

Nifursol

in feeds, **Ch 5**, p 22

Nihydrazone

in feeds, **Ch 5**, pp 22–23

Nikethamide

in drugs, **Ch 20**, pp 26–27

Nitarson

in feeds, **Ch 5**, p 23

Nithiazide

in feeds, **Ch 5**, pp 23–24

Nitrate esters

in drugs, **Ch 18**, pp 34–35

Nitrates

in animal feed, **Ch 4**, pp 38–39

in baby foods, **Ch 50**, pp 12–13

in cheese, **Ch 33**, pp 86–87

in fertilizers, **Ch 2**, pp 12, 15–16

in forages, **Ch 14**, pp 5–7

in meat, **Ch 39**, p 8

in water, **Ch 11**, pp 11, 29–31

Nitrites

in animal feed, **Ch 4**, pp 38–39

in cheese, **Ch 33**, pp 86–87

in cured meat, **Ch 39**, pp 8–9

in curing preparations, **Ch 47**, p 23

in meat, **Ch 39**, p 8

in tablets, **Ch 18**, p 17

in water, **Ch 11**, pp 29–31

in wheat flour, **Ch 32**, p 18

5-Nitro-2-propoxyaniline

in food, **Ch 47**, pp 51–52

in nonalcoholic beverages, **Ch 47**, p 47

Nitrobenzene

in almond extract, **Ch 36**, p 24

Nitrodan

in feeds, **Ch 5**, pp 24–25

Nitrofurazone

in feeds, **Ch 5**, p 16

Nitrogen

activity in fertilizers, **Ch 2**, pp 17–18

activity index of urea-formaldehyde fertilizers, **Ch 2**, p 18

in anhydrous ammonia, **Ch 2**, p 3

in animal feed, (albuminoid), **Ch 4**, p 37

in animal feed, (amido), **Ch 4**, p 38

in animal feed, (ammoniacal), **Ch 4**, pp 36–37

in animal feed, (nitrate and nitrite), **Ch 4**, pp 38–39

in beer, **Ch 27**, p 9

in brewing grains, **Ch 27**, p 9

in cacao products, **Ch 31**, p 2

in casein, in milk, **Ch 33**, pp 58–59

in cheese, **Ch 33**, pp 84–85

in color additives, **Ch 46**, p 12

in confectionery, **Ch 44**, p 24

in corn syrups and dextrose products, **Ch 44**, p 51

in cream, **Ch 33**, p 66

in cyanamide, (water-insoluble), **Ch 2**, p 16

in eggs, **Ch 34**, p 2

in evaporated milk, **Ch 33**, p 70

in fertilizers, (ammoniacal), **Ch 2**, pp 15–16

in fertilizers, (nitrate), **Ch 2**, pp 15–16

in fertilizers, (total), **Ch 2**, pp 12–15

in fertilizers, (water-insoluble), **Ch 2**, pp 16–17

in food dressings, **Ch 43**, p 9

in gelatin, **Ch 38**, p 1

in gelatin dessert powders, **Ch 38**, p 2

in honey, **Ch 44**, p 27

in laboratory wort, **Ch 27**, p 29

in macaroni products, **Ch 32**, p 74

in meat, **Ch 39**, pp 5–8, 13–14

in meat extracts and similar products, **Ch 39**, p 24

microchemical determination, **Ch 12**, pp 5–7

in molasses, **Ch 44**, p 19

noncasein, in milk, **Ch 33**, p 57

nonprotein, in milk, **Ch 33**, pp 12–13

in nonvolatile ether extract of pepper, **Ch 43**, p 2

in peat, (total), **Ch 2**, p 54

in plants, (total), **Ch 3**, pp 28–29

in prepared mustard, **Ch 43**, p 7

protein, in milk, **Ch 33**, pp 13–14

in seafood, **Ch 35**, p 8

in soybean flour, **Ch 32**, p 63

in spices, **Ch 43**, p 2

in starch dessert powders, **Ch 38**, p 3

in sugars and syrups, **Ch 44**, pp 3–4

in tobacco, **Ch 3**, p 34

total, in milk, **Ch 33**, pp 10–12

trimethylamine, in seafood, **Ch 35**, p 9

in urine, (total), **Ch 14**, pp 7–10

in water, (ammonia), **Ch 11**, p 10

in water, (nitrate), **Ch 11**, pp 11, 29–31

in water, (nitrite), **Ch 11**, pp 29–31

in water, (total), **Ch 11**, pp 9–10

in wheat flour, **Ch 32**, pp 14, 19

in wines, **Ch 28**, p 12

in wort, **Ch 27**, pp 9, 39

Nitrogen-containing pesticide residues

in finished drinking water, **Ch 10**, pp 41–47

Nitrogen-phosphorus detection

ethylene thiourea residues in water, **Ch 10**, pp 104–106

Nitroglycerin

in drugs, **Ch 18**, p 34

in sublingual drug tablets, **Ch 18**, pp 39–40

Nitromersol

mercury in, **Ch 18**, pp 15–16

Nitromide

in feeds, **Ch 5**, p 25

Nitrophenide

in feeds, **Ch 5**, p 25

N-Nitrosamines

in baby bottle rubber nipples, **Ch 48**, pp 8–9

in fried bacon, **Ch 39**, pp 9–11

in minced fish-meat and surimi-meat frankfurters, **Ch 39**, pp 12–13

Nitroso-R-salt method

cobalt in plants, **Ch 3**, p 10

Nitrosocresol method

cobalt in plants, **Ch 3**, pp 8–10

N-Nitrosodibutylamine

in latex infant pacifiers, **Ch 8**, pp 3–5

N-Nitrosodimethylamine

in beer, **Ch 27**, pp 17–21

in nonfat dry milk, **Ch 33**, pp 73–74

N-Nitrosopyrrolidine

in fried bacon, **Ch 39**, pp 11–12

NMKL-AOAC methods

benzoic acid and sorbic acid in food, **Ch 47**, pp 13–14

hydroxyproline in meat and meat products, **Ch 39**, pp 15–16

lead, cadmium, zinc, copper, and iron in foods, **Ch 9**, pp 16–22

- phosphorus (total) in foods, **Ch 45**, pp 50–52
- NMR.** *see* **Nuclear magnetic resonance spectrometry**
- Nomenclature**
- antibiotics in feeds, common and chemical names, **Ch 5**, p 88
 - drugs, common and chemical names, **Ch 18**, pp 59–61; **Ch 19**, pp 36–37; **Ch 20**, p 35; **Ch 21**, p 15; **Ch 22**, p 7
 - drugs in animal tissues, common and chemical names, **Ch 23**, p 45
 - drugs in feeds, common and chemical names, **Ch 5**, p 88
 - pesticide formulations, common and chemical names, **Ch 7**, pp 136–138, **Ch 10**, p 140
 - vitamin E rules, **Ch 45**, p 38
- Nonenzymatic-gravimetric method**
- total dietary fiber in foods and food products with 2% or less starch, **Ch 45**, p 103
- Nonacid-forming qualities**
- of fertilizers, **Ch 2**, p 41
- Nonalcoholic beverages and concentrates**
- acidity in, **Ch 29**, pp 1–2
 - acids (dibasic) in, **Ch 29**, p 1
 - alcohol in, **Ch 29**, p 1
 - alginates in chocolate beverages, **Ch 29**, p 6
 - ash of, **Ch 29**, p 1
 - benzaldehyde in, **Ch 29**, p 2
 - benzoate in carbonated beverages, **Ch 29**, pp 2–3
 - benzoic acid in, **Ch 47**, p 12
 - brominated vegetable oils in, **Ch 47**, pp 45–46
 - caffeine in, **Ch 29**, pp 2–4
 - citric acid in, **Ch 29**, p 1
 - cyclohexylsulfamate salts in, **Ch 47**, p 48
 - dihydroanethole in, **Ch 29**, pp 4–5
 - dihydrosafrole in, **Ch 29**, pp 4–5
 - essential oils in, **Ch 29**, p 3
 - esters in, **Ch 29**, p 2
 - glucose in, **Ch 29**, p 6
 - isosafrole in, **Ch 29**, pp 4–5
 - malic acid in, **Ch 29**, p 1
 - methyl anthranilate in, **Ch 29**, pp 5–6
 - methyl salicylate in, **Ch 29**, pp 4–5
 - monochloroacetic acid in, **Ch 29**, p 2; **Ch 47**, pp 22–23
 - nonnutritive sweeteners in, **Ch 47**, p 47
 - preliminary examination, **Ch 29**, p 1
 - quaternary ammonium compounds in, **Ch 29**, p 6
 - saccharin in, **Ch 47**, pp 47, 55
 - saccharin in carbonated beverages, **Ch 29**, pp 2–3
 - safrole in, **Ch 29**, pp 4–5
 - sample preparation, **Ch 29**, p 1
 - solids (total) in, **Ch 29**, p 6
 - specific gravity of, **Ch 29**, p 6
 - sucrose in, **Ch 29**, p 6
 - sugars (reducing) in, **Ch 29**, p 6
 - tartaric acid in, **Ch 29**, p 2
 - gamma-undecalactone in, **Ch 29**, p 6
- Nonfat dry milk.** *see also* **Dried milk and its products**
- Listeria* in, **Ch 17**, pp 241–250
 - in meat, **Ch 39**, p 21
 - N*-nitrosodimethylamine in, **Ch 33**, pp 73–74
 - Salmonella* in, **Ch 17**, pp 131–132, 144–146, 150–156, 158–164, 166–181, 190–202, 210–212
- Nonnutritive sweeteners.** *see also* **specific sweeteners**
- in nonalcoholic beverages, **Ch 47**, p 47
- Noodles.** *see* **Macaroni products**
- Nordihydroguaiaretic acid**
- in foods, **Ch 47**, pp 1–2
 - in oils, fats, and butter oil, **Ch 47**, pp 2–5
- Norepinephrine**
- in epinephrine preparations, **Ch 18**, pp 21–22
- Norethindrone**
- in drugs, **Ch 21**, pp 6–8
- Norethindrone acetate**
- in drugs, **Ch 21**, pp 6–7
- Norethynodrel**
- in drugs, **Ch 21**, pp 6–8
- Norflurazon**
- in finished drinking water, **Ch 10**, pp 41–47
- Norgestrel**
- in drugs, **Ch 21**, pp 7–8
- Novobiocin**
- in feeds, **Ch 5**, p 75
 - in milk, **Ch 33**, pp 50–52
- Nuclear magnetic resonance spectrometry**
- beet or cane sugar in maple syrup, **Ch 44**, pp 42–47
 - beet sugar in fruit juices, **Ch 37**, pp 27–31
 - moisture and fat in meats, **Ch 39**, pp 27–30
 - site-specific deuterium/hydrogen ratios in vanilla, **Ch 36**, pp 13–15
- Nucleotides**
- in infant formula and adult nutritional formula, **Ch 50**, pp 84–86
- Nutmeg**
- filth in, **Ch 16**, pp 44–47, 51
- Nutmeg extract,** **Ch 36**, p 25
- Nutrients**
- in fertilizers, (minor), **Ch 2**, pp 29–31
- Nutritional formula**
- chromium, selenium, and molybdenum in, **Ch 50**, pp 80–82
 - folate in, **Ch 50**, pp 38–44
 - 5'-mononucleotides in, **Ch 50**, pp 82–84
 - myo-inositol (free and bound as phosphatidylinositol) in, **Ch 50**, pp 77–80
 - nucleotides in, **Ch 50**, pp 84–86
 - vitamin A in, **Ch 50**, pp 44–48, 72–74
 - vitamin B₁₂ in, **Ch 50**, pp 48–56, 72–74
- vitamin D₂ and vitamin D₃ in, **Ch 50**, pp 59–65
 - vitamin D in, **Ch 50**, pp 57–59
- Nutritional supplements.** *see* **Dietary supplements; Vitamins and other nutrients**
- Nuts**
- dodine pesticide residues in pecans, **Ch 10**, p 72
- Nuts and nut products**
- aflatoxins in peanut butter, **Ch 49**, pp 7–9, 11, 13, 19–24, 34–37
 - aflatoxins in peanuts, **Ch 49**, pp 6–13, 15–19, 21–24, 26–28
 - ash of, **Ch 40**, p 2
 - baked goods with nut tissues, filth in, **Ch 16**, p 26
 - dodine pesticide residues in pecans, **Ch 10**, p 72
 - examination of peanut butter, **Ch 40**, p 2
 - extraneous materials in, **Ch 16**, pp 18–19
 - fat (crude) in, **Ch 40**, p 1
 - fiber (crude) in, **Ch 40**, p 2
 - filth in peanut butter, **Ch 16**, p 19
 - glycerol in shredded coconut, **Ch 40**, p 3
 - inorganic residue in, **Ch 40**, p 2
 - microbiological methods, **Ch 17**, pp 4–5
 - moisture in, **Ch 40**, p 1
 - preservation of nut sample, **Ch 40**, p 1
 - protein (crude) in, **Ch 40**, pp 1–2
 - Salmonella* in peanut butter, **Ch 16**, pp 8–11; **Ch 17**, pp 176–181, 216–219
 - Salmonella* in pecans, **Ch 16**, pp 8–11
 - Salmonella* in walnuts, **Ch 17**, pp 212–216
 - sample preparation, **Ch 40**, p 1
 - sodium chloride in, **Ch 40**, p 2
 - starch in peanut butter, **Ch 40**, pp 2–3
 - sucrose in, **Ch 40**, p 2
 - sugars (reducing) in, **Ch 40**, p 2
 - volume of packaged nuts, **Ch 40**, p 1
- Nyns selective method**
- Jackson-Mathews modification, fructose in sugars and syrups, **Ch 44**, p 12
- Nystatin**
- in feeds, **Ch 5**, pp 75–76
- Oatmeal**
- filth in, **Ch 16**, pp 28–29
- Oats**
- β-D-glucan in, **Ch 32**, pp 58–62, 64–66
 - insect infestation (internal), **Ch 16**, p 20
 - piperonyl butoxide pesticide residues in, **Ch 10**, pp 93–94
- Ochratoxin A**
- in barley, **Ch 49**, pp 63–64, 69–73
 - in corn, **Ch 49**, pp 69–71
 - in ginseng and ginger, **Ch 49**, pp 43–47
 - in green coffee, **Ch 49**, pp 65, 67–69
 - in roasted coffee, **Ch 49**, pp 65–67
 - in wine and beer, **Ch 49**, pp 73–75
- Ochratoxins**
- in barley, **Ch 49**, pp 63–64, 69–73

- cis- and trans-Octadecenoic isomers**
in hydrogenated vegetable oils and animal fats, **Ch 41**, pp 33–37
- N-Octyl bicycloheptene dicarboximide**
in pesticide formulations, **Ch 7**, pp 65–68
- Octyl gallate**
in oils, fats, and butter oil, **Ch 47**, pp 2–5
- Office International du Cacao et du Chocolat-AOAC methods.** *see also* **AOAC-Office International du Cacao et du Chocolat methods**
fat in cacao products, **Ch 31**, p 10
- Ofner volumetric method**
invert sugar in sugars and syrups, **Ch 44**, p 10
- Oil red XO color additive**
in foods, **Ch 46**, pp 1–2
- Oils, essential.** *see* **Essential oils**
- Oils and fats.** *see also* **Fats**
acetyl value of, **Ch 41**, p 5
acids (polyunsaturated) in, **Ch 41**, pp 16–19
acids (volatile) in, **Ch 41**, pp 14–15
animal fats in vegetable fats and oils, **Ch 41**, pp 50–52
in anise and nutmeg extracts, **Ch 36**, p 25
brominated vegetable oils in nonalcoholic beverages, **Ch 47**, pp 45–46
butyric acid in fats containing butterfat, **Ch 41**, pp 44–45
butyric acids (mole per cent) in fat, **Ch 41**, pp 15–16
in cassia, cinnamon, and clove extracts, **Ch 36**, p 24
in cereal adjuncts, **Ch 27**, p 32
chick edema factor in, **Ch 41**, pp 56–57
cholesterol in, **Ch 41**, pp 50–52
colors (synthetic) in, **Ch 41**, pp 57–58
copper in, **Ch 9**, pp 14–15
cottonseed oil in, **Ch 41**, p 52
critical temperature of dissolution of oil from butter or margarine, **Ch 33**, p 77
cyclopropane in oils, **Ch 41**, pp 52–53
dioxins in, **Ch 41**, pp 56–57
docosenoic acid in, **Ch 41**, pp 30–31
erucic acid in, **Ch 41**, pp 29–30
essential oil in hops and hop pellets, **Ch 27**, pp 35–36
fat in foods, **Ch 41**, pp 20–25
fats (foreign) containing tristearin in lard, **Ch 41**, pp 54–55
fats (vegetable) in butterfat, **Ch 41**, pp 47–49
trans fatty acid isomers in margarines, **Ch 41**, pp 41–42
fatty acids (free) in crude and refined oils, **Ch 41**, pp 12–13
fatty acids in, **Ch 41**, pp 19–20, 52–53
fatty acids in encapsulated fish oils, **Ch 41**, pp 27–29
fatty acids (saturated and unsaturated) in, **Ch 41**, p 16
fatty acids (total) in, **Ch 41**, pp 13–14
fish oil detection, **Ch 41**, p 55
fish oil methyl and ethyl esters, **Ch 41**, pp 27–29
flaxseed oil identification, **Ch 41**, p 68
in food dressings, **Ch 43**, p 10
in fruits and fruit products, **Ch 37**, p 19
glycerides in monoglyceride concentrates, **Ch 41**, pp 58–59
glycerides in shortening, **Ch 41**, pp 61–62
hydrocarbons (saturated) in glycerides, **Ch 41**, p 56
hydroxyl value of, **Ch 41**, p 6
index of refraction, **Ch 41**, pp 3–4
insoluble acids in, **Ch 41**, p 12
iodine absorption number of, **Ch 41**, pp 6–7
iodine value of, **Ch 41**, pp 7–9
iron in, **Ch 9**, pp 14–15
isolated *trans* unsaturated fatty acid content in partially hydrogenated fats, **Ch 41**, pp 39–41
trans (isolated) unsaturated fatty acids in, **Ch 41**, pp 42–44
trans isomers (isolated) in margarines and shortenings, **Ch 41**, pp 37–39
lead in edible oils and fats, **Ch 41**, pp 9–11
in lemon juice, **Ch 37**, pp 20–21
marine animal oil detection, **Ch 41**, p 55
melting point of fats and fatty acids, **Ch 41**, p 4
methyl esters of fatty acids in, **Ch 41**, pp 25–26
cis, *cis*-methylene interrupted polyunsaturated fatty acids in oils, **Ch 41**, p 33
mineral oil in fats, **Ch 41**, pp 55–56
in mineral oil-soap emulsions, **Ch 7**, p 21
moisture in, **Ch 41**, p 1
mono- and diglycerides in, **Ch 41**, pp 62–64
1-monoglycerides in fats, shortenings, and monoglycerides, **Ch 41**, pp 60–61
1-monoglycerides in monoglyceride concentrates, **Ch 41**, pp 59–60
nickel in, **Ch 9**, pp 14–15
cis- and *trans*-octadecenoic isomers and general fatty acid composition in, **Ch 41**, pp 33–37
oil in oilseeds, **Ch 41**, pp 68–71
organochlorine pesticide residues in animal fats, **Ch 10**, p 27
peanut oil in, **Ch 41**, p 53
in peppermint, spearmint, and wintergreen extracts, **Ch 36**, p 24
peroxide value of, **Ch 41**, pp 11–12
phenolic antioxidants in, **Ch 47**, pp 2–5
polar components in frying fats, **Ch 41**, pp 31–32
polymerized triglycerides in, **Ch 41**, pp 67–68
polymers and oxidation products of heated vegetable oils, **Ch 41**, p 31
polysorbate 60 in shortening, oils, and dressings, **Ch 47**, pp 41–42
rosin oil in, **Ch 41**, p 52
salad oils, **Ch 41**, p 54
sample preparation, **Ch 41**, p 1
saponification number of, **Ch 41**, p 12
sesame oil in, **Ch 41**, p 54
beta-sitosterol in butter oil, **Ch 41**, pp 49–50
soluble acids in, **Ch 41**, p 12
specific gravity of, **Ch 41**, pp 2–3
squalene in, **Ch 41**, pp 45–46
tea seed oil in olive oil, **Ch 41**, p 54
thiocyanogen number of, **Ch 41**, p 12
titer test for, **Ch 41**, pp 4–5
triglycerides (by partition numbers) in vegetable oils, **Ch 41**, pp 65–67
triglycerides in, **Ch 41**, pp 46–47
unsaponifiable residue of, **Ch 41**, p 45
volatile matter in, **Ch 41**, p 1
weight (apparent) per unit volume, **Ch 41**, pp 2–3
- Oilseeds**
oil in, **Ch 41**, pp 68–71
protein (crude) in, **Ch 4**, pp 34–36
protein in, **Ch 32**, pp 44–45
- Ointments**
belladonna in, **Ch 20**, p 6
calomel in, **Ch 18**, p 16
clioquinol in, **Ch 18**, pp 35–36
iodine in, **Ch 18**, p 11
iodoform in, **Ch 18**, p 4
mercury in mercurial ointments, **Ch 18**, p 17
physostigmine in, **Ch 20**, p 15
physostigmine salicylate and physostigmine sulfate in, **Ch 20**, pp 14–15
stramonium alkaloids in, **Ch 20**, p 6
sulfoxazole in, **Ch 19**, p 26
- Oleandomycin**
in feeds, **Ch 5**, p 76
- Oleic acid**
in oils and fats, **Ch 41**, pp 16–19
- Oligodeoxyribonucleotides**
DNA colony hybridization method, **Ch 17**, pp 72–76
- Olive oil**
peanut oil in, **Ch 41**, p 53
tea seed oil in, **Ch 41**, p 54
- Omethoate**
in fruits and vegetables, **Ch 10**, pp 10–12
- Omnispec method**
bacterial counts in raw and pasteurized milk, **Ch 17**, pp 7–9
- Onion powder**
filth in, **Ch 16**, p 49
Salmonella in, **Ch 17**, pp 128–132
- Onions**
maleic hydrazide residues in, **Ch 10**, pp 85–86
- Opium**
alkaloids, **Ch 20**, pp 1–6
morphine in, **Ch 20**, pp 4–5

OSCC method. *see* **Optical somatic cell counting method**

Oxalic acid
in canned vegetables, **Ch 42**, pp 8–9

Oxamyl
in finished drinking water, **Ch 10**, pp 52–55
in grapes and potatoes, **Ch 10**, pp 55–58

Oxazepam
in drug tablets and capsules, **Ch 22**, pp 5–6

Oxidation methods
1-monoglycerides in monoglyceride concentrates, **Ch 41**, pp 59–60
paralytic shellfish poisoning toxins in shellfish, **Ch 49**, pp 89–102
paralytic shellfish toxins in mussels, clams, oysters, and scallops, **Ch 49**, pp 105–116
sorbic acid in cheese, **Ch 47**, pp 28–29
thiourea in orange juice, **Ch 47**, pp 39–40

Oxidation products
of heated vegetable oils, **Ch 41**, p 31

Oxides
mixed, in color additives, **Ch 46**, p 24

6,6-Oxybis(2-naphthalenesulfonic acid)
in FD&C Red No. 40, **Ch 46**, pp 16–17
in FD&C Yellow No. 6, **Ch 46**, pp 19–21

Oxydemeton-methyl
in pesticide formulations, **Ch 7**, pp 120–121

Oxygen
microchemical determination, **Ch 12**, pp 7–9
in water, (dissolved), **Ch 11**, pp 5–6

Oxygen flask combustion method
bromine determination, **Ch 12**, p 3
chlorine determination, **Ch 12**, p 3
iodine determination, **Ch 12**, p 3
sulfur determination, **Ch 12**, pp 11–12

Oxygen radicals absorbance capacity
estimation of antioxidant capacity, **Ch 47**, pp 7–8

Oxyquinoline sulfate
in drugs, **Ch 19**, pp 4–5

Oxytetracycline
in edible animal tissues, **Ch 23**, pp 22–26
in feeds, **Ch 5**, pp 76–77, 82–87
in milk, **Ch 33**, pp 50–57

Oxytetracycline hydrochloride
in feed, fish feed and animal remedies, **Ch 5**, pp 82–87

Oxythioquinox
in pesticide formulations, **Ch 7**, pp 133–134

Oysters
frozen and thawed shucked, detection of, **Ch 35**, pp 4–6
indole in, **Ch 35**, pp 19–20
paralytic shellfish toxins in, **Ch 49**, pp 105–116
poliovirus 1 in, **Ch 17**, pp 268–269
shell in canned products, **Ch 16**, p 30

shucked, drained liquid from, **Ch 35**, p 6
shucked, volume of, **Ch 35**, p 6
solids in, **Ch 35**, p 8
Vibrio cholerae in, **Ch 17**, pp 263–265

Packaging materials
insect penetration, **Ch 16**, p 55
microbial ranking of porous materials, **Ch 16**, pp 56–61

Paint
lead in, **Ch 8**, pp 2–3

Palm kernel oil
in cocoa butter and in fat extracted from milk chocolate, **Ch 31**, p 11
silver number for detection of, **Ch 31**, p 11

Pamaquine
in drugs, **Ch 20**, p 17

Pancreatin digestion methods
filth in baked goods with fruit and nut tissues, **Ch 16**, p 26
filth in corn flour, **Ch 16**, p 25

Pantothenic acid
microbiological assays, **Ch 45**, pp 55–58
in milk-based infant formula, **Ch 50**, pp 26–28
in vitamin preparations, **Ch 45**, pp 61–62

Papain
filth in, **Ch 16**, p 54
proteolytic activity, **Ch 47**, pp 43–44

Papaya leaves
filth in, **Ch 16**, pp 44–47

Paper
fingerprint detection, **Ch 24**, p 1

Paper and paperboard
PCBs in, **Ch 10**, p 33

Paper chromatographic methods
acids (volatile) in bread, **Ch 32**, pp 68–69
anthocyanins in fruit juices, **Ch 37**, pp 19–20
ergotamine in drugs, **Ch 20**, pp 13–14
ethyl vanillin in vanilla extract, **Ch 36**, pp 5–6
lysergic acid diethylamide in drug powders, **Ch 22**, p 5
malvidin glucosides in grape juice, **Ch 37**, p 20
organic acids (foreign) in fruit juices, **Ch 37**, pp 14–15
organic acids in vanilla extract, **Ch 36**, p 11
organochlorine and organophosphorus pesticide residues, **Ch 10**, pp 2–3, 10
plant material (foreign) in vanilla extract, **Ch 36**, pp 9–10
sulfonamide mixtures in drugs, **Ch 19**, p 24
vanilla resins in vanilla extract, **Ch 36**, p 9
vanillin in vanilla extract, **Ch 36**, pp 5–6

Paper chromatographic-spectrophotometric method
lysergic acid diethylamide in drug powders, **Ch 22**, p 5

Paprika
aflatoxin B₁ and total aflatoxins in, **Ch 49**, pp 34–37
filth in, **Ch 16**, pp 44–47, 51–52

Parabens
procaine in presence of, **Ch 18**, pp 31–32

Paraffin
in confectionery, **Ch 44**, p 25

Paraldehyde
in drugs, **Ch 19**, p 19

Paralytic shellfish poison
biological method, **Ch 35**, p 27; **Ch 49**, pp 86–88

Paralytic shellfish toxins
in mussels, clams, oysters, and scallops, **Ch 49**, pp 105–116
in shellfish, **Ch 49**, pp 89–102, 116–123

Paraoxon
in apples and green beans, **Ch 10**, pp 35–36

Paraphenylenediamine
in hair dyes and rinses, **Ch 15**, p 13

Paraquat
in pesticide formulations, **Ch 7**, pp 49
in potatoes, **Ch 10**, pp 70–72

Parasites
in fish muscle, **Ch 35**, p 27

Parathion
in apples and green beans, **Ch 10**, pp 35–36
confirmatory method, **Ch 10**, pp 39–40
in fruits and vegetables, **Ch 10**, pp 36–39
multiresidue methods, **Ch 10**, pp 1–10
in pesticide formulations, **Ch 7**, pp 121–123
residues of, **Ch 10**, pp 91–92

Paregoric
morphine in, **Ch 20**, pp 4–5

Paris Green
Bordeaux mixture pesticide formulations with, **Ch 7**, p 16

Paris Green pesticides
arsenic (total) in, **Ch 7**, pp 8, 16
arsenious oxide (total) in, **Ch 7**, pp 8–9, 16
arsenious oxide (water-soluble) in, **Ch 7**, pp 8, 16
carbon dioxide in, **Ch 7**, p 16
copper in, **Ch 7**, pp 9, 16
moisture in, **Ch 7**, pp 8, 16

Parsley
filth in, **Ch 16**, pp 44–47

Partially hydrogenated fats
isolated *trans* unsaturated fatty acid content in, **Ch 41**, pp 39–41

Particle size range
of peat, **Ch 2**, p 53

Partition chromatographic methods
 γ -BHC (lindane) in pesticide formulations, **Ch 7**, pp 73–74

- diatomaceous earth for drugs, **Ch 18**, p 1
- Partition numbers**
triglycerides in vegetable oils, **Ch 41**, pp 65–67
- Pasta**
Salmonella in, **Ch 16**, pp 8–11; **Ch 17**, pp 216–219
- Patulin**
in apple juice, **Ch 49**, pp 75–80
in clear and cloudy apple juices and apple puree, **Ch 49**, pp 78–80
- PCBs.** see **Polychlorinated biphenyls**
- PCNB**
in pesticide formulations, **Ch 7**, p 101
- Peaches**
azinphos-methyl pesticide residues in, **Ch 10**, pp 58–59
captan pesticide residues in, **Ch 10**, p 63
dodine pesticide residues in, **Ch 10**, p 72
maleic hydrazide residues in, **Ch 10**, pp 85–86
methoxychlor residues in, **Ch 10**, p 87
thiourea in frozen fruit, **Ch 47**, pp 40–41
- Peanut butter**
aflatoxins in, **Ch 49**, pp 7–9, 11, 13, 19–24, 34–37
examination of, **Ch 40**, p 2
filth and extraneous material in, **Ch 16**, p 19
Salmonella in, **Ch 16**, pp 8–11; **Ch 17**, pp 176–181, 216–219
starch in, **Ch 40**, pp 2–3
- Peanut oil**
in oils and fat, **Ch 41**, p 53
in olive, cottonseed, corn, and soybean oils, **Ch 41**, p 53
- Peanuts**
aflatoxins in, **Ch 49**, pp 6–13, 15–19, 21–24, 26–28
decomposed, in peanut butter, **Ch 16**, p 19
- Pears**
captan pesticide residues in, **Ch 10**, p 63
dodine pesticide residues in, **Ch 10**, p 72
fluorine on, **Ch 9**, p 24
glyodin residues in, **Ch 10**, p 76
lead on, **Ch 9**, p 29
methoxychlor residues in, **Ch 10**, p 87
- Peas**
Alaska, piperonyl butoxide pesticide residues in, **Ch 10**, pp 93–94
canned, solids (alcohol-insoluble) in, **Ch 42**, p 4
weevils in, **Ch 16**, p 37
- Peat**
air capacity, **Ch 2**, pp 55–56
ash of, **Ch 2**, p 54
cation exchange capacity, **Ch 2**, p 56
mechanical analysis of, **Ch 2**, p 53
moisture in, **Ch 2**, p 53
nitrogen (total) in, **Ch 2**, p 54
- organic matter in, **Ch 2**, p 54
particle size range of, **Ch 2**, p 53
pH of, **Ch 2**, pp 53–54
sample preparation, **Ch 2**, p 52
sampling of, **Ch 2**, p 52
sand in, **Ch 2**, p 54
volume weight, **Ch 2**, pp 55–56
volumes for, **Ch 2**, pp 54–55
water capacity, **Ch 2**, pp 54–55
water-holding capacity, **Ch 2**, pp 55–56
water-saturated materials, **Ch 2**, pp 55–56
- Pebulate**
in finished drinking water, **Ch 10**, pp 41–47
- Pecans**
dodine pesticide residues in, **Ch 10**, p 72
filth in, **Ch 16**, p 18
Salmonella in, **Ch 16**, pp 8–11
- Pectic acid**
in cacao products, **Ch 31**, pp 3–5
in fruit products, **Ch 37**, p 10
- Pectin gel methods**
aerobic plate count, **Ch 17**, p 11
coliforms in dairy products, **Ch 17**, p 27
- Pediatric nutritional formula**
folate in, **Ch 50**, pp 38–40
5'-mononucleotides in, **Ch 50**, pp 82–84
vitamin D in, **Ch 50**, pp 57–59
- Penicillin**
in milk, **Ch 33**, pp 46–50
procaine, in feeds, **Ch 5**, p 77
- Penicillin G**
in milk, **Ch 23**, pp 21–22
- Penicillin V potassium**
in tablets, **Ch 18**, p 36
- Pentabromacetone method**
citric acid in fruits and fruit products, **Ch 37**, p 11
- Pentachlorophenol**
in finished drinking water, **Ch 10**, pp 106–113
in gelatin, **Ch 10**, pp 92–93
- Pentacyanoammonioferroate test**
thiourea in orange juice, **Ch 47**, p 39
- Pentaerythrityl tetranitrate**
in bulk drug triturates, capsules, and tablets, **Ch 18**, pp 37–38
in drugs, **Ch 18**, pp 34–35, 37
with meprobamate in drugs, **Ch 18**, pp 38–39
- Pentobarbital**
in drugs, **Ch 19**, p 14
- Pentosans**
in feeds, **Ch 4**, pp 59–60
in wines, **Ch 28**, p 13
- Pepper**
capsaicinoids in, **Ch 43**, pp 14–15
filth in, **Ch 16**, pp 44–47, 52
mammalian feces in, **Ch 16**, p 68
nitrogen in nonvolatile ether extract of, **Ch 43**, p 2
piperine in preparations, **Ch 43**, pp 6–7
Salmonella in, **Ch 17**, pp 144–146, 150–156, 158–160, 173–181, 190–202
- Pepper sauce**
filth in, **Ch 16**, p 52
- Peppermint extract, Ch 36**, pp 24, 25
- Peppermint leaves**
filth in, **Ch 16**, p 47
- Peppers**
filth in, **Ch 16**, p 52
- Pepsin digestibility**
of animal protein feeds, **Ch 4**, pp 39–40
- Perchloric acid method**
potassium in plants, **Ch 3**, pp 13–14
total color in color additives, **Ch 46**, p 13
- Percolator method**
filth in green leafy vegetables, **Ch 16**, pp 41–42
- Performic acid oxidation**
amino acids in feeds, **Ch 4**, pp 9–19
- Periodate oxidation method**
propylene glycol in drugs, **Ch 18**, p 2
- Permanganate method**
oxygen (dissolved) in water, **Ch 11**, p 6
- Permanganate oxidation number**
for vinegars, **Ch 43**, p 14
- Permatone orange color additive**
analysis of, **Ch 46**, p 8
- Permethrin**
in agricultural products, **Ch 10**, pp 94–96
in foods, **Ch 10**, pp 17–26
in pesticide formulations, **Ch 7**, p 61
in water, **Ch 10**, pp 27–32
- Peroxidase**
in frozen vegetables, **Ch 42**, p 14
- Peroxide value**
of oils and fats, **Ch 41**, pp 11–12
- Perphenazine**
microchemical tests, **Ch 18**, pp 47, 51
- Persulfate method**
manganese in water, **Ch 11**, p 24
- Perthane**
residues of, **Ch 10**, pp 72–73
- Pesticide formulations**
acephate in technical material and soluble powder formulations, **Ch 7**, pp 129–130
alachlor in, **Ch 7**, pp 69–70
aldicarb in, **Ch 7**, p 25
aldrin in, **Ch 7**, pp 72–73
allethrin formulations, **Ch 7**, pp 56–57
d-trans-allethrin in, **Ch 7**, pp 57–58
aminocarb, **Ch 7**, pp 25–26
amitrole in, **Ch 7**, pp 45–46
anilazine in, **Ch 7**, pp 26–27
arsenic (total) in, **Ch 7**, pp 2–3, 8–11, 16–17
arsenic (water-soluble) in, **Ch 7**, pp 3, 10–11, 16–17
arsenious oxide (total) in, **Ch 7**, pp 8–11, 16
arsenious oxide (water-soluble) in, **Ch 7**, pp 8, 16
azinphos-methyl in, **Ch 7**, pp 104–106

- bendiocarb in technical and wettable powders, **Ch 7**, p 27
- benfluralin in, **Ch 7**, pp 77–78
- benomyl in, **Ch 7**, p 28
- bentazon in, **Ch 7**, p 46
- benzene hexachloride in, **Ch 7**, pp 76–77
- γ-BHC in, **Ch 7**, pp 73–76
- bleaching powders, **Ch 7**, p 20
- Bordeaux mixtures, **Ch 7**, pp 15–17
- brodifacoum (technical) and, **Ch 7**, pp 130–131
- bromoxynil octanoate in, **Ch 7**, pp 78–79
- butachlor in, **Ch 7**, p 79
- calcium arsenate, **Ch 7**, pp 10, 17
- calcium cyanide, **Ch 7**, p 17
- calcium hypochlorite, **Ch 7**, p 20
- calcium (total) in, **Ch 7**, pp 10–11, 19
- captan in, **Ch 7**, pp 79–80
- carbaryl in, **Ch 7**, pp 28–29
- carbofuran in, **Ch 7**, p 29
- carbon dioxide in, **Ch 7**, pp 15–17
- chloramben in, **Ch 7**, p 81
- chloramine T, **Ch 7**, pp 20–21
- chlordane (AG) in granular formulations, **Ch 7**, pp 83–84
- chlordane (AG) technical, alpha and gamma isomers in, **Ch 7**, p 83
- chlordane (technical) and, **Ch 7**, pp 81–82
- chlordimeform in, **Ch 7**, pp 84–85
- chloride in, **Ch 7**, pp 17–18
- chlorine in, **Ch 7**, pp 20–21, 71
- chlorothalonil in technical and formulated materials, **Ch 7**, pp 43–45
- chlorotoluron in, **Ch 7**, pp 29–31
- chloroxuron in, **Ch 7**, pp 29–31
- chlorpyrifos in, **Ch 7**, p 106
- common and chemical names, **Ch 7**, pp 136–138; **Ch 10**, p 140
- containing fentin acetate or fentin hydroxide, **Ch 7**, pp 13–15
- copper carbonate, **Ch 7**, p 11
- copper fungicides (water-insoluble), **Ch 7**, p 12
- copper in, **Ch 7**, pp 4, 9, 11–12, 16–17
- copper naphthenate, **Ch 7**, p 11
- cyanazine in, **Ch 7**, pp 46–48
- cyanide in, **Ch 7**, pp 17–18
- cyfluthrin in, **Ch 7**, pp 103–104
- cyhexatin in, **Ch 7**, pp 131–132
- cypermethrin in, **Ch 7**, pp 58–59
- 2,4-D in, **Ch 7**, pp 85, 90–92, 101–102
- dalapon (magnesium and/or sodium salt) in, **Ch 7**, pp 86–87
- dalapon (sodium salt) in, **Ch 7**, p 86
- DCPA in, **Ch 7**, p 87
- DDT in, **Ch 7**, pp 87–90
- deltamethrin in, **Ch 7**, p 60
- diazinon in, **Ch 7**, pp 51, 106–107
- dicamba--2,4-D in, **Ch 7**, pp 90–92
- dicamba--MCPA in, **Ch 7**, pp 90–92
- dicamba in, **Ch 7**, p 90
- dichlobenil in, **Ch 7**, p 92
- dicofol in, **Ch 7**, pp 93–94
- dieldrin in, **Ch 7**, pp 72–73
- diflubenuron in, **Ch 7**, p 95
- diquat in, **Ch 7**, p 48
- disulfoton in, **Ch 7**, pp 107–108
- dithianon in technical products and formulations, **Ch 7**, pp 31–32
- dithiocarbamates in, **Ch 7**, p 32
- dodine in, **Ch 7**, p 132
- dry lime sulfur, **Ch 7**, pp 18–19
- endosulfan in, **Ch 7**, pp 95–96
- endrin in, **Ch 7**, pp 72–73
- ether extract of Derris and Cubé powder, **Ch 7**, p 62
- ethion in, **Ch 7**, p 108
- ethyl parathion in, **Ch 7**, pp 124–125
- fenitrothion technical and, **Ch 7**, p 109
- fensulfothion in, **Ch 7**, pp 109–111
- fentin in, **Ch 7**, p 13
- fentin-maneb, **Ch 7**, pp 13–14
- ferbam in, **Ch 7**, p 32
- fertilizer-pesticide mixtures, **Ch 7**, p 1
- fluazifop-butyl in, **Ch 7**, pp 96–97
- fluometuron in, **Ch 7**, pp 33–34
- fluorine present as sodium fluosilicate in, **Ch 7**, p 7
- fluorine (total) in, **Ch 7**, pp 5–7
- folpet in, **Ch 7**, p 97
- formaldehyde in, **Ch 7**, pp 132–133
- formothion in, **Ch 7**, p 111
- fumigant mixtures, **Ch 7**, pp 24–25
- fungicides, **Ch 7**, pp 25–45
- glyphosate in water soluble granular formulations, **Ch 7**, pp 113–116
- glyphosate (technical) and, **Ch 7**, pp 111–113
- heptachlor in, **Ch 7**, pp 97–98
- heptachlor in AG chlordane, **Ch 7**, p 84
- herbicides, **Ch 7**, pp 8, 38–45–56
- hexachlorobenzene in technical and formulated materials, **Ch 7**, pp 43–45
- hexachlorocyclopentadiene in technical chlordane, **Ch 7**, p 83
- hydrazine in maleic hydrazide technical products and formulations, **Ch 7**, pp 54–56
- imidacloprid in liquid and solid formulations, **Ch 7**, pp 116–117
- inorganic and organometallic pesticides and adjuvants, **Ch 7**, pp 8–25
- isofenphos technical in, **Ch 7**, pp 117–118
- lead arsenate, **Ch 7**, pp 9–10, 16–17
- lead in, **Ch 7**, pp 4, 10, 16–17
- lime sulfur solutions, **Ch 7**, pp 18–19
- malathion in, **Ch 7**, pp 118–119
- maleic hydrazide, **Ch 7**, pp 52–56
- maneb in, **Ch 7**, pp 13–15, 32
- maneb in formulations containing fentin acetate or fentin hydroxide, **Ch 7**, pp 13–15
- MCPA ester and salt in, **Ch 7**, pp 98–99
- MCPP in, **Ch 7**, pp 91–92
- mercury in, **Ch 7**, pp 22–23
- methamidophos in, **Ch 7**, pp 119–120
- methazole in, **Ch 7**, pp 99–100
- methiocarb, **Ch 7**, p 34
- methomyl in insecticidal formulations, **Ch 7**, pp 41–42
- methyl parathion in, **Ch 7**, pp 123–125
- metolachlor in, **Ch 7**, pp 100–101
- metoxuron in, **Ch 7**, pp 29–31
- metribuzin in, **Ch 7**, pp 48–49
- microencapsulated, alachlor in, **Ch 7**, pp 69–70
- microencapsulated, diazinon in, **Ch 7**, p 107
- microencapsulated, methyl parathion or ethyl parathion in, **Ch 7**, pp 124–125
- mineral oil-soap emulsions, **Ch 7**, pp 21–22
- mineral oils, unsulfonated residue of, **Ch 7**, p 21
- moisture in, **Ch 7**, pp 1–2, 8–11, 15–17, 21
- nabam in, **Ch 7**, p 32
- alpha-naphthylthiourea in, **Ch 7**, p 24
- nicotine in tobacco products, **Ch 7**, pp 68–69
- N-octyl bicycloheptene dicarboximide in, **Ch 7**, pp 65–68
- organic mercurial seed disinfectants, **Ch 7**, pp 22–23
- organochlorine pesticide contamination of, **Ch 7**, pp 7–8
- organohalogen pesticides, **Ch 7**, pp 69–104
- organophosphorus, **Ch 7**, pp 104–130
- oxydemeton-methyl in, **Ch 7**, pp 120–121
- oxythioquinox in, **Ch 7**, pp 133–134
- paraquat in, **Ch 7**, pp 49
- parathion in, **Ch 7**, pp 121–123
- Paris Green, **Ch 7**, pp 8–9, 16
- PCNB in, **Ch 7**, p 101
- permethrin in, **Ch 7**, p 61
- phorate in, **Ch 7**, p 126
- phosphamidon in, **Ch 7**, pp 126–127
- pictoram in, **Ch 7**, pp 101–102
- piperonyl butoxide in, **Ch 7**, pp 63, 65–67
- pirimicarb in, **Ch 7**, pp 34–35
- pirimiphos-methyl in, **Ch 7**, pp 125–126
- potassium cyanate, **Ch 7**, pp 17–18
- potassium cyanide, **Ch 7**, p 18
- propachlor in, **Ch 7**, p 102
- propoxur formulations, **Ch 7**, pp 35–36
- pyrethrins in, **Ch 7**, pp 63–67
- quaternary ammonium compounds, **Ch 7**, p 134
- related to natural products and their synergists, **Ch 7**, pp 56–69
- rodenticide formulations, **Ch 7**, p 24
- rotenone in, **Ch 7**, pp 62–63
- rotenone in Derris and Cubé powder, **Ch 7**, pp 61–62
- sabadilla alkaloids in, **Ch 7**, p 68
- sample preparation, **Ch 7**, p 1
- sampling, **Ch 7**, p 1
- simazine in, **Ch 7**, pp 46–47
- soaps, **Ch 7**, pp 21–22
- sodium cyanide, **Ch 7**, p 18
- sodium hydroxide in, **Ch 7**, p 20

- sodium hypochlorite solutions, **Ch 7**, p 20
- sodium TCA in, **Ch 7**, p 103
- sulfoxide, **Ch 7**, p 135
- sulfur in, **Ch 7**, pp 18–19
- sulprofos in, **Ch 7**, pp 127–128
- 2,4,5-T in, **Ch 7**, p 102
- tebuconazole in fungicide formulations, **Ch 7**, pp 36–37
- temephos in, **Ch 7**, pp 128–129
- TEPP in, **Ch 7**, pp 129
- terbutylazine in, **Ch 7**, p 50
- tetradifon (technical) and, **Ch 7**, p 103
- thallous sulfate in, **Ch 7**, p 24
- thiocarbamates in herbicide formulations, **Ch 7**, p 38
- thiocyanate (organic) in livestock or fly sprays, **Ch 7**, pp 134–135
- thiodicarb in technical products and formulations, **Ch 7**, pp 38–39
- thiophosphorus, **Ch 7**, pp 104–130
- thiram in, **Ch 7**, pp 39–40
- triadimefon, **Ch 7**, pp 40–41
- triazine in, **Ch 7**, pp 50–52
- trifluralin in, **Ch 7**, pp 77–78, 104
- unsulfonated residue of mineral oils, **Ch 7**, pp 21–22
- warfarin in rodenticide formulations, **Ch 7**, p 135
- zinc arsenite, **Ch 7**, p 11
- zinc in, **Ch 7**, pp 4–5, 11
- zineb in, **Ch 7**, p 32
- ziram in, **Ch 7**, p 32
- Pesticide residues**
- aminomethylphosphonic acid in crops, **Ch 10**, pp 78–83
- aminomethylphosphonic acid in environmental water, **Ch 10**, pp 77–78
- azinphos-methyl, **Ch 10**, pp 58–59
- benzene hexachloride, **Ch 10**, p 59
- biphenyl, in citrus fruits, **Ch 10**, pp 61–62
- captan, **Ch 10**, p 63
- carbamate residues, **Ch 10**, pp 51–58
- carbaryl, **Ch 10**, pp 64–65
- chlorinated acidic residues in finished drinking water, **Ch 10**, pp 106–113
- p*-chlorophenyl phenyl sulfone, **Ch 10**, pp 65–67
- common and chemical names of, **Ch 10**, p 140
- DDT, **Ch 10**, pp 67–69
- 1,2-dibromo-3-chloropropane in water, **Ch 10**, pp 113–116
- 1,2-dibromoethane in water, **Ch 10**, pp 113–116
- dichlone, **Ch 10**, pp 69–70
- diquat in potatoes, **Ch 10**, pp 70–72
- dodine, **Ch 10**, p 72
- ethylal (perthane), **Ch 10**, pp 72–73
- ethylene dibromide in grains, **Ch 10**, pp 73–74
- ethylene thiourea in finished drinking water, **Ch 10**, pp 104–106
- ethylenethiourea, **Ch 10**, pp 74–76
- in foods, **Ch 10**, pp 17–26
- fumigants, **Ch 10**, p 50
- glyodin in apples and pears, **Ch 10**, p 76
- glyphosate in crops, **Ch 10**, pp 78–83
- glyphosate in environmental water, **Ch 10**, pp 77–78
- hexachlorobenzene in adipose tissue, **Ch 10**, p 84
- hexachlorobenzene in fatty products, **Ch 10**, pp 83–84
- lindane, **Ch 10**, pp 59–61
- low-levels in soft drinks and sports drinks, **Ch 10**, pp 116–124
- malathion residues, **Ch 10**, pp 84–85
- maleic hydrazide, **Ch 10**, pp 85–86
- methoxychlor, **Ch 10**, p 87
- 2-(*p*-*tert*-butylphenoxy)-1-methylethyl 2-chloroethyl sulfite (Aramite), **Ch 10**, pp 62–63
- mirex in adipose tissue, **Ch 10**, p 84
- mirex in fatty products, **Ch 10**, pp 83–84
- monofluoroacetic acid residues, **Ch 10**, pp 87–89
- munition residues in soil, **Ch 10**, pp 136–138
- naphthyleneacetic acid, **Ch 10**, pp 89–90
- nicotine, **Ch 10**, pp 90–91
- nitrogen-containing, in finished drinking water, **Ch 10**, pp 41–47
- in nonfatty foods, **Ch 10**, pp 12–17
- organochlorine, **Ch 10**, pp 1–12, 26–35
- organophosphorus, **Ch 10**, pp 1–12, 35–50
- paraquat in potatoes, **Ch 10**, pp 69–70
- parathion, **Ch 10**, pp 91–92
- pentachlorophenol in gelatin, **Ch 10**, pp 92–93
- phosphorus-containing, in finished drinking water, **Ch 10**, pp 41–47
- piperonyl butoxide, **Ch 10**, pp 93–94
- in soft drinks and sports drinks, **Ch 10**, pp 116–136
- synthetic pyrethroids in agricultural products, **Ch 10**, pp 94–96
- technical BHC, **Ch 10**, pp 59–61
- thiram, **Ch 10**, pp 96–99
- veterinary analytical toxicology, **Ch 14**, p 5
- in water, **Ch 10**, pp 99–136
- Pet foods. see also Feeds**
- arsenic in, **Ch 9**, pp 1–3
- boron in, **Ch 3**, pp 6–7
- cadmium in, **Ch 9**, pp 1–3
- calcium in, **Ch 3**, pp 5–7; **Ch 4**, pp 60–61
- copper in, **Ch 3**, pp 5–7; **Ch 4**, pp 60–61
- ether extract in, **Ch 4**, pp 40–41
- fat (crude) in, **Ch 4**, pp 40–41
- fiber (crude) in, **Ch 4**, pp 44–47
- iron in, **Ch 3**, pp 5–6; **Ch 4**, pp 60–61
- lead in, **Ch 9**, pp 1–3
- magnesium in, **Ch 3**, pp 5–7
- manganese in, **Ch 3**, pp 5–7; **Ch 4**, pp 60–61
- metals in, **Ch 3**, pp 5–7
- minerals in, **Ch 4**, pp 60–61, 65–66; **Ch 50**, pp 15–17
- moisture in soft-moist and semi-moist, **Ch 4**, pp 4–5
- phosphorus in, **Ch 3**, pp 6–7; **Ch 4**, pp 65–66
- potassium in, **Ch 3**, pp 5–7
- protein (crude) in, **Ch 4**, pp 24–25, 27–29, 31–32; **Ch 39**, pp 6–7
- Salmonella* in, **Ch 16**, pp 8–11; **Ch 17**, pp 212–216
- selenium in, **Ch 3**, pp 25–26; **Ch 9**, pp 1–3, 43–44
- taurine in, **Ch 4**, pp 19–20
- thiamine in, **Ch 45**, pp 11–13
- vitamin A in, **Ch 45**, pp 6–9
- vitamin D in, **Ch 45**, pp 33–35
- zinc in, **Ch 3**, pp 5–7; **Ch 4**, pp 60–61; **Ch 9**, pp 1–3
- Petrifilm methods**
- aerobic plate count in foods, **Ch 17**, p 12
- bacterial and coliform counts in dairy products, **Ch 17**, pp 28–29
- bacterial and coliform counts in milk, **Ch 17**, pp 27–29
- coliform and *E. coli* counts in foods, **Ch 17**, p 32
- confirmed *E. coli* counts in poultry, meats, and seafood, **Ch 17**, pp 64–65
- Enterobacteriaceae* in foods, **Ch 17**, pp 46–49
- rapid enumeration of coliforms in foods, **Ch 17**, pp 32–36
- rapid *S. aureus* count plate method, enumeration of *S. aureus* in selected foods, **Ch 17**, pp 99–101
- Staph Express Count plate method, enumeration of *S. aureus* in foods, **Ch 17**, pp 101–106
- yeast and mold counts in foods, **Ch 17**, pp 19–21
- Petroleum ether extract**
- of roasted coffee, **Ch 30**, p 4
- of tea, **Ch 30**, p 12
- Petroleum ether extraction method**
- oil in cereal adjuncts, **Ch 27**, p 32
- pH**
- of acidified foods, **Ch 42**, pp 2–3
- of baked products, **Ch 32**, p 72
- of beer, **Ch 27**, p 7
- of bread, **Ch 32**, p 71
- of brewing sugars and syrups, **Ch 27**, p 38
- buffer solutions for calibration of equipment, **App A**, pp 2–3
- buffers and indicators for colorimetric comparisons, **App A**, p 3
- of cacao products, **Ch 31**, p 2
- of macaroni products, **Ch 32**, p 74
- of mineral soils, **Ch 2**, pp 56–58
- of organic soils, **Ch 2**, pp 59–60
- of peat, **Ch 2**, pp 53–54
- of saline-sodic soils, **Ch 2**, pp 58–59
- of water, **Ch 11**, p 2

- of wheat flour, **Ch 32**, p 12
- of wines, **Ch 28**, p 9
- of wort, **Ch 27**, p 39
- pH differential method**
 - anthocyanin pigment content of fruit juices, beverages, natural colorants and wines, **Ch 37**, pp 37–39
- pH method**
 - cholinesterase in blood, **Ch 14**, pp 4–5
- Pharmaceutical Manufacturers Association-Food Chemicals Codex-AOAC method**
 - papain proteolytic activity, **Ch 47**, p 44
- Phenacetin**. *see also* **APC drugs**
 - with antihistamines in drugs, **Ch 18**, pp 20–21
 - in drugs, **Ch 19**, pp 9–11; **Ch 20**, p 7
- Phenaglycodol**
 - in drugs, **Ch 19**, p 20
- Phenates**
 - in disinfectant formulations, **Ch 6**, pp 3–6
- Phenazopyridine hydrochloride**
 - in drugs, **Ch 18**, pp 32–33
- Phencyclidine**
 - in drug powders, **Ch 22**, p 6
- Phenethylamines**, **Ch 18**, pp 27–28
- Pheniramine maleate**
 - with aspirin, phenacetin, and caffeine in drugs, **Ch 18**, pp 20–21
- Phenobarbital**
 - in drugs, **Ch 18**, pp 36–37; **Ch 19**, pp 11–12, 15–17; **Ch 20**, p 7
 - with mannitol hexanitrate in drugs, **Ch 18**, pp 36–37
- Phenol**
 - in hazardous substances, **Ch 8**, pp 5–6
- Phenol coefficient methods**
 - disinfectant testing, **Ch 6**, pp 1–6
- Phenol-sulfuric acid test**
 - saccharin in food, **Ch 47**, p 53
- Phenolic drugs**, **Ch 19**, pp 2–7
- Phenolic vasoconstrictors**
 - procaine in presence of, **Ch 18**, pp 31–32
- Phenolphthalein**
 - in chocolate drug preparations, **Ch 19**, pp 5–6
 - in drug emulsions, **Ch 19**, p 6
 - in tablets, **Ch 19**, pp 6, 12
- Phenols**
 - in disinfectant formulations, **Ch 6**, pp 3–6
- Phenolsulfonates**
 - in deodorants, **Ch 15**, pp 10–11
 - in drugs, **Ch 19**, p 6
- Phenothiazine**
 - in drugs, **Ch 19**, p 32
 - in feeds, **Ch 5**, p 26
 - microchemical tests, **Ch 18**, pp 47, 51
- Phenprocoumon**
 - in drugs, **Ch 19**, pp 20–23
- Phenyl salicylate**
 - in drugs, **Ch 19**, p 11
- Phenylalanine**
 - in feeds, **Ch 4**, pp 9–19
- Phenylalkanolamine salts**
 - in elixirs and syrups, **Ch 18**, p 26
- Phenylephrine hydrochloride**
 - in drugs, **Ch 18**, pp 22–25
- Phenylhydrazine-p-sulfonic acid**
 - in FD&C Yellow No. 5, **Ch 46**, pp 17–18
- Phenylmercuric chloride**
 - mercury in, **Ch 18**, pp 15–16
- Phenylpropanolamine**
 - in drugs, **Ch 18**, p 28
- Phenylpropanolamine hydrochloride**
 - in drugs, **Ch 18**, pp 25–26
 - in elixirs and syrups, **Ch 18**, p 26
- Phenylpropylmethylamine**
 - in drugs, **Ch 18**, p 28
- Phenytol**
 - in drugs, **Ch 19**, pp 15–16
- Phenytol sodium**
 - in drug capsules, **Ch 19**, p 17
- Phloxine B color additive**
 - analysis of, **Ch 46**, p 8
- Phorate**
 - in pesticide formulations, **Ch 7**, p 126
 - in soft drinks and sports drinks, **Ch 10**, pp 116–124
- Phorate sulfone**
 - in soft drinks and sports drinks, **Ch 10**, pp 116–124
- Phorate sulfoxide**
 - in soft drinks and sports drinks, **Ch 10**, pp 116–124
- Phosphamidon**
 - in technical and formulated pesticide products, **Ch 7**, pp 126–127
- Phosphatase**
 - in butter, **Ch 33**, pp 80–81
 - in casein, **Ch 33**, p 45
 - in cheese, **Ch 33**, pp 91–94
 - in cream, **Ch 33**, p 66
 - in ice cream and frozen desserts, **Ch 33**, p 98
 - in milk, **Ch 33**, pp 40–45
- Phosphatase activity**
 - alkaline, in fluid dairy products, **Ch 33**, pp 45–46
- Phosphate rock fertilizers**
 - mechanical analysis of, **Ch 2**, p 4
- Phosphated flour**
 - ash of, **Ch 32**, p 2
 - inorganic material added in, **Ch 32**, p 2
- Phosphatidylinositol**
 - in infant formula and adult nutritionals, **Ch 50**, pp 77–80
- Phosphorus**
 - in animal feed, **Ch 4**, pp 65–66
 - in baking powders, **Ch 25**, p 6
 - in beer, **Ch 27**, p 10
 - in cheese, **Ch 33**, pp 82–84, 94–95
 - in color additives, **Ch 46**, pp 24–25
 - in cordials and liqueurs, **Ch 26**, p 21
 - in distilled liquors, **Ch 26**, p 7
 - in eggs, **Ch 34**, p 5
 - in enteral products, **Ch 50**, pp 13–14
 - in fertilizers, **Ch 2**, pp 5–12
 - in food dressings, **Ch 43**, p 9
 - in foods, **Ch 45**, pp 50–52
 - in fortified food products, **Ch 50**, pp 65–72
 - in fruits and fruit products, **Ch 37**, pp 8–9
 - in gelatin, **Ch 38**, p 1
 - in infant formula, **Ch 50**, pp 13–14, 17–18
 - in liming materials, **Ch 1**, p 8
 - in meat and meat products, **Ch 39**, pp 4–5
 - in meat extracts and similar products, **Ch 39**, p 24
 - microchemical determination, **Ch 12**, pp 9–10
 - in pet foods, **Ch 3**, pp 6–7; **Ch 4**, pp 65–66
 - in plants, **Ch 3**, pp 2–4, 6–7, 23–24
 - in processed cheese products, **Ch 33**, pp 94–95
 - in vinegar, **Ch 43**, p 12
 - in vitamin preparations, **Ch 18**, pp 8–9
 - in water, **Ch 11**, pp 21–23
 - in wheat flour, **Ch 32**, p 4
 - in wines, **Ch 28**, p 9
- Phosphorus-containing pesticide residues**
 - in finished drinking water, **Ch 10**, pp 41–47
- Phosphorus pentoxide**
 - in liming materials, **Ch 1**, p 5
- Photoelectric colorimetric methods**
 - chlorophyll in plants, **Ch 3**, pp 31–32
- Photofluorometric methods**
 - ethoxyquin residues in animal tissues, **Ch 23**, p 7
 - reserpine in feeds, **Ch 5**, pp 29–30
- Photometric methods**. *see also* **Flame photometric methods**
 - benzoyl peroxide bleach in wheat flour, **Ch 32**, pp 19–20
 - color of beer, **Ch 27**, pp 1–2
 - color of laboratory wort, **Ch 27**, p 28
 - color of white wines, **Ch 28**, p 1
 - coumarin in vanilla extract, **Ch 36**, p 6
 - phosphorus in animal feed and pet food, **Ch 4**, pp 65–66
 - phosphorus in cheese and processed cheese products, **Ch 33**, pp 94–95
 - phosphorus in water, **Ch 11**, pp 21–22
- Phthalic acid derivatives**
 - in color additives, **Ch 46**, p 21
- Phthalocyaninato (2-) copper color additive**
 - analysis of, **Ch 46**, p 10
- Phylloquinone**
 - in ready-to-feed milk-based infant formula, **Ch 50**, pp 6–8
- Physical examination**
 - of cordials and liqueurs, **Ch 26**, p 19
 - of distilled liquors, **Ch 26**, p 1
 - of hops, **Ch 27**, p 34
 - of malt kernels, **Ch 27**, p 25
 - of wines, **Ch 28**, p 1

- Physostigmine alkaloids**, Ch 20, pp 14–16
- Physostigmine salicylate**
in drug solutions and ointments, Ch 20, pp 14–15
in drug tablets, Ch 20, p 15
- Physostigmine sulfate**
in drug solutions and ointments, Ch 20, pp 14–15
- Phytase**
activity in feed, Ch 4, pp 75–77
- Phytate**
in foods, Ch 32, p 78
- Pickles**
filth in, Ch 16, pp 52–53
- Pickling spice**
filth in, Ch 16, pp 44–47
- Picloram**
in finished drinking water, Ch 10, pp 106–113
in pesticide formulations, Ch 7, pp 101–102
- Pigments**
anthocyanin pigment content of fruit juices, beverages, natural colorants and wines, Ch 37, pp 37–39
carotenes in plants, Ch 3, p 33
chlorophyll in plants, Ch 3, pp 31–33
separation and identification of, Ch 46, p 1
in wheat flour, Ch 32, p 21
- Pilocarpic acid**
in drugs, Ch 20, p 26
- Pilocarpine**
in drugs, Ch 20, p 26
- Pimiento**
essential oil in extract, Ch 36, p 25
- Pineapple juice**
canned, filth in, Ch 16, p 35
canned, mold in, Ch 16, p 74
polydimethylsiloxane in, Ch 47, pp 52–53
- Pinene**
in lemon and orange oils, Ch 36, p 22
- Pinto beans**
piperonyl butoxide pesticide residues in, Ch 10, pp 93–94
- Piperazine**
in drugs, Ch 18, p 44
in feeds, Ch 5, pp 26–27
- Piperine**
in pepper preparations, Ch 43, pp 6–7
- Piperonyl butoxide**
in pesticide formulations, Ch 7, pp 63, 65–67
residues of, Ch 10, pp 93–94
- Pirimicarb**
in pesticide formulations, Ch 7, pp 34–35
- Pirimiphos-methyl**
in technical products and pesticide formulations, Ch 7, pp 125–126
- Pistachio nuts**
aflatoxins in, Ch 49, p 30
- Pistachio paste**
aflatoxin B₁ and total aflatoxins in, Ch 49, pp 34–37
- Plant materials**
in vanilla extract, Ch 36, pp 9–10
- Plant sugars**
C-4 in honey, Ch 44, pp 33–36
- Plant toxins**
cyanogenetic glucosides in feeds, Ch 49, p 123
fumonisins in corn, Ch 49, pp 56–63
glycoalkaloids in potato tubers, Ch 49, pp 124–126
hydrocyanic acid in beans, Ch 49, pp 123–124
- Plants**
aluminum in, Ch 3, pp 2–4, 5, 7
arsenic in, Ch 3, p 16
ash of, Ch 3, p 1
barium in, Ch 3, pp 2–3
boron in, Ch 3, pp 2–7, 16
calcium in, Ch 3, pp 2–8
carotenes and xanthophylls in dried materials, Ch 45, pp 10–11
carotenes in, Ch 3, p 33
carotenes in fresh materials, Ch 45, pp 9–10
chloride in, Ch 3, pp 16–18
chlorophyll in, Ch 3, pp 31–33
cobalt in, Ch 3, pp 8–10
copper in, Ch 3, pp 2–7, 10
ether extract of, Ch 3, p 28
fiber (crude) in, Ch 3, p 28
fluoride in, Ch 3, pp 18–23
fructose in, Ch 3, p 27
glucose in, Ch 3, p 27
iron in, Ch 3, pp 2–7, 10–11
lignin in, Ch 3, pp 30–31
magnesium in, Ch 3, pp 2–7, 11
manganese in, Ch 3, pp 2–7, 11–12
metals in, Ch 3, pp 2–16
moisture in, Ch 3, p 1
molybdenum in, Ch 3, pp 2–3, 12
nitrogen (total) in, Ch 3, pp 28–29
phosphorus in, Ch 3, pp 2–4, 6–7, 23–24
pigments in, Ch 3, pp 31–33
potassium in, Ch 3, pp 2–7, 12–14
resistant starch in, Ch 45, pp 128–130
sample preparation, Ch 3, p 1
sampling of, Ch 3, p 1
sand in, Ch 3, p 1
selenium in, Ch 3, pp 24–26
silica in, Ch 3, p 1
sodium in, Ch 3, pp 2–4, 12–14
starch in, Ch 3, p 29
strontium in, Ch 3, p 2–3
sucrose in, Ch 3, p 28
sugars in, Ch 3, pp 26–28
sulfur in, Ch 3, p 26
tobacco, Ch 3, pp 33–41
zinc in, Ch 3, pp 2–7, 14–16
- Plasma**
ephedrine alkaloids in, Ch 51, pp 1–5
- Plate counts**
Bacillus cereus in foods, Ch 17, p 125
for eggs and egg products, Ch 17, p 2
- Platinic chloride method**
potassium in plants, Ch 3, p 13
- Platinum**
recovery in fertilizers, Ch 2, p 23
- Plums**
aziphos-methyl pesticide residues in, Ch 10, pp 58–59
captan pesticide residues in, Ch 10, p 63
methoxychlor residues in, Ch 10, p 87
- Podophyllum**
in drugs, Ch 20, p 31
- Poisons.** *see* **Natural toxins**
- Polar components**
in frying fats, Ch 41, pp 31–32
- Polarimetric methods**
camphor in drugs, Ch 20, p 30
glucose in sugars and syrups, Ch 44, p 8
lactose in milk, Ch 33, p 17
raffinose in sugars and syrups, Ch 44, pp 7–8
sucrose in confectionery, Ch 44, p 24
sucrose in maple products, Ch 44, p 38
sucrose in molasses, Ch 44, p 19
sucrose in sugars and syrups, Ch 44, pp 4–8
RRR- or *all-rac-alpha*-tocopherol in drugs and food or feed supplements, Ch 45, pp 41–43
- Polarization**
of honey, Ch 44, p 28
of maple products, Ch 44, p 38
sucrose in nonalcoholic beverages, Ch 29, p 6
of vinegars, Ch 43, p 13
- Polarization methods**
glucose, commercial in wine, Ch 28, p 5
malic acid in fruits and fruit products, Ch 37, pp 12–13
oils of lemon and orange in extracts, Ch 36, p 17
oils of lemon, orange, and lime in oil-base flavors, Ch 36, p 18
starch in wheat flour, Ch 32, p 18
sucrose in fruits and fruit products, Ch 37, p 18
- Polarographic methods**
bismuth compounds in drugs, Ch 18, p 6
differential pulse, saccharin in food, Ch 47, pp 54–55
differential pulse, sulfites in food, Ch 47, pp 32–33
fumaric acid in food, Ch 47, p 1
guaifenesin in drugs, Ch 19, pp 3–4
lead in fish, Ch 9, p 32
single sweep oscillographic, organophosphorus pesticide residues, Ch 10, pp 39–40
- Polenske number**
fatty acids in butter, Ch 33, pp 78–79
- Polenske values**
acids (volatile) in oils and fats, Ch 41, pp 14–15
of cacao fat, Ch 31, p 10
- Poliovirus 1**
in oysters, Ch 17, pp 268–269

- Polyacrylamide gel isoelectric focusing method**
thin layer, identification of cooked and frozen crabmeat, **Ch 35**, pp 31–32
thin layer, identification of fish species, **Ch 35**, pp 30–31
- Polychlorinated biphenyls**
in fish, **Ch 10**, pp 26–27
multiresidue methods, **Ch 10**, pp 1–10
in paper and paperboard, **Ch 10**, p 33
in serum, (as Aroclor 1254), **Ch 10**, pp 33–35
- Polyclonal enzyme immunoassay screening method**
Listeria in foods, **Ch 17**, pp 234–240, 241–244
Salmonella in foods, **Ch 17**, pp 153–158
- Polycyclic aromatic hydrocarbons**
in food, **Ch 48**, pp 1–4
- Polydextrose**
in foods, **Ch 45**, pp 98–100
- Polydimethylsiloxane**
in pineapple juice, **Ch 47**, pp 52–53
- Polymers**
of heated vegetable oils, **Ch 41**, p 31
- Polyphenolics**
in lemon juice, **Ch 37**, pp 20–21
- Polysaccharides**
starch in animal feed, **Ch 4**, pp 58–59
- Polysorbate 60**
in shortening, oils, and dressings, **Ch 47**, pp 41–42
- Polythiazide**
in drugs, **Ch 19**, p 30
- Polyvalent enzyme immunoassay method**
Staphylococcal enterotoxins in selected foods, **Ch 17**, pp 94–97
- Polyvalent flagellar test tube test**
Salmonella in foods, **Ch 17**, pp 141–142
- Polyvalent somatic slide or plate test**
Salmonella in foods, **Ch 17**, pp 141–142
- Pomeroy-Kirshman-Alsterberg method**
oxygen (dissolved) in water, **Ch 11**, p 6
- Ponceau 3R color additive**
in foods, **Ch 46**, pp 1–2
- Ponceau SX color additive**
analysis of, **Ch 46**, p 5
in foods, **Ch 46**, pp 1–2
- Popcorn**
filth in, **Ch 16**, p 36
- Poppy seed**
filth in, **Ch 16**, pp 44–47
- Pork**
filth in sausage, **Ch 16**, pp 32–33
Listeria in, **Ch 17**, pp 229–232
Salmonella in, **Ch 16**, pp 8–11; **Ch 17**, pp 8–11, pp 181–190, 210–212
- Post-column derivatization**
aflatoxin B, and total aflatoxins in foods, **Ch 49**, pp 34–37
aflatoxins in corn, raw peanuts, and peanut butter, **Ch 49**, pp 23–24
monensin, narasin, and salinomycin in premixes, supplements and feeds, **Ch 5**, pp 51–57
sulfamethazine in feeds, **Ch 5**, pp 40–44
- Post-column oxidation methods**
paralytic shellfish toxins in mussels, clams, oysters, and scallops, **Ch 49**, pp 105–116
- Potassium**
in baking powders, **Ch 25**, p 5
in beer, **Ch 27**, p 21
in distilled liquors, **Ch 26**, pp 6–7
in dried milk, **Ch 33**, pp 74–75
in electrolyte replenishers, **Ch 18**, p 8
in enteral products, **Ch 50**, pp 15–17
in fertilizers, **Ch 2**, pp 22–29
in fortified food products, **Ch 50**, pp 65–72
in fruits and fruit products, **Ch 37**, pp 7–8
in infant formulas, **Ch 50**, pp 15–18
in pet foods, **Ch 3**, pp 5–7; **Ch 50**, pp 15–17
in plants, **Ch 3**, pp 2–7, 12–14
in seafood, **Ch 35**, pp 10–11
in soaps, **Ch 7**, p 21
in solid wastes, **Ch 9**, pp 46–50
in tobacco, **Ch 3**, pp 34–35
in water, **Ch 11**, p 20
in wines, **Ch 28**, p 9
- Potassium bromate**
in cold wave hair neutralizers, **Ch 15**, pp 13–14
standard solution, **App A**, p 5
- Potassium bromide**
effervescent, with caffeine in drugs, **Ch 18**, p 9
elixir of, **Ch 18**, pp 9–10
standard solution, **App A**, p 5
- Potassium cyanate pesticides**, **Ch 7**, pp 17–18
- Potassium cyanide pesticides**, **Ch 7**, p 18
- Potassium dichromate**
standard solution, **App A**, pp 5–6
- Potassium hydrogen phthalate method**
sodium hydroxide standard solution, **App A**, p 7
- Potassium iodide**
in animal feed, **Ch 4**, p 60
in ointments, **Ch 18**, p 11
- Potassium permanganate**
standard solution, **App A**, p 6
- Potassium thiocyanate**
standard solutions, **App A**, p 1
- Potato chips**
filth in, **Ch 16**, p 36
- Potatoes**
calcium in canned products, **Ch 42**, p 6
dehydrated products, filth in, **Ch 16**, p 43
diquat residues in, **Ch 10**, pp 70–72
ethylenethiourea pesticide residues in, **Ch 10**, pp 74–76
glycoalkaloids in tubers, **Ch 49**, pp 124–126
maleic hydrazide residues in, **Ch 10**, pp 85–86
N-methylcarbamate insecticide and metabolite residues, **Ch 10**, pp 55–58
moisture in frozen french fries, **Ch 42**, p 14
naphthyleneacetic acid residues in, **Ch 10**, pp 89–90
organophosphorus pesticide residues in, **Ch 10**, pp 36–39
paraquat residues in, **Ch 10**, pp 70–72
- Potentiometric methods**
acidity of beer, **Ch 27**, p 7
chloride in cheese, **Ch 33**, p 84
chloride in eggs, **Ch 34**, p 5
chloride in milk-based infant formula, **Ch 50**, p 12
chlorides in tobacco, **Ch 3**, p 34
chlorides in water-soluble color additives, **Ch 46**, pp 25–26
chlorine (soluble) in animal feed, **Ch 4**, p 62
dicofol in pesticide formulations, **Ch 7**, p 93
fentin in pesticide formulations, **Ch 7**, p 13
fluoride in plants, **Ch 3**, pp 18–19
fluorides in hazardous substances, **Ch 8**, pp 1–2
monosodium glutamate in food, **Ch 47**, pp 55–56
neutralizing value for liming materials, **Ch 1**, p 2
nitrate in forages, **Ch 14**, pp 5–6
pH of beer, **Ch 27**, p 7
pH of cacao products, **Ch 31**, p 2
pH of wheat flour, **Ch 32**, p 12
quaternary ammonium compounds, **Ch 7**, p 134
salt (chlorine as sodium chloride) in seafood, **Ch 35**, p 10
sodium chloride in canned vegetables, **Ch 42**, pp 7–8
- Poultry and poultry products**
adulteration of meat products, **Ch 39**, pp 23–24
arsenic in, **Ch 9**, p 22
calcium in mechanically separated meat, **Ch 39**, pp 16–17
clopidol residues in chicken tissues, **Ch 23**, pp 4–6
confirmed *E. coli* counts in, **Ch 17**, pp 64–65
decoquinatate residues in chicken tissues, **Ch 23**, pp 6–7
fat in, **Ch 39**, p 3
filth and sand in chicken giblet paste, **Ch 16**, p 30
fresh chilled and frozen, *Salmonella* in, **Ch 17**, pp 203–205
Listeria in, **Ch 17**, pp 224–262
moisture in, **Ch 39**, pp 1–2
monensin in chicken tissues, **Ch 23**, pp 39–44
nalidixic acid in chicken liver and muscle, **Ch 23**, pp 10–11

- narasin in chicken tissues, **Ch 23**, pp 39–44
- ractopamine in turkey tissues, **Ch 23**, pp 26–29
- ractopamine (parent and total) in turkey tissues, **Ch 23**, pp 29–39
- S. aureus* in, **Ch 17**, pp 105–106
- Salmonella* in, **Ch 17**, pp 150–156, 158–166, 173–190, 193–219
- Salmonella* in raw chicken breast, **Ch 16**, pp 8–11
- Salmonella* in turkey, **Ch 16**, pp 8–11
- sulfonamide residues in turkey and duck tissues, **Ch 23**, pp 18–19
- total viable count in raw ground chicken, automated enumeration, **Ch 16**, pp 6–8
- Poultry feed**
Salmonella in, **Ch 17**, pp 132–133, 173
- Powder brushing method**
fingerprint detection on objects, **Ch 24**, p 1
- Powdered milk.** see **Dried milk and its products**
- Power-Chesnut method**
caffeine in roasted coffee, **Ch 30**, p 2
caffeine in tea, **Ch 30**, p 11
- Pre-enrichment culture method**
Salmonella in dry foods, **Ch 17**, pp 171–172
- Prechromatographic oxidation methods**
paralytic shellfish poisoning toxins in shellfish, **Ch 49**, pp 89–102
- Precipitation methods**
mercury in organic mercurial seed disinfectants, **Ch 7**, p 22
oils of lemon, orange, and lime in oil-base flavors, **Ch 36**, p 17
- Prednisolone**
in drugs, **Ch 21**, pp 12–14
- Prednisone**
in drugs, **Ch 21**, pp 12–13
- Premix feeds.** see **Feeds**
- Prepared mustard.** see **Mustard (prepared)**
- Preservation**
efficacy of preservation of non-eye area water-miscible cosmetic and toiletry formulations, **Ch 15**, pp 3–6
- Preservatives.** see also **Chemical preservatives; Food additives (direct)**
in butter, **Ch 33**, p 80
in cream, **Ch 33**, p 66
diethylcarbonate in wines, **Ch 28**, p 18
in evaporated milk, **Ch 33**, p 70
in ground beef, **Ch 47**, pp 14–15
in milk, **Ch 33**, p 35
monochloroacetic acid in, **Ch 47**, pp 21–22
quaternary ammonium compounds in, **Ch 47**, pp 24–25
sorbic acid in wines, **Ch 28**, pp 17–18
sulfurous acid in wines, **Ch 28**, p 17
in wines, **Ch 28**, pp 17–18
- Press cake**
filth in, **Ch 16**, p 11
- Primidone**
in drug tablets, **Ch 19**, pp 33–34
- Probability of detection**
as a statistical model for the validation of qualitative methods, **App H**
- Procainamide hydrochloride**
in drugs, **Ch 18**, p 32
- Procaine**
in drugs, **Ch 18**, pp 31–32
- Procaine penicillin**
in feeds, **Ch 5**, p 77
- Process cheese**
lactose in, **Ch 33**, pp 89–90
phosphorus in, **Ch 33**, pp 94–95
- Processed foods**
fructans in, **Ch 45**, pp 91–95
Listeria in meats and poultry, **Ch 17**, pp 256–257
S. aureus in, **Ch 17**, pp 101–103
Salmonella in, **Ch 17**, pp 130–132
sulfur in, **Ch 45**, p 88
- Procyimidone**
in foods, **Ch 10**, pp 17–26
- PROFIT procedure**
beef and poultry adulteration of meat products, **Ch 39**, pp 23–24
- Progestational steroids**
in drugs, **Ch 21**, pp 6–8
- Proline**
in feeds, **Ch 4**, pp 9–19
in honey, **Ch 44**, pp 27–28
- Promanide**
in finished drinking water, **Ch 10**, pp 41–47
- Promethazine**
microchemical tests, **Ch 18**, pp 47, 51
- Prometon**
in finished drinking water, **Ch 10**, pp 41–47
in pesticide formulations, **Ch 7**, p 51
- Prometryn**
in pesticide formulations, **Ch 7**, p 51
- Propachlor**
in pesticide formulations, **Ch 7**, p 102
in water, **Ch 10**, pp 27–32
- Propanil**
in water, **Ch 10**, pp 99–104
- Propazine**
in finished drinking water, **Ch 10**, pp 41–47
in pesticide formulations, **Ch 7**, p 51
- Propham**
in water, **Ch 10**, pp 99–104
- Prophenpyridamine**
codeine with, **Ch 20**, p 2
- Propionates**
in food, **Ch 47**, p 23
- Propionic acid**
in bread, **Ch 32**, pp 67–69
in cake, **Ch 32**, p 72
in seafood, **Ch 35**, pp 14–15
- Propoxur**
in finished drinking water, **Ch 10**, pp 52–55
in fruits and vegetables, **Ch 10**, pp 51–52
- technical and pesticide formulations, **Ch 7**, pp 35–36
- Propoxycaine**
in drugs, **Ch 18**, pp 31–32
- n-Propyl alcohol**
in distilled liquors, **Ch 26**, pp 12–14
- Propyl gallate**
in foods, **Ch 47**, pp 1–2, 6–7
in oils, fats, and butter oil, **Ch 47**, pp 2–5
- Propylene glycol**
in cased cigarette cut filler and ground tobacco, **Ch 3**, p 35
in cosmetics, **Ch 15**, pp 2–3
in drugs, **Ch 18**, p 2
in ground tobacco, **Ch 3**, p 35
in vanilla extract, **Ch 36**, p 2
- Propylthiouracil**
in drugs, **Ch 19**, p 31
- Protein**
in animal feed, **Ch 32**, pp 14, 50
in baked products, **Ch 32**, p 72
in beer, **Ch 27**, pp 9–10
in bread, **Ch 32**, p 70
in brewing grains, **Ch 27**, p 9
in brewing sugars and syrups, **Ch 27**, p 37
in cereal adjuncts, **Ch 27**, p 33
digestibility of foods and food ingredients, **Ch 45**, pp 82–83
in dried milk, **Ch 33**, p 72
in fruit products, **Ch 37**, p 10
in grains, **Ch 32**, pp 44–45, 49–50
in ice cream and frozen desserts, **Ch 33**, p 97
in infant formula, **Ch 50**, p 18
in laboratory malt, **Ch 27**, p 29
in macaroni products, **Ch 32**, p 74
in milk, **Ch 33**, pp 14–15, 26–30
in milk chocolate, **Ch 31**, p 12
in oilseeds, **Ch 4**, pp 34–36; **Ch 32**, pp 44–45
in raw and processed meats, **Ch 39**, pp 30–31
reducing substances in milk, **Ch 33**, p 16
soy, in raw and heat-processed meat products, **Ch 39**, pp 17–21
in sweetened condensed milk, **Ch 33**, p 71
in tea, **Ch 30**, p 12
in wheat, **Ch 32**, pp 50–54
in wheat flour, **Ch 32**, pp 14–15
in yeast, **Ch 27**, pp 9, 39
in wort, **Ch 27**, p 41
- Protein (crude)**
in animal feed, **Ch 4**, pp 24–32, 34–36
in forages, **Ch 4**, pp 32–36
in grain, **Ch 4**, pp 34–36
in meat and meat products, **Ch 39**, pp 6–8, 25–27
in nuts and nut products, **Ch 40**, pp 1–2
in oilseeds, **Ch 4**, pp 34–36
in pet food, **Ch 4**, pp 24–25, 27–29, 31–32
in plants, **Ch 3**, pp 28–29

- Protein efficiency ratios**
calculation method, **Ch 45**, pp 80–82
rat bioassay, **Ch 45**, p 79
- Protein nitrogen unit precipitation method**
allergenic extracts in drugs, **Ch 20**, pp 33–34
- Protein-reducing substances**
in milk, **Ch 33**, p 16
- Proteolytic activity**
of flour and malted wheat flour, **Ch 32**, pp 25–26
- Proteolytic chillproofing enzymes**
in beer, **Ch 27**, p 17
- Proximate analysis**
of milk-based infant formula, **Ch 50**, p 18
- Prunes**
moisture in, **Ch 37**, pp 4–6
- Pseudoephedrine**
in botanicals and dietary supplements, **Ch 51**, pp 5–7
- Pseudoephedrine HCl**
in drug combinations, **Ch 20**, pp 10–11
- Pseudomonas aeruginosa***
testing disinfectants against, **Ch 6**, pp 6, 18–22
- Psicose**
in corn syrup, **Ch 44**, pp 52–53
- Pteroylglutamic acid**
in infant formula, **Ch 50**, pp 24–26
in vitamin preparations, **Ch 45**, pp 59–60
- Pulsed amperometric detection**
carbohydrates in soluble (instant) coffee, **Ch 30**, pp 5–10
with column switching, myo-inositol (free and bound as phosphatidylinositol) in infant formula and adult nutritionals, **Ch 50**, pp 77–80
- Putrescine**
in canned tuna, **Ch 35**, pp 20–23
- Pycnometer methods**
alcohol by volume in distilled liquors, **Ch 26**, pp 2–3
alcohol by weight in distilled liquors, **Ch 26**, p 6
solids in syrups, **Ch 44**, p 2
specific gravity of beer, **Ch 27**, p 3
specific gravity of distilled liquors, **Ch 26**, p 2
specific gravity of lemon, orange, and lime extracts, **Ch 36**, p 16
specific gravity of lemon and orange oils, **Ch 36**, p 19
specific gravity of milk, **Ch 33**, p 5
specific gravity of oils, **Ch 41**, pp 2–3
specific gravity of vanilla extract, **Ch 36**, p 1
specific gravity of water, **Ch 11**, p 1
specific gravity of wines, **Ch 28**, p 1
specific gravity of wort, **Ch 27**, p 38
weight (apparent) per unit volume of fats and oils, **Ch 41**, pp 2–3
- Pymetrozine**
in foods, **Ch 10**, pp 17–26
- Pyoverdine**
in eggs, **Ch 34**, p 13
- Pyranine concentrated color additive**
analysis of, **Ch 46**, p 7
- Pyrantel tartrate**
in feeds, **Ch 5**, p 27
- Pyrene**
in D&C Green No. 8, **Ch 46**, p 15
- Pyrethrins**
in pesticide formulations, **Ch 7**, pp 63–67
- Pyrethroids, synthetic**
in agricultural products, **Ch 10**, pp 94–96
- Pyridine test**
monochloroacetic acid in liquids and preservatives, **Ch 47**, pp 21–22
- Pyridoxal**
in food extracts, **Ch 45**, pp 66–68
in ready-to-feed milk-based infant formulas, **Ch 50**, pp 20–21
- Pyridoxamine**
in food extracts, **Ch 45**, pp 66–68
in ready-to-feed milk-based infant formulas, **Ch 50**, pp 20–21
- Pyridoxine**
in food extracts, **Ch 45**, pp 66–68
in ready-to-feed milk-based infant formulas, **Ch 50**, pp 20–21
- Pyrilamine**
codeine with, **Ch 20**, p 2
in cough syrup, **Ch 18**, p 19
- Pyrochemiluminescence method**
nitrogen (total) in urine, **Ch 14**, pp 7–10
- Pyrogallol**
in hair dyes, **Ch 15**, p 14
- Pyrogallol red assay**
estimation of antioxidant capacity, **Ch 47**, pp 7–8
- Q-Trol screening methods**
Salmonella in foods, **Ch 17**, p 161
- Quaternary ammonium compounds**
in aqueous solutions, **Ch 47**, p 27
in commercial preservatives, **Ch 47**, pp 24–25
in eggs, **Ch 34**, p 13
in foods and beverages, **Ch 47**, pp 25–26
in milk, **Ch 47**, pp 23–24, 27
in nonalcoholic beverages, **Ch 29**, p 6
in pesticide formulations, **Ch 7**, p 134
- Quercetin**
in drugs, **Ch 20**, pp 31–32
- Quinacrine hydrochloride**
in drugs, **Ch 20**, pp 17–18
- Quinalizarin method**
boron in plants, **Ch 3**, p 16
- Quinic acid**
in cranberry juice cocktail and apple juice, **Ch 37**, p 14
- Quinine**
in drug powders, **Ch 22**, p 4
in drugs, **Ch 19**, pp 9–10; **Ch 20**, pp 7, 16–17
- Quinine ethylcarbonate**
in drugs, **Ch 20**, p 16
- Quinizarin green SS color additive**, **Ch 46**, p 7
- Quinoline molybdate gravimetric method**
phosphorus in fruits and fruit products, **Ch 37**, p 9
- Quinoline yellow SS color additive**
analysis of, **Ch 46**, p 9
- Quinolinium molybdophosphate methods**
alkalimetric, phosphorus (available) in fertilizers, **Ch 2**, p 11
alkalimetric, phosphorus (citrate-insoluble) in fertilizers, **Ch 2**, p 10
alkalimetric, phosphorus (total) in fertilizers, **Ch 2**, p 7
alkalimetric, phosphorus (water-soluble) in fertilizers, **Ch 2**, p 9
gravimetric, phosphorus (available) in fertilizers, **Ch 2**, p 11
gravimetric, phosphorus (citrate-insoluble) in fertilizers, **Ch 2**, p 10
gravimetric, phosphorus in plants, **Ch 3**, p 23
gravimetric, phosphorus (total) in fertilizers, **Ch 2**, pp 6–7
gravimetric, phosphorus (water-soluble) in fertilizers, **Ch 2**, p 9
- Quisumbing-Thomas methods**
invert sugar in sugars and syrups, **Ch 44**, p 10
sugars (reducing) in plants, **Ch 3**, p 28
- Racephenicol**
in feeds, **Ch 5**, pp 27–29
- Ractopamine**
parent and total, in bovine, swine, and turkey tissues, **Ch 23**, pp 29–39
in swine, bovine, and turkey tissues, **Ch 23**, pp 26–29
- Radioactive tracer methods**
 γ -BHC (lindane) in pesticide formulations, **Ch 7**, pp 74–75
- Radioactivity**
barium-140 in milk and other foods, **Ch 13**, pp 6–8
cesium-134 in foods, **Ch 13**, pp 8–10
cesium-137 in foods, **Ch 13**, pp 8–10
cesium-137 in milk and other foods, **Ch 13**, pp 6–8
emanation method, **Ch 13**, p 1
gamma ray methods, **Ch 13**, p 1
iodine-131 in milk, **Ch 13**, pp 10–12
iodine-131 in milk and other foods, **Ch 13**, pp 6–8
radioactive contamination, emergency level measures, **Ch 13**, pp 12–13
radon method, **Ch 13**, p 1
of solid substances, **Ch 13**, p 1
strontium-89 in milk, **Ch 13**, pp 3–6
strontium-90 in milk, **Ch 13**, pp 3–6
strontium-90 in water, **Ch 13**, pp 1–3
tritium in water, **Ch 13**, p 1
- Radiochemical separation methods**
iodine-131 in milk, **Ch 13**, pp 10–12
- Radon method**
radioactivity of substances, **Ch 13**, p 1

- Raffinose**
in sugars and syrups, **Ch 44**, pp 7–8
- Raisins**
filth in, **Ch 16**, p 35
moisture in, **Ch 37**, pp 4–6
- RAMP® anthrax test cartridge**
Bacillus anthracis detection, **Ch 17**, pp 274–275
- Randall/Soxtec/extraction-submersion method**
fat (crude) in feeds, cereal grains, and forages, **Ch 4**, pp 41–44
- Raney powder method**
nitrogen (total) in fertilizers, **Ch 2**, p 15
- Rapid colorimetric immunoenrichment-based screening method**
Salmonella in foods, **Ch 17**, pp 181–185
- Rappaport-Vassiliadis medium**
Salmonella in cocoa and chocolate, **Ch 17**, pp 166–167
Salmonella in dried milk products, **Ch 17**, pp 167–169; **Ch 33**, p 75
Salmonella in foods, **Ch 17**, pp 176–181
- Raspberries**
insects in frozen products, **Ch 16**, pp 33–34
beta-ionone in concentrates, **Ch 36**, pp 26–27
mold in, **Ch 16**, p 74
- Rat bioassay**
protein digestibility of foods and food ingredients, **Ch 45**, pp 82–83
protein efficiency ratio, **Ch 45**, p 79
vitamin D in milk, vitamin preparations, and feed concentrates, **Ch 45**, pp 74–78
- Rat hemoglobin repletion bioassay**
iron bioavailability, **Ch 45**, pp 83–85
- Rauwolfia alkaloids**, **Ch 20**, pp 18–25
- Rauwolfia serpentina drugs**
reserpine-rescinnamine group alkaloids in, **Ch 20**, pp 21–25
- RDX**. see 1,3,5-Trinitro-1,3,5-triazine
- Receptor binding assay**
paralytic shellfish toxins in shellfish, **Ch 49**, pp 116–123
- Recommended Candidate Dispute Resolution Methods 2012**
chromium, selenium, and molybdenum in infant formula and adult nutritional products, **Ch 50**, pp 80–82
5'-mononucleotides in infant formula and adult/pediatric nutritional formula, **Ch 50**, pp 82–84
myo-inositol (free and bound as phosphatidylinositol) in infant formula and adult nutritionals, **Ch 50**, pp 77–80
- Red No. 3**
analysis of, **Ch 46**, p 5
in foods, **Ch 46**, pp 3–4
- Red No. 6**
analysis of, **Ch 46**, p 8
subsidiary dyes in, **Ch 46**, p 21
- Red No. 7**
analysis of, **Ch 46**, p 7
subsidiary dyes in, **Ch 46**, p 21
- Red No. 8**
analysis of, **Ch 46**, pp 7–8
lake red C amine in, **Ch 46**, p 15
- Red No. 9**
analysis of, **Ch 46**, p 8
lake red C amine in, **Ch 46**, p 15
- Red No. 17**, **Ch 46**, p 8
- Red No. 19**
analysis of, **Ch 46**, p 8
phthalic acid derivatives in, **Ch 46**, p 21
- Red No. 21**, **Ch 46**, pp 8–9
- Red No. 22**, **Ch 46**, p 9
- Red No. 27**, **Ch 46**, p 8
- Red No. 28**, **Ch 46**, p 8
- Red No. 30**, **Ch 46**, p 8
- Red No. 31**, **Ch 46**, p 8
- Red No. 33**, **Ch 46**, p 9
- Red No. 34**, **Ch 46**, p 9
- Red No. 36**, **Ch 46**, p 9
- Red No. 37**, **Ch 46**, p 9
- Red No. 39**, **Ch 46**, p 9
- Red No. 40**
analysis of, **Ch 46**, p 6
in foods, **Ch 46**, pp 3–4
intermediates in, **Ch 46**, pp 15–17
- Red No. 2 (former)**, **Ch 46**, pp 3–4
- Red pepper**
capsaicinoids in, **Ch 43**, pp 14–15
filth in, **Ch 16**, pp 44–47
oleoresins, capsaicinoids in, **Ch 43**, pp 14–15
- Reducing substances**
in molasses, **Ch 44**, p 21
in vinegar, **Ch 43**, pp 12–13
- Reduction methods**
nitroglycerin in drugs, **Ch 18**, p 34
selenium in feeds and premixes, **Ch 4**, pp 68–69, 71
- Reference materials**
definitions, **App A**, pp 8–9
sources of, **App A**, p 9
- Reference standards**
aflatoxins, **Ch 49**, p 5
- Reference tables**, **App C**
- Reflectance colorimetric method**
bacterial counts in raw and pasteurized milk, **Ch 17**, pp 7–9
- Refluxing, in beakers and crucibles**
amylase-treated neutral detergent fiber in feeds, **Ch 4**, pp 49–55
- Refraction**
flaxseed oil identification, **Ch 41**, p 68
index of refraction of oils and fats, **Ch 41**, pp 3–4
- Refraction method**
alcohol in wines, **Ch 28**, p 1
- Refractive index**
of butterfat, **Ch 33**, p 77
of honey, **Ch 44**, p 27
of lemon and orange oils, **Ch 36**, p 19
of volatile oil, **Ch 43**, p 4
- Refractive index method**
solids (soluble) in tomato products, **Ch 42**, pp 5–6
- Refractometer methods**
alcohol by volume in distilled liquors, **Ch 26**, p 5
alcohol in beer, **Ch 27**, p 4
dry substance in corn syrups and sugars, **Ch 44**, pp 49–50
immersion, methanol in distilled liquors, **Ch 26**, p 15
moisture in honey, **Ch 44**, p 26
solids in syrups, **Ch 44**, p 2
solids (soluble) in citrus fruit juices, **Ch 37**, p 7
solids (soluble) in frozen concentrate for lemonade, **Ch 37**, p 7
solids (soluble) in fruits and fruit products, **Ch 37**, p 7
- Refrigerated pre-enrichment culture method**
Salmonella in dry foods, **Ch 17**, pp 171–172
- Reichert-Meissl values**
acids (volatile) in oils and fats, **Ch 41**, pp 14–15
of cacao fat, **Ch 31**, p 10
- Reineckate method**
quaternary ammonium compounds in commercial preservatives, **Ch 47**, pp 24–25
quaternary ammonium compounds in milk, **Ch 47**, pp 23–24
- Relish**
filth in, **Ch 16**, p 53
- Renard test**
peanut oil in oils and fats, **Ch 41**, p 53
- Rescinnamine**
in drugs, **Ch 20**, pp 21–25
- Reserpine**
in drugs, **Ch 20**, pp 18–25
in feeds, **Ch 5**, pp 29–30
- Residue**
acid-insoluble, in frozen fruits and vegetables, **Ch 16**, pp 35–36
- Resin**
in ginger, **Ch 43**, p 5
- Resorcinol**
in hair lotions, **Ch 15**, p 14
- Retention times**
dexamethasone in drug substance and elixirs, **Ch 21**, p 10
- Retinol**
in infant formula and adult nutritionals, **Ch 50**, pp 72–74
isomers in milk and milk-based infant formula, **Ch 50**, pp 1–3
- Retinyl palmitate (vitamin A)**
in fortified fluid milk, **Ch 45**, pp 3–6
- Reveal for E. coli O157:H7 test**
eight-hour method, **Ch 17**, pp 78–81
twenty-hour method, **Ch 17**, pp 83–86
- Reversed-phase liquid chromatographic methods**
 β -carotene in supplements and raw materials, **Ch 51**, pp 13–19
imidacloprid in liquid and solid pesticide formulations, **Ch 7**, pp 116–117
lasalocid sodium in feeds and premixes, **Ch 5**, pp 57–60

- methomyl in insecticidal formulations, Ch 7, pp 41–42
- Rhodamine B color additive**
analysis of, Ch 46, p 9
- Rhodamine B stearate color additive**
analysis of, Ch 46, p 9
- Riboflavin**
in foods, Ch 45, pp 14–17
microbiological assays, Ch 45, pp 55–58
in ready-to-feed milk-based infant formula, Ch 50, p 8
in vitamin preparations, Ch 45, pp 14–17, 62–63
- Rice**
filth in flours (powders), extruded products, and paper, Ch 16, p 24
piperonyl butoxide pesticide residues in, Ch 10, pp 93–94
- Rice cereals**
antioxidants in, Ch 32, p 63
filth in, Ch 16, p 28
- Roberts copper method**
dextran in raw cane sugar, Ch 44, pp 16–18
- Robertson method**
Jones modification, nitrogen (nitrate) in fertilizers, Ch 2, p 16
nitrogen (nitrate) in fertilizers, Ch 2, p 16
- Rocks**
in peanut butter, Ch 16, p 19
- Rodent excreta.** *see also* Excreta
in brewer's grits, Ch 16, pp 21–22
in condiment seeds, Ch 16, p 49
in corn flour, Ch 16, p 25
in grain products, Ch 16, p 22
- Rodenticide formulations**
alpha-naphthylthiourea in, Ch 7, p 24
thallous sulfate in, Ch 7, p 24
warfarin in, Ch 7, p 135
- Roese-Gottlieb method**
fat in cream, Ch 33, p 66
fat in evaporated milk, Ch 33, p 70
fat in milk, Ch 33, p 18
fat in sweetened condensed milk, Ch 33, p 71
- Romer minicolumn method**
aflatoxins in foods and feeds, Ch 49, pp 5–6
- Ronnel**
in feeds, Ch 5, pp 30–31
multiresidue methods, Ch 10, pp 1–10
- Rosemary**
essential oil in extract, Ch 36, p 25
filth in, Ch 16, pp 44–47
- Rosin oil**
in oils and fats, Ch 41, p 52
- Rot**
in tomato products, Ch 16, pp 79–80
- Rot fragment count, Ch 16, pp 79–80**
- Rotenone**
in Derris and Cubé powder, Ch 7, pp 61–62
in pesticide formulations, Ch 7, pp 62–63
- Roxarsone**
in feed premixes, Ch 5, pp 31–32
in feeds, Ch 5, pp 31–33
- Rubber articles**
extractives from, Ch 48, p 6
N-nitrosamines in baby bottle rubber nipples, Ch 48, pp 8–9
- Rutin**
in drugs, Ch 20, pp 31–32
- Rye flour**
alpha-amylase in, Ch 32, p 22
- Rye meal**
filth in, Ch 16, p 22
- Sabadilla alkaloids**
in pesticide formulations, Ch 7, p 68
- Saccharides (major)**
in corn syrup, Ch 44, pp 52–53
- Saccharides (minor)**
in dextrose products, Ch 44, p 53
- Saccharin**
in carbonated beverages, Ch 29, pp 2–3
in food, Ch 47, pp 53–55
in nonalcoholic beverages, Ch 47, pp 47, 55
- Saffron**
in macaroni products, Ch 32, pp 75–76
- Safrole**
in nonalcoholic beverages, Ch 29, pp 4–5
- Sage**
filth in, Ch 16, pp 44–47, 49–50
- Salad dressings**
filth in, Ch 16, p 53
gums in, Ch 43, pp 10–11
- Salad oils**
cold test, Ch 41, p 54
- Salicylamide**
in drugs, Ch 19, pp 8–9
- Salicylates**
in aspirin, Ch 19, p 11
cinchophen with, Ch 20, p 26
- Salicylic acid**
in aspirin, Ch 19, p 11
in drugs, Ch 19, p 1
in food and beverages, Ch 47, pp 27–28
in hair lotions, Ch 15, p 14
- Saline-sodic soils**
pH of, Ch 2, pp 58–59
- Salinomycin**
in premixes, supplements and feeds, Ch 5, pp 51–57
- Salmon**
canned, ethanol in, Ch 35, pp 26–27
canned Pacific, identification of, Ch 35, pp 32–34
- Salmonella**
BAX® automated system, Ch 17, pp 205–210
biochemical identification, Ch 17, pp 136–141, 279–280
in cocoa and chocolate, Ch 17, pp 166–167
colorimetric deoxyribonucleic acid hybridization method, Ch 17, pp 161–164
colorimetric monoclonal enzyme immunoassay screening method, Ch 17, pp 146–153, 161
colorimetric polyclonal enzyme immunoassay screening method, Ch 17, pp 153–156, 176–181
conductance method, automated, Ch 17, pp 169–171
culture media and reagents, Ch 17, pp 128–130
DNA colony hybridization method, Ch 17, pp 161, 212–216
in dried milk products, Ch 17, pp 131–132, 144–146, 150–156, 159–164, 167–169; Ch 33, p 75
in dry foods, Ch 17, pp 171–172
enzyme-linked fluorescent assay, Ch 17, pp 210–212
enzyme-linked immunofluorescent assay, Ch 17, pp 158–160
enzyme-linked immunosorbent assays, Ch 17, pp 173–176
fluorescent antibody screening test, Ch 17, pp 142–144
fluorogenic monoclonal enzyme immunoassay screening method, Ch 17, p 161
in food, Ch 16, pp 8–11
in foods, Ch 17, pp 128–130, 134–166, 216–219
in foods other than raw foods or foods with a high microbial load, Ch 17, pp 149–150
in foods with a low microbial load, Ch 17, pp 190–193
in fresh cheese, dried egg products, and fresh chilled and frozen poultry, Ch 17, pp 203–205
Gene Quence® DNA hybridization, Ch 17, pp 212–216
hydrophobic grid membrane filter method, Ch 17, pp 144–146
identification in foods, Ch 17, pp 128–130, 181–185
immuno-concentration *Salmonella* method, Ch 17, pp 193–202
immunodiffusion (1-2 Test) method, Ch 17, pp 164–166
motile, in foods, Ch 17, pp 156–158, 164–166, 185–190
motility enrichment, Ch 17, pp 166–169
nonmotile, in foods, Ch 17, pp 156–158, 185–190
polyclonal enzyme immunoassay method, Ch 17, pp 156–158
in poultry feed, Ch 17, pp 132–133
pre-enrichment and selective enrichment broth culture methods, Ch 17, pp 171–172
in processed foods, Ch 17, pp 130–132
rapid colorimetric immuno-enrichment-based screening method, Ch 17, pp 181–185
in raw, highly contaminated foods and poultry feed, Ch 17, pp 132–133, 173

- selective plate procedure, **Ch 17**, pp 193–198
- serological tests, **Ch 17**, pp 141–142
- ULTIMA™ immunoassay, **Ch 17**, pp 176–181
- visual immunoassay, **Ch 17**, pp 176–181
- visual immunoprecipitate assay, **Ch 17**, pp 185–190
- Salmonella choleraesuis**
testing disinfectants against, **Ch 6**, pp 10–13
- Salmonella enterica**
testing disinfectants against, **Ch 6**, pp 6–10
- Salmonella-Tek**, **Ch 17**, pp 146–150
- Salmonella typhi**
testing disinfectants against, **Ch 6**, pp 1–3
- Salt**. *see also* **Sodium chloride**
in butter, **Ch 33**, pp 76–77
calcium in, **Ch 11**, p 32
in cheese, **Ch 33**, p 84
constituents in, reporting results, **Ch 11**, p 32
inorganic, in color additives, **Ch 46**, p 26
iodine in iodized salt, **Ch 11**, p 32
lead in, **Ch 11**, p 32
magnesium in, **Ch 11**, p 32
matters insoluble in acid, **Ch 11**, p 32
matters insoluble in water, **Ch 11**, p 31
in meat and meat products, **Ch 39**, p 4
moisture in, **Ch 11**, p 31
sample preparation, **Ch 11**, p 31
in seafood, **Ch 35**, pp 9–10
solution preparation, **Ch 11**, p 32
sulfate in, **Ch 11**, p 32
- Sample collection**
biological agents from nonporous surfaces, bulk sample collection and swab sample collection of visible powders, **Ch 17**, p 278
cheese, **Ch 33**, p 81
cream, **Ch 33**, p 64
milk, **Ch 33**, pp 4–5
- Sample preparation**
acids (dibasic) in nonalcoholic beverages, **Ch 29**, p 1
aflatoxins, **Ch 49**, pp 2–3
animal feeds, **Ch 4**, p 1; **Ch 5**, p 1
baking powders and baking chemicals, **Ch 25**, p 1
beer, **Ch 27**, p 1
bread, **Ch 32**, p 66
butter, **Ch 33**, p 76
cacao products, **Ch 31**, p 1
canned vegetables, **Ch 42**, p 1
cheese, **Ch 33**, p 81
confectionery, **Ch 44**, p 24
corn syrups and sugars, **Ch 44**, p 48
cream, **Ch 33**, pp 64–65
dried milk, **Ch 33**, p 72
for eggs and egg products, **Ch 17**, p 2
evaporated milk, **Ch 33**, p 70
fertilizers, **Ch 2**, p 3
fish and marine products, **Ch 35**, p 1
food dressings, **Ch 43**, p 8
fruits, **Ch 37**, pp 2–3
gelatin, **Ch 38**, p 1
gelatin dessert powders, **Ch 38**, pp 1–2
grains, **Ch 32**, p 44
honey, **Ch 44**, p 25
hops, **Ch 27**, p 34
ice cream and frozen desserts, **Ch 33**, p 96
lemon juice, **Ch 37**, pp 20–21
liming materials, **Ch 1**, pp 1, 4, 6–7
macaroni products, **Ch 32**, p 73
malt, **Ch 27**, p 24
maple products, **Ch 44**, p 37
meat and meat products, **Ch 39**, p 1
meat extracts and similar products, **Ch 39**, p 24
milk, **Ch 33**, p 5
nuts and nut products, **Ch 40**, p 1
oils and fats, **Ch 41**, p 1
peat, **Ch 2**, p 52
pesticide formulations, **Ch 7**, p 1
plants, **Ch 3**, p 1
prepared mustard, **Ch 43**, p 7
roasted coffee, **Ch 30**, p 2
salicylic acid in food and beverages, **Ch 47**, p 27
salt, **Ch 11**, p 31
spices, **Ch 43**, p 1
starch dessert powders, **Ch 38**, pp 2–3
sugars and syrups, **Ch 44**, p 1
sweetened condensed milk, **Ch 33**, p 71
tea, **Ch 30**, p 10
vinegars, **Ch 43**, p 12
wort, **Ch 27**, p 38
- Sample treatment**
fish and marine products, **Ch 35**, p 1
- Sampling**
aflatoxins, **Ch 49**, pp 2–3
of ammoniacal solutions, **Ch 2**, pp 2–3
anhydrous ammonia, **Ch 2**, p 3
animal feeds, **Ch 4**, p 1; **Ch 5**, p 1
brewers' grains, **Ch 27**, p 41
butter, **Ch 33**, pp 3–4, 76
cereal adjuncts, **Ch 27**, p 31
cheese, **Ch 33**, p 4
condensed milk, **Ch 33**, p 3
dairy products, **Ch 33**, pp 1–2
dried milk and its products, **Ch 33**, pp 3, 71–72
drugs, **Ch 18**, p 1
eggs and egg products, **Ch 17**, p 1; **Ch 34**, p 1
evaporated milk, **Ch 33**, pp 3, 70
fertilizer-pesticide mixtures, **Ch 7**, p 1
fertilizers, **Ch 2**, pp 1–3
fruits, **Ch 37**, p 1
hops, **Ch 27**, p 34
infant formula, **Ch 50**, p 1
liming materials, **Ch 1**, p 1
malt, **Ch 27**, p 24
milk from bulk tanks and other storage equipment, **Ch 33**, pp 2–3
molasses, **Ch 44**, p 18
peat, **Ch 2**, p 52
pesticide formulations, **Ch 7**, p 1
of plants, **Ch 3**, p 1
sweetened condensed milk, **Ch 33**, p 71
wheat flour, **Ch 32**, p 1
yeast, liquid and pressed, **Ch 27**, pp 39–40
- Sand**
in chicken giblet paste, **Ch 16**, p 30
in ground pepper, **Ch 16**, p 52
in peat, **Ch 2**, p 54
in plants, **Ch 3**, p 1
- Sanitizing action**
of disinfectants, **Ch 6**, pp 24–27
- Santonica**
santonin in, **Ch 20**, p 32
- Santonin**
in drug mixtures, **Ch 20**, p 32
in santonica, **Ch 20**, p 32
- Saponification methods**
cholesterol in foods, **Ch 45**, pp 104–105
isoflavones in soy and selected foods containing soy, **Ch 45**, pp 119–121
menthol in drugs, **Ch 20**, p 31
organochlorine and organophosphorus pesticide residues, **Ch 10**, p 7
alpha-tocopherol and alpha-tocopherol acetate in foods and feeds, **Ch 45**, pp 40–42, 43
- Saponification number**
of cacao fat, **Ch 31**, p 11
of oils and fats, **Ch 41**, p 12
- Sauces**
filth in, **Ch 16**, p 40
- Sauerkraut**
filth in, **Ch 16**, p 43
- Sausage**
filth in, **Ch 16**, pp 32–33
Salmonella in, **Ch 16**, pp 8–11
water (added) in, **Ch 39**, p 2
- Savory**
filth in, **Ch 16**, pp 44–47
- Saw palmetto**
campesterol, stigmasterol, and beta-sitosterol in raw materials and dietary supplements, **Ch 51**, pp 24–27
- SCABA method**
ethanol and original gravity content in beer, **Ch 27**, pp 5–6
- Scallops**
paralytic shellfish toxins in, **Ch 49**, pp 105–116
shucked, volume of, **Ch 35**, p 6
- Schaeffer's salt**
in FD&C Red No. 40, **Ch 46**, pp 15–17
in FD&C Yellow No. 6, **Ch 46**, pp 19–21
- Scintillation spectrometric method**
tritium in water, **Ch 13**, p 1
- SD-39 agar**
E. coli O157:H7 counts in foods, **Ch 17**, pp 60–63
- Seafood**. *see also* **Fish and other marine products**
ash of, **Ch 35**, p 8
confirmed *E. coli* counts in, **Ch 17**, pp 64–65

- cooking, **Ch 35**, p 2
domoic acid in shellfish, **Ch 49**, pp 102–105
fat in, **Ch 35**, p 11
fatty acids in, **Ch 35**, pp 13–15
frozen, net contents of, **Ch 35**, pp 1–2
histamine in, **Ch 35**, pp 15–19
L. monocytogenes in, **Ch 17**, pp 232–234, 250–257
Listeria spp. in, **Ch 17**, pp 229–232, 258–262
mercury (methyl) in, **Ch 9**, pp 40–43
mussels, domoic acid in, **Ch 49**, pp 88–89
net contents of frozen seafood, **Ch 35**, pp 1–2
nitrogen in, **Ch 35**, p 8
paralytic shellfish poison, **Ch 49**, pp 86–89
paralytic shellfish poisoning toxins in shellfish, **Ch 49**, pp 89–102, 116–123
paralytic shellfish toxins in mussels, clams, oysters, and scallops, **Ch 49**, pp 105–116
potassium in, **Ch 35**, pp 10–11
S. aureus in, **Ch 17**, pp 105–106
Salmonella in, **Ch 17**, pp 216–219
salt in, **Ch 35**, pp 9–10
in seafood cocktail, **Ch 35**, p 7
sodium in, **Ch 35**, pp 10–11
solids in, **Ch 35**, p 8
trimethylamine nitrogen in, **Ch 35**, p 9
- Seafood toxins**
domoic acid in mussels, **Ch 49**, pp 88–89
domoic acid toxins in shellfish, **Ch 49**, pp 102–105
paralytic shellfish poison, **Ch 49**, pp 86–89
paralytic shellfish poisoning toxins in shellfish, **Ch 49**, pp 89–102, 116–123
paralytic shellfish toxins in mussels, clams, oysters, and scallops, **Ch 49**, pp 105–116
- Secobarbital sodium**
in drugs, **Ch 19**, p 14
- Sedative drugs**, **Ch 19**, pp 13–20
- Sediment test method**
sediment in dairy products, **Ch 16**, p 16
sediment in milk, **Ch 16**, pp 13–16
- Sedimentation methods**
capsicums, filth in, **Ch 16**, pp 47–48
coffee (ground) and coffee substitutes, filth in, **Ch 16**, pp 11–12
eggs and egg products, filth in, **Ch 16**, p 30
excreta in condiment seeds, **Ch 16**, p 49
garlic powder, filth in, **Ch 16**, p 49
maggots in blueberries and cherries, **Ch 16**, p 34
nuts (shelled), filth in, **Ch 16**, p 18
onion powder, filth in, **Ch 16**, p 49
peanut butter, filth and extraneous materials in, **Ch 16**, p 19
tea, filth in, **Ch 16**, p 12
- Sediments.** *see also* **Soils**
in dairy products, **Ch 16**, p 16
in milk, **Ch 16**, pp 13–16; **Ch 33**, p 38
- Seed disinfectants**
formaldehyde in, **Ch 7**, p 133
organic mercurial, mercury in, **Ch 7**, pp 22–23
- Seeds**
in berry fruits, **Ch 37**, pp 6–7
condimental, excreta in, **Ch 16**, p 49
condimental, filth in, **Ch 16**, pp 44–47
filth (external) in, **Ch 16**, p 19
insect infestation (internal), **Ch 16**, p 21
- Selective enrichment methods**
L. monocytogenes in milk and dairy products, **Ch 17**, pp 220–223
Salmonella in dry foods, **Ch 17**, pp 171–172
- Selective plate methods**
Salmonella in foods (HE BS SMID), **Ch 17**, pp 193–196
Salmonella in foods (HE BS XLD), **Ch 17**, pp 196–198
- Selenite cystine broth**
colorimetric polyclonal immunoassay screening method, *Salmonella* in foods, **Ch 17**, pp 153–156
- Selenium**
in feeds and premixes, **Ch 4**, pp 66–71
in fertilizers, **Ch 2**, pp 42, 50–52
in foods, **Ch 9**, pp 1–3, 43–44
in infant formula and adult nutritional products, **Ch 50**, pp 80–82
in pet foods, **Ch 3**, 25–26; **Ch 9**, pp 1–3, 43–44
in plants, **Ch 3**, pp 24–26
in solid wastes, **Ch 9**, pp 46–50
in waters and wastewaters, **Ch 9**, pp 50–60
- Self-rising flour**
ash of, **Ch 32**, p 2
carbon dioxide (total) in, **Ch 32**, p 5
- Semiautomated methods.** *see also* **Automated methods**
chlorpheniramine maleate in drug tablets, **Ch 18**, pp 19–20
ferrous sulfate in drugs, **Ch 18**, pp 12–14
fluoride in plants, **Ch 3**, pp 19–23
fluorometric methods, reserpine in drugs, **Ch 20**, pp 20–21
nitrogen (total) in plants, **Ch 3**, p 29
nitroglycerin in sublingual drug tablets, **Ch 18**, pp 39–40
prednisolone or prednisone in drugs, **Ch 21**, pp 12–13
protein (crude) in animal feed, **Ch 4**, pp 28–31
protein (crude) in pet food, **Ch 4**, pp 28–29
- Semimicro methods**
fat in fish meal, **Ch 35**, pp 12–13
- Semolina**
filth in, **Ch 16**, p 22
- Separation method**
Staphylococcal enterotoxin in foods, **Ch 17**, pp 97–98
- Serine**
in feeds, **Ch 4**, pp 9–19
- Serological confirmation**
E. coli O157:H7 counts in foods, **Ch 17**, pp 60–63
- Serological flagellar screening test**
Salmonella identification in foods, **Ch 17**, pp 134–136
- Serological tests**
Salmonella in foods, **Ch 17**, pp 141–142
- Serum**
copper in, **Ch 14**, p 2
PCBs (as Aroclor 1254) in, **Ch 10**, pp 33–35
zinc in, **Ch 14**, pp 2–3
- Sesame oil**
in oils and fats, **Ch 41**, p 54
- Shaffer-Somogyi micro method**
glucose in sugars and syrups, **Ch 44**, p 11
- Shell**
in cacao products, **Ch 31**, pp 3–9
in clams (canned), **Ch 16**, p 30
in crabmeat (canned), **Ch 16**, p 30
in oysters (canned), **Ch 16**, p 30
- Shellac**
in confectionery, **Ch 44**, p 25
- Shellfish.** *see also* **Fish and other marine products; Seafood**
C. perfringens from, **Ch 17**, pp 120–121
domoic acid in, **Ch 49**, pp 102–105
growing waters, fecal coliforms in, **Ch 17**, pp 39–41
mercury (methyl) in fish, **Ch 9**, pp 37–40
paralytic shellfish toxins in, **Ch 49**, pp 89–102, 116–123
paralytic shellfish toxins in mussels, clams, oysters, and scallops, **Ch 49**, pp 105–123
- Shigatoxin genes**
from *E. coli* O157:H7, **Ch 17**, pp 81–83
- Shortenings**
glycerides in, **Ch 41**, pp 61–62
trans isomers (isolated) in, **Ch 41**, pp 37–39
1-monoacylglycerides in, **Ch 41**, pp 60–61
polyorbate 60 in, **Ch 47**, pp 41–42
- Shrimp**
canned, filth in, **Ch 16**, p 32
frozen, drained weight of, **Ch 35**, p 6
indole in, **Ch 35**, pp 19–20, 23–25
Listeria in, **Ch 17**, pp 232–234, 241–250
Salmonella in, **Ch 16**, pp 8–11; **Ch 17**, pp 164–166, 210–212
in shrimp cocktail, **Ch 35**, p 7
- Sichert-Bleyer method**
glucose in cacao products, **Ch 31**, pp 14–15
glucose in corn syrups and sugars, **Ch 44**, p 51

Sieving methods

- cheeses, filth in, **Ch 16**, pp 17–18
- cinnamon (unground) (crude and reconditioned), filth in, **Ch 16**, p 49
- filth in tea, **Ch 16**, p 12
- flour, insect eggs in, **Ch 16**, p 24
- sauerkraut, filth in, **Ch 16**, p 43
- shell in cacao products, **Ch 31**, p 3
- sorting corn grits, **Ch 27**, p 32
- spices and condiments, foreign matter in, **Ch 16**, p 44
- starch, filth in, **Ch 16**, p 25
- tofu, filth in, **Ch 16**, pp 38–39
- wet sieving of liming materials, **Ch 1**, p 1

Sigma value method

- foam collapse rate of beer, **Ch 27**, pp 11–12

Silages

- carotenes in, **Ch 45**, pp 9–10

Silica

- in face powders, **Ch 15**, p 13
- in liming materials, **Ch 1**, pp 4–5
- in plants, **Ch 3**, p 1
- in water, **Ch 11**, pp 13–14

Silicon

- in liming materials, **Ch 1**, pp 8–9

Silicotungstic acid method

- nicotine in tobacco products, **Ch 7**, pp 68–69

Silver

- in solid wastes, **Ch 9**, pp 46–50
- in water, **Ch 11**, pp 16–17
- in waters and wastewaters, **Ch 9**, pp 50–60

Silver diethyldithiocarbamate method

- arsenic in foods, **Ch 9**, p 22

Silver nitrate

- standard solution, **App A**, p 6

Silver number

- for coconut and palm kernel oils, **Ch 31**, p 11

Silver protein

- in drugs, **Ch 18**, p 17

Silvex. see also 2,4,5-T

- in finished drinking water, **Ch 10**, pp 106–113

Simazine

- in finished drinking water, **Ch 10**, pp 41–47
- in pesticide formulations, **Ch 7**, pp 46–47

Simetryn

- in finished drinking water, **Ch 10**, pp 41–47

SimPlate Coliform and E. coli Color Indicator

- detection and confirmed quantitation of coliforms and *E. coli* in foods, **Ch 17**, pp 36–39

SimPlate Total Plate Count-Color Indicator method

- detection and quantification of total aerobic microorganisms, **Ch 17**, pp 12–16

SimPlate Yeast and Mold-Color Indicator (Y&M-CI) method

- detection and quantification of yeasts and molds in foods, **Ch 17**, pp 21–26

Single color method

- zinc in plants, **Ch 3**, pp 15–16

Single tablet assay

- progestational steroids in drugs, **Ch 21**, pp 7–8
- reserpine in drugs, **Ch 20**, pp 19–20

Site specific natural isotope

- fractionation-nuclear magnetic resonance spectrometry**
- beet or cane sugar in maple syrup, **Ch 44**, pp 42–47
- beet sugar in fruit juices, **Ch 37**, pp 27–31
- site-specific deuterium/hydrogen ratios in vanilla, **Ch 36**, pp 13–15

beta-Sitosterol

- in butter oil, **Ch 41**, pp 49–50
- in saw palmetto raw materials and dietary supplements, **Ch 51**, pp 24–27

Skim milk

- alkaline phosphatase activity, **Ch 33**, pp 45–46

Skim milk powder. see also Dried milk and its products

- alkalinity of ash, **Ch 33**, p 72
- iodine in, **Ch 33**, pp 36–38

Slag fertilizers

- mechanical analysis of, **Ch 2**, p 3

Sludges

- metals in, **Ch 9**, pp 46–50

Snack foods

- extraneous materials in, **Ch 16**, p 36

SNIF-NMR. see Site specific natural isotope fractionation-nuclear magnetic resonance spectrometry**Soaps**

- in mineral oil-soap emulsions, **Ch 7**, pp 21–22

Soda lye

- carbonate and hydroxide in, **Ch 8**, p 1

Sodium

- in baking powders, **Ch 25**, p 5
- in beer, **Ch 27**, pp 21–22
- in chloramine T pesticide formulations, **Ch 7**, p 21
- in distilled liquors, **Ch 26**, p 7
- in dried milk, **Ch 33**, pp 74–75
- in electrolyte replenishers, **Ch 18**, p 8
- in enteral products, **Ch 50**, pp 15–17
- in fertilizers, **Ch 2**, p 39
- in foods for special dietary use, **Ch 45**, p 85
- in fortified food products, **Ch 50**, pp 65–72
- in fruits and fruit products, **Ch 37**, p 8
- in infant formulas, **Ch 50**, pp 15–18
- in pet foods, **Ch 50**, pp 15–17
- in plants, **Ch 3**, pp 2–4, 12–14
- in seafood, **Ch 35**, pp 10–11
- in soaps, **Ch 7**, p 21
- in solid wastes, **Ch 9**, pp 46–50

- in water, **Ch 11**, pp 20–21
- in wines, **Ch 28**, p 9

Sodium acetate

- in color additives, **Ch 46**, p 26

Sodium acid pyrophosphate

- neutralizing value of, **Ch 25**, p 2

Sodium aluminum phosphate

- neutralizing value of, **Ch 25**, p 2

Sodium benzoate

- in carbonated beverages, **Ch 29**, pp 2–3

Sodium bicarbonate

- cinchophen with, **Ch 20**, p 26

Sodium biphenyl reduction method

- chlorine (total) in organohalogen pesticide formulations, **Ch 7**, p 71

Sodium borate

- in food, **Ch 47**, p 15

Sodium bromide

- elixir of, **Ch 18**, pp 9–10

Sodium cacodylate

- arsenic in, **Ch 18**, p 5

Sodium carbonate

- in soda lye, **Ch 8**, p 1

Sodium carbonate method

- hydrochloric acid standard solution, **App A**, pp 4–5

Sodium chloride. see also Salt

- in ash of bread, **Ch 32**, p 69
- in canned vegetables, **Ch 42**, pp 7–8
- in color additives, **Ch 46**, p 26
- in meat, **Ch 39**, p 4
- in nuts and nut products, **Ch 40**, p 2
- in seafood, **Ch 35**, pp 9–10

Sodium cyanide pesticides, Ch 7, p 18**Sodium cyclamate**

- in canned fruit, **Ch 47**, p 48
- in nonalcoholic beverages, **Ch 47**, p 48

Sodium fluorescein

- in drugs, **Ch 18**, pp 43–44

Sodium fluosilicate

- in pesticide formulations, **Ch 7**, p 7

Sodium halides

- in halogenated fluorescein colors, **Ch 46**, p 26

Sodium hydroxide

- in soda lye, **Ch 8**, p 1
- in sodium hypochlorite solution pesticide formulations, **Ch 7**, p 20
- standard solution, **App A**, p 7

Sodium hydroxide method

- hydrochloric acid standard solution, **App A**, pp 3–5

Sodium hypochlorite solutions

- pesticide formulations, **Ch 7**, p 20

Sodium lauryl sulfate

- in egg white, **Ch 47**, pp 42–43

Sodium metabisulfite

- amino acids in feeds, **Ch 4**, pp 9–13

Sodium nitrite test

- cyclohexylsulfamate salts in nonalcoholic beverages, **Ch 47**, p 48

Sodium perborate

- in cold wave hair neutralizers, **Ch 15**, pp 13–14

- Sodium peroxide method**
sulfur in plants, **Ch 3**, p 26
- Sodium saccharin**
in nonalcoholic beverages, **Ch 47**, pp 47, 55
- Sodium salicylate**
in drugs, **Ch 19**, p 10
- Sodium salt, "1080"**
residues of, **Ch 10**, pp 87–89
- Sodium sulfate**
in color additives, **Ch 46**, p 26
- Sodium TCA**
in pesticide formulations, **Ch 7**, p 103
- Sodium tetraphenylboron methods**
volumetric, potassium in fertilizers, **Ch 2**, pp 28–29
- Sodium thiosulfate**
standard solutions, **App A**, p 7
- Soft curd cheese**
gums in, **Ch 33**, p 90
- Soft drinks**
mold in, **Ch 16**, p 78
pesticide residues in, **Ch 10**, pp 116–136
- Soil acidifiers**
aluminum sulfate-type, aluminum in, **Ch 2**, p 42
- Soils**
in frozen fruits and vegetables, **Ch 16**, pp 35–36
in frozen spinach, **Ch 16**, p 42
metals in, **Ch 9**, pp 46–50
mineral, pH of, **Ch 2**, pp 56–58
munition pesticide residues in, **Ch 10**, pp 136–138
organic soils, pH of, **Ch 2**, pp 59–60
pH of, **Ch 2**, pp 56–60
saline-sodic, pH of, **Ch 2**, pp 58–59
- α -Solanine**
in potato tubers, **Ch 49**, pp 124–126
- Solid fertilizers.** see **Fertilizers**
- Solid substances**
radioactivity of, **Ch 13**, p 1
- Solid wastes**
metals in, **Ch 9**, pp 46–50
- Solids**
in baked products, **Ch 32**, p 71
in bread, **Ch 32**, p 66
in canned peas, **Ch 42**, p 4
in canned vegetables, **Ch 42**, p 4
in citrus fruit juices, **Ch 37**, p 7
in cordials and liqueurs, **Ch 26**, p 20
in cream, **Ch 33**, p 66
in eggs, **Ch 34**, p 2
in evaporated milk, **Ch 33**, p 70
in food dressings, **Ch 43**, p 8
in frozen concentrate for lemonade, **Ch 37**, p 7
in frozen peas, **Ch 42**, p 11
in frozen spinach, **Ch 42**, p 11
in fruits and fruit products, **Ch 37**, pp 6–7
in ginger extract, **Ch 36**, p 24
in ice cream and frozen desserts, **Ch 33**, p 96
in infant formula, **Ch 50**, p 18
in lemon, orange, and lime extracts, **Ch 36**, p 19
in macaroni products, **Ch 32**, p 73
in maple products, **Ch 44**, p 37
in milk, **Ch 33**, pp 10, 26–30, 39–40
in nonalcoholic beverages, **Ch 29**, p 6
not-fat in milk, **Ch 33**, p 40
in prepared mustard, **Ch 43**, p 7
in roasted coffee, **Ch 30**, p 5
in seafood, **Ch 35**, p 8
in sweetened condensed milk, **Ch 33**, p 71
in syrups, **Ch 44**, pp 1–2
in tomato products, **Ch 42**, pp 4–6
in vanilla extract, **Ch 36**, p 8
in vinegars, **Ch 43**, pp 12–13
in water, **Ch 11**, p 7
in wheat flour, **Ch 32**, p 1
in wines, **Ch 28**, p 4
in yeast, **Ch 27**, pp 40–41
- Soluble acids**
in oils and fats, **Ch 41**, p 12
- Soluble matter**
in color additives, **Ch 46**, p 26
- Solutions.** see **Standard solutions**
- Solvent extraction methods**
fat (crude) in meat and meat products, **Ch 39**, pp 3–4
- Solvents**
in drugs, **Ch 18**, pp 2–3
- Somatic cells**
in milk, **Ch 17**, pp 270–271; **Ch 33**, p 7
- Somatic grouping**
Salmonella in foods, **Ch 17**, pp 141–142
- Somatic slide or plate test**
Salmonella in foods, **Ch 17**, pp 141–142
- Sommer's table**
paralytic shellfish poison, **Ch 49**, p 87
- Somogyi micro method**
fructose in plants, **Ch 3**, p 27
- Sorbic acid**
in cheese, **Ch 47**, pp 28–29
in cottage cheese, **Ch 33**, p 91
in dairy products, **Ch 47**, p 29
in food, **Ch 47**, pp 13–14
in wines, **Ch 28**, pp 17–18
- Sorbitol**
in food, **Ch 47**, pp 46–47
in fruit juices, **Ch 37**, p 15
- Sorensen method**
nitrogen (amino) in meat, **Ch 39**, p 14
- Sound spectrographic method**
voice print identification, **Ch 24**, pp 3–4
- Sour cream**
filth in, **Ch 16**, p 16
- Soxhlet extraction method**
fat in cacao products, **Ch 31**, p 10
- Soxtec method.** See **Randall/Soxtec/ extraction-submersion method**
- Soy**
isoflavones in, **Ch 45**, pp 119–121
- Soy flour**
ash in, **Ch 32**, p 63
ether extract in, **Ch 32**, p 63
fiber (crude) in, **Ch 32**, p 63
filth in, **Ch 16**, p 25
in meat, **Ch 39**, p 17
moisture in, **Ch 32**, p 63
nitrogen in, **Ch 32**, p 63
Salmonella in, **Ch 17**, pp 144–146, 150–156, 158–163, 173–181, 193–202, 210–212
in uncooked cereal products, **Ch 32**, p 27
- Soy foods**
isoflavones in, **Ch 45**, pp 119–128
vitamin B₁₂ in fortified soya-based infant formula powder, **Ch 50**, pp 36–38
- Soy protein**
in raw and heat-processed meat products, **Ch 39**, pp 17–21
- Soy sauce**
ethyl carbamate in, **Ch 28**, pp 15–17
filth in, **Ch 16**, p 40
- Soybean oil**
peanut oil in, **Ch 41**, p 53
- Soybeans**
aflatoxins in, **Ch 49**, p 30
- Spearmint extract, Ch 36**, p 24
- Spearmint leaves**
filth in, **Ch 16**, pp 44–47
- Species identification**
beef and poultry adulteration of meat products, **Ch 39**, pp 23–24
canned Pacific salmon, **Ch 35**, pp 32–34
fish, **Ch 35**, pp 27–31
- Specific conductance**
of water, **Ch 11**, pp 1–2
- Specific gravity**
of beer, **Ch 27**, p 3
of canned vegetables, **Ch 42**, p 6
of cordials and liqueurs, **Ch 26**, p 19
of distilled liquors, **Ch 26**, p 2
of fats and oils, **Ch 41**, pp 2–3
of lemon, orange, and lime extracts, **Ch 36**, p 19
of lemon and orange oils, **Ch 36**, p 19
of milk, **Ch 33**, p 5
of molasses, **Ch 44**, p 19
of nonalcoholic beverages, **Ch 29**, p 6
of vanilla extract, **Ch 36**, p 1
of volatile oil, **Ch 43**, p 4
of water, **Ch 11**, p 1
of wines, **Ch 28**, p 1
of wort, **Ch 27**, p 38
- Specific gravity methods**
alcohol in beer, **Ch 27**, p 4
alcohol in lemon, orange, and lime extracts, **Ch 36**, p 16
fat (crude) in meat, **Ch 39**, p 2
sulfuric acid standard solution, **App A**, p 8
- Spectinomycin**
in feeds, **Ch 5**, p 78
- Spectral characterization method**
orange pulp wash and/or added water in processed Florida orange juice, **Ch 37**, pp 22–24
- Spectrofluorometric methods**
estradiol valerate in drugs, **Ch 21**, p 1
lasalocid in feeds, **Ch 5**, pp 46–47

Spectrographic methods

direct reading, metals in plants, **Ch 3**, pp 2–3

emission, metals in plants, **Ch 3**, p 2

Spectrometric methods. see also**Scintillation spectrometric method**

flame emission, sodium and potassium in dried milk, **Ch 33**, pp 74–75

site specific natural isotope

fractionation-nuclear magnetic resonance, beet or cane sugar in maple syrup, **Ch 44**, pp 42–47

site specific natural isotope

fractionation-nuclear magnetic resonance, beet sugar in fruit juices, **Ch 37**, pp 27–31

site specific natural isotope

fractionation-nuclear magnetic resonance, site-specific deuterium/hydrogen ratios in vanilla, **Ch 36**, pp 13–15

stable isotope ratio mass, sugar-beet derived syrups in frozen orange juice, **Ch 37**, pp 26–27

Spectrophotofluorometric methods

nalidixic acid in animal tissues, **Ch 23**, pp 10–11

nequinat in feeds, **Ch 5**, p 20

polycyclic aromatic hydrocarbons and benzo[a]pyrene in food, **Ch 48**, pp 3–4

reserpine-rescinnamine group alkaloids in *Rauwolfia serpentina* drugs, **Ch 20**, pp 21–22

Spectrophotometric--thin layer**chromatographic methods**

biphenyl pesticide residues in citrus fruits, **Ch 10**, pp 61–62

Spectrophotometric absorbance**characteristics**

of lemon and orange oils, **Ch 36**, p 20

Spectrophotometric enzymatic**methods**

maleic hydrazide pesticide residues, **Ch 10**, pp 85–86

Spectrophotometric methods. see also Atomic absorption**spectrophotometric****methods; Chromatographic-****spectrophotometric methods;****Infrared spectrophotometric****methods**

acenocoumarol in drugs, **Ch 19**, pp 20–22

acetaminophen in drugs, **Ch 19**, pp 7–9

2-acetylamino-5-nitrothiazole in feeds, **Ch 5**, pp 1–2

acids in hops, **Ch 27**, p 35

aklomid in feeds, **Ch 5**, pp 2–3

2-amino-5-nitrothiazole in feeds, **Ch 5**, p 4

p-aminobenzoic acid in feeds, **Ch 5**, pp 3–4

aminophylline in drugs, **Ch 19**, p 15

p-aminosalicylic acid in drugs, **Ch 19**, pp 2–3

amprolium in feeds, **Ch 5**, pp 4–5

amyl *p*-dimethylaminobenzoate in suntan preparations, **Ch 15**, p 15

ANOT residues in animal tissues, **Ch 23**, p 1

antihistamines in drugs with aspirin, phenacetin, and caffeine, **Ch 18**, pp 20–21

antimony in foods, **Ch 9**, p 22

antipyrine in drugs, **Ch 18**, pp 29–30

arprinocid in feed premixes, **Ch 5**, p 6

arsanilic acid in feeds, **Ch 5**, pp 6–7

arsenic in liver tissue, **Ch 14**, p 1

arsenic (total) residues in animal tissues, **Ch 23**, p 2

aspirin in drugs, **Ch 19**, pp 11–12

azinthos-methyl pesticide residues, **Ch 10**, pp 58–59

bendroflumethiazide in drugs, **Ch 19**, p 27

benzocaine in drugs, **Ch 18**, pp 29–30

benzoic acid in non-solid food and beverages, **Ch 47**, p 12

benztropine mesylate in drugs, **Ch 20**, pp 6–7

betaine in orange juice, **Ch 37**, p 10

bithionol in feeds, **Ch 5**, p 8

biuret in fertilizers, **Ch 2**, p 21

boric acid in caviar, **Ch 47**, pp 17–18

boron in fertilizers, **Ch 2**, p 32

butabarbital sodium in drugs, **Ch 19**, p 17

cadmium anthranilate in feeds, **Ch 5**, p 9

caffeine in nonalcoholic beverages, **Ch 29**, pp 3–4

calcium pantothenate in vitamin preparations, **Ch 45**, p 48

captan pesticide residues in fruits and vegetables, **Ch 10**, p 63

carbadox in feeds, **Ch 5**, pp 9–10

carotenes and xanthophylls in dried plant materials and mixed feeds, **Ch 45**, pp 10–11

carotenes in fresh plant materials and silages, **Ch 45**, pp 9–10

chloral hydrate in drugs, **Ch 19**, p 18

chloramben in pesticide formulations, **Ch 7**, p 81

chlorogenic acid in green coffee, **Ch 30**, p 1

p-chlorophenyl phenyl sulfone residues, **Ch 10**, pp 65–67

chlorophyll in plants, **Ch 3**, pp 32–33

codeine in drug elixirs, **Ch 20**, pp 2–3

color in spices, **Ch 43**, p 1

color of beer, **Ch 27**, p 1

color of distilled liquors, **Ch 26**, p 1

color of laboratory wort, **Ch 27**, p 28

color of raw cane sugars, **Ch 44**, p 1

coloring matter in distilled liquors, **Ch 26**, p 2

colors (synthetic) in oils and fats, **Ch 41**, pp 57–58

conjugated estrogens in drugs, **Ch 21**, p 1

dehydroacetic acid in cheese, **Ch 47**, p 19

dexamethasone phosphate in drugs, **Ch 21**, p 9

diacetylmorphine (heroin) and quinine in drug powders, **Ch 22**, p 4

dichlone residues in fruits and vegetables, **Ch 10**, pp 69–70

dichlorophene in drugs, **Ch 18**, pp 40–41

dicumarol in drugs, **Ch 19**, pp 20–22

dienestrol in drugs, **Ch 21**, p 4

diethylstilbestrol in drugs, **Ch 21**, pp 3–4

diethylstilbestrol in feeds, **Ch 5**, p 12

digitoxin in drugs, **Ch 20**, pp 27–28

digitoxosides in drugs, **Ch 20**, pp 29–30

digoxin in drugs, **Ch 20**, pp 29–30

dimetridazole in feeds, **Ch 5**, p 13

diquat in pesticide formulations, **Ch 7**, p 48

dodine pesticide residues in fruits and nuts, **Ch 10**, p 72

enzymatic, fructan (total) in foods, **Ch 44**, p 53

ephedrine in solid dosage drugs, **Ch 20**, p 10

esters in distilled liquors, **Ch 26**, pp 9–10

ethinyl estradiol in drugs, **Ch 21**, pp 1–2

ethynodiol diacetate in drugs, **Ch 21**, p 6

FD&C color additives in foods, **Ch 46**, pp 3–4

flame, sodium in fruits and fruit products, **Ch 37**, p 8

formaldehyde in maple syrup, **Ch 44**, pp 40–41

fusel oil in distilled liquors, **Ch 26**, pp 11–12

glyodin in apples and pears, **Ch 10**, p 76

griseofulvin in feeds, **Ch 5**, p 46

hexachlorocyclopentadiene in technical chlordane, **Ch 7**, p 83

hexachlorophene in deodorants, **Ch 15**, pp 9–10

hexestrol in drugs, **Ch 21**, p 5

hydralazine hydrochloride in drug tablets, **Ch 18**, pp 57–58

hydroxymethylfurfural in honey, **Ch 44**, p 32

inductively coupled plasma-optical emission, arsenic, cadmium, cobalt, chromium, lead, molybdenum, nickel, and selenium in fertilizers, **Ch 2**, pp 42, 51–52

intermediates in FD&C Blue No. 1, **Ch 46**, pp 14–15

intermediates in FD&C Red No. 40, **Ch 46**, p 15

intermediates in FD&C Yellow No. 6, **Ch 46**, p 19

iron in drugs, **Ch 18**, pp 11–12

iron in wheat flour, **Ch 32**, pp 2–4

isoniazid in drugs, **Ch 19**, pp 2–3

lactic acid in canned vegetables, **Ch 42**, p 9

- lactic acid in fruits and fruit products, **Ch 37**, p 14
- lactic acid in milk and milk products, **Ch 33**, pp 8–10
- lactose in milk, **Ch 33**, pp 59–62
- lysergic acid diethylamide in drug powders, **Ch 22**, p 5
- mannitol hexanitrate in drugs, **Ch 18**, pp 36–37
- menadione sodium bisulfite in drugs, **Ch 19**, p 23
- mephentermine sulfate in drugs, **Ch 18**, pp 18–19
- mestranol in drugs, **Ch 21**, pp 5–6
- methapyrilene in expectorants, **Ch 18**, p 19
- methyl salicylate in drugs, **Ch 19**, p 5
- cis*, *cis*-methylene interrupted polyunsaturated fatty acids in oils, **Ch 41**, p 33
- molybdovanadophosphate, phosphorus (available) in fertilizers, **Ch 2**, p 11
- molybdovanadophosphate, phosphorus (citrate-insoluble) in fertilizers, **Ch 2**, p 10
- molybdovanadophosphate, phosphorus (total) in fertilizers, **Ch 2**, p 6
- molybdovanadophosphate, phosphorus (water-soluble) in fertilizers, **Ch 2**, p 9
- naphthyleneacetic acid residues, **Ch 10**, pp 89–90
- near-infrared, piperazine in drugs, **Ch 18**, p 44
- near-infrared, water in dried vegetables, **Ch 42**, p 10
- neostigmine methylsulfate in drugs, **Ch 20**, p 16
- neutral lactase activity in industrial enzyme preparations, **Ch 33**, p 57
- niacinamide in multivitamin preparations, **Ch 45**, p 21
- nicarbazin in feeds, **Ch 5**, pp 20–21
- nicotine in feeds, **Ch 5**, p 21
- nicotine residues, **Ch 10**, pp 90–91
- nifursol in feeds, **Ch 5**, p 22
- nitarson in feeds, **Ch 5**, p 23
- nithiazide in feeds, **Ch 5**, pp 23–24
- nitrate in baby foods, **Ch 50**, pp 12–13
- nitromide in feeds, **Ch 5**, p 25
- nitrophenide in feeds, **Ch 5**, p 25
- norepinephrine in epinephrine preparations, **Ch 18**, pp 21–22
- papain proteolytic activity, **Ch 47**, p 44
- paraquat in pesticide formulations, **Ch 7**, pp 49
- pentaerythrityl tetranitrate in drugs, **Ch 18**, p 37
- phenethylamines in drugs, **Ch 18**, p 28
- phenobarbital in drugs, **Ch 18**, pp 36–37; **Ch 19**, pp 11–12, 15–17
- phenolsulfonates in deodorants, **Ch 15**, pp 10–11
- phenothiazine in feeds, **Ch 5**, p 26
- phenprocoumon in drugs, **Ch 19**, pp 20–22
- phenylalkanolamine salts in elixirs and syrups, **Ch 18**, p 26
- phenylpropanolamine hydrochloride in drugs, **Ch 18**, p 25
- phenytoin in drugs, **Ch 19**, pp 15–16
- phenytoin sodium in drug capsules, **Ch 19**, p 17
- phosphatase in casein, **Ch 33**, p 45
- phosphorus in color additives, **Ch 46**, pp 24–25
- phosphorus in infant formulas and enteral products, **Ch 50**, pp 13–14
- phosphorus in meat and meat products, **Ch 39**, pp 4–5
- phthalic acid derivatives in color additives, **Ch 46**, p 21
- pigment in wheat flour, **Ch 32**, p 21
- piperazine in feeds, **Ch 5**, pp 26–27
- piperine in pepper preparations, **Ch 43**, pp 6–7
- piperonyl butoxide, **Ch 10**, pp 93–94
- polycyclic aromatic hydrocarbons and benzo[*a*]pyrene in food, **Ch 48**, pp 1–4
- polythiazide in drugs, **Ch 19**, p 30
- polyunsaturated acids in oils and fats, **Ch 41**, pp 16–19
- preservatives in ground beef, **Ch 47**, pp 14–15
- procainamide hydrochloride in drugs, **Ch 18**, p 32
- progestational steroids in drugs, **Ch 21**, pp 6–7
- propylthiouracil in drugs, **Ch 19**, p 31
- protein-reducing substances in milk, **Ch 33**, p 16
- pyrantel tartrate in feeds, **Ch 5**, p 27
- pyrilamine in cough syrup, **Ch 18**, p 19
- quinine in drugs, **Ch 20**, p 16
- rescinamine in drugs, **Ch 20**, pp 22–23, 25
- reserpine in drugs, **Ch 20**, pp 18–19, 22–23
- reserpine-rescinamine group alkaloids in *Rauwolfia serpentina* drugs, **Ch 20**, pp 22–23
- ronnel in feeds, **Ch 5**, pp 30–31
- roxarsone in feeds and premixes, **Ch 5**, pp 31–32
- rutin in drugs, **Ch 20**, pp 31–32
- salicylamide in drugs, **Ch 19**, pp 8–9
- sorbic acid in dairy products, **Ch 47**, p 29
- sorbic acid in wines, **Ch 28**, p 17
- subsidiary dyes in Yellow No. 5, **Ch 46**, p 21
- subsidiary dyes in Yellow No. 6, **Ch 46**, p 22
- sulfadiazine in drugs, **Ch 19**, p 25
- sulfaguandine in feeds, **Ch 5**, p 34
- sulfamerazine in drugs, **Ch 19**, p 25
- sulfamerazine in feeds, **Ch 5**, p 37
- sulfamethazine in feeds, **Ch 5**, pp 35, 37
- sulfantran in feeds, **Ch 5**, pp 35–36
- sulfaquinoxaline in feeds, **Ch 5**, pp 36–38
- sulfathiazole in feeds, **Ch 5**, p 37
- sulfonamides in feeds, **Ch 5**, p 37
- sulfoxide pesticide formulations, **Ch 7**, p 135
- tannin in distilled liquors, **Ch 26**, p 17
- terpin hydrate in drug elixirs, **Ch 20**, pp 2–3
- theobromine in drugs, **Ch 19**, pp 16–17
- thiabendazole in feed supplements and premixes, **Ch 5**, pp 39–40
- thiabendazole in feeds, **Ch 5**, pp 38–40
- thiazide drugs, **Ch 19**, pp 29–30
- thiourea in frozen peaches, **Ch 47**, pp 40–41
- thiram residues in fruits and vegetables, **Ch 10**, pp 96–99
- titanium in cheese, **Ch 9**, p 45
- 4-toluene-azo-2-naphthol-3-carboxylic acid in D&C Red Nos. 6 and 7, **Ch 46**, p 21
- total color in color additives, **Ch 46**, p 13
- trisulfapyrimidines in drugs, **Ch 19**, p 24
- uric acid in flour, **Ch 16**, pp 70–71
- vitamin A in margarine, **Ch 45**, pp 1–3
- warfarin in rodenticide formulations, **Ch 7**, p 135
- warfarin potassium in drugs, **Ch 19**, pp 20–22
- warfarin sodium in drugs, **Ch 19**, pp 20–22
- zoalene in animal tissues, **Ch 23**, pp 19–20
- zoalene in feeds, **Ch 5**, p 40
- Spectrophotometric molybdovanadate method**
phosphorus in fruits and fruit products, **Ch 37**, pp 8–9
- Spectrophotometric-steam distillation method**
furfural in distilled liquors, **Ch 26**, p 14
- Spectroscopic methods. see also**
Ultraviolet spectroscopic methods
emission, boric acid in food, **Ch 47**, pp 18–19
- inductively coupled plasma, metals and other elements in plants and pet foods, **Ch 3**, pp 6–7
- inductively coupled plasma emission, minerals in infant formula, **Ch 50**, pp 17–18
- mid-infrared, fat, lactose, protein, and solids in milk, **Ch 33**, pp 26–30
- mid-infrared, protein in milk, **Ch 33**, p 15
- near-infrared, protein in wheat, **Ch 32**, pp 50–54
- near-infrared reflectance, fiber (acid detergent) in forage, **Ch 4**, pp 32–33
- near-infrared reflectance, moisture in forage, **Ch 4**, pp 2–4
- near-infrared reflectance, protein (crude) in forage, **Ch 4**, pp 32–33
- strontium in water, **Ch 11**, pp 15–16

Spicer-Edwards flagellar test tube test

Salmonella in foods, **Ch 17**, pp 141–142

Spices and other condiments

adulterants in, **Ch 43**, pp 5–6

afatoxins and ochratoxin A in ginseng and ginger, **Ch 49**, pp 43–47

alcohol extract of, **Ch 43**, p 2

allspice, filth in, **Ch 16**, pp 44–47

annatto, filth in, **Ch 16**, pp 44–47

ash of spices, **Ch 43**, p 2

black pepper, filth in, **Ch 16**, pp 44–47, 52

capsaicinoids in capsicums and their extractives, **Ch 43**, pp 14–15

capsicums, filth in, **Ch 16**, pp 44–48

cardamon, filth in, **Ch 16**, p 48

celery seed, filth in, **Ch 16**, pp 44–48

cinnamon, filth in, **Ch 16**, pp 44–49

color (extractable) in spices, **Ch 43**, p 1

condiment seeds, excreta (rodent and insect) in, **Ch 16**, p 49

condiment seeds, filth in, **Ch 16**, pp 44–47

copper-reducing substances in, **Ch 43**, p 2

coriander, filth in, **Ch 16**, pp 44–48

dressings, filth in, **Ch 16**, p 53

ethylene dichloride and trichloroethylene in spice oleoresins, **Ch 47**, p 56

extraneous materials in, **Ch 16**, pp 44–53

fiber (crude) in, **Ch 43**, p 3

filth in, **Ch 16**, pp 40, 44–53

filth in fish products containing spice, **Ch 16**, p 31

food dressings, **Ch 43**, pp 8–12

garlic powder, filth in, **Ch 16**, pp 44–47, 49

ginger, filth in, **Ch 16**, pp 44–48

horseradish (prepared), filth in, **Ch 16**, p 53

leaves of alfalfa, papaya, peppermint, and spearmint, filth in, **Ch 16**, p 47

marjoram, filth in, **Ch 16**, pp 44–47, 50–51

methylene chloride extract of, **Ch 43**, p 2

moisture in, **Ch 43**, pp 1–2

mold in, **Ch 16**, p 76

mustard (prepared), filth in, **Ch 16**, p 53

nitrogen in, **Ch 43**, p 2

nitrogen in nonvolatile ether extract of pepper, **Ch 43**, p 2

nutmeg, filth in, **Ch 16**, pp 44–47, 51

onion powder, filth in, **Ch 16**, p 49

oregano, filth in, **Ch 16**, pp 44–47, 51

paprika, filth in, **Ch 16**, pp 44–47, 51–52

pepper, filth in, **Ch 16**, p 52

pepper sauce, filth in, **Ch 16**, p 52

peppers, filth in, **Ch 16**, p 52

pickles, filth in, **Ch 16**, pp 52–53

piperine in pepper preparations, **Ch 43**, pp 6–7

prepared mustard, **Ch 43**, pp 7–8

sage, filth in, **Ch 16**, pp 44–47, 49–50

sample preparation, **Ch 43**, p 1

sauces containing spices, filth in, **Ch 16**, p 40

starch in, **Ch 43**, p 3

tamarind pulp, filth in, **Ch 16**, p 53

tannin in cloves and allspice, **Ch 43**, p 3

vinegars, **Ch 43**, pp 12–14

volatile oil in mustard seed, **Ch 43**, p 5

volatile oil in spices, **Ch 43**, pp 3–5

white pepper, filth in, **Ch 16**, pp 44–48, 52

Spinach

carbaryl pesticide residues in, **Ch 10**, p 65

ethylenethiourea pesticide residues in, **Ch 10**, pp 74–76

nicotine residues, **Ch 10**, pp 90–91

Salmonella in, **Ch 16**, pp 8–11

soil in frozen products, **Ch 16**, p 42

solids (total) in frozen products, **Ch 42**, p 11

Spindle method

solids in syrups, **Ch 44**, pp 2–3

Spiral plate method

bacteria in foods and cosmetics, **Ch 17**, pp 6–7

Spiral vessel count

of cacao products, **Ch 31**, pp 5–7

Spirits, Ch 26, pp 1–19**Spirulina powders and tablets**

filth in, **Ch 16**, pp 54–55

Sporeforming organisms

in low-acid canned foods, **Ch 17**, pp 113–114

Spores

of thermophilic bacteria in sugars, **Ch 17**, pp 112–113

in tomato products, **Ch 16**, p 80

Sporicidal activity

of disinfectants, **Ch 6**, pp 32–37, 44–47

Sports drinks

pesticide residues in, **Ch 10**, pp 116–136

Spot test identification

gums in drugs, **Ch 20**, p 33

Squalene

in oils and fats, **Ch 41**, pp 45–46

Stable isotope ratio mass spectrometric method

sugar-beet derived syrups in frozen orange juice, **Ch 37**, pp 26–27

Stahl microbiological agar diffusion assay

neomycin in feeds, **Ch 5**, pp 74–75

Stakeholder Panel on Infant Formula and Adult Nutritionals

AOAC recommended guidelines for stakeholder panel on infant formula and adult nutritionals (SPIFAN) single-laboratory validation, **App L**

Standard method performance requirements, p xxvii

antioxidant activity in foods, beverages, food ingredients, and dietary supplements, lv

drug residues in shrimp, tilapia, catfish, and salmon, p xxviii

Bacillus anthracis in aerosol collection filters and/or liquids, p xxxvi

Bacillus anthracis spores in visible powders, p xl

chromium, molybdenum, and selenium in infant formula and adult/pediatric nutritional formula, p liii

estrone in freshwater, p xlvi

folate in infant formula and adult/pediatric nutritional formula, p l

Francisella tularensis in aerosol collection filters and/or liquids, p xxix

guidelines for standard method performance requirements, **App F**

myo-inositol in infant formula and adult/pediatric nutritional formula, p li

nucleotides in infant formula and adult/pediatric nutritional formula, p lii

ricin in visible powders, p xlii

vitamin A in infant formula and adult/pediatric nutritional formula, p xlvii

vitamin B₁₂ in infant formula and adult/pediatric nutritional formula, p xlix

vitamin D in infant formula and adult/pediatric nutritional formula, p xlvi

vitamin E in infant formula and adult/pediatric nutritional formula, p liv

Yersinia pestis in aerosol collection filters and/or liquids, p xxxii

Standard reference color method

color of beer, **Ch 27**, p 1

Standard solutions

ammonium thiocyanate, **App A**, p 1

arsenious oxide, **App A**, p 2

buffer solutions for calibration of pH equipment, **App A**, pp 2–3

buffers and indicators for colorimetric pH comparisons, **App A**, p 3

elements, **Ch 3**, pp 2–4

hydrochloric acid, **App A**, pp 3–5

iodine, **App A**, p 5

and materials, **App A**, p 1

potassium bromide-bromate, **App A**, p 5

potassium dichromate, **App A**, pp 5–6

potassium permanganate, **App A**, p 6

potassium thiocyanate, **App A**, p 1

silver nitrate, **App A**, p 6

sodium hydroxide, **App A**, p 7

sodium thiosulfate, **App A**, p 7

sulfuric acid, **App A**, p 8

titanium trichloride, **App A**, p 8

Standards

for aflatoxins, **Ch 49**, pp 3–5

procedures and guidelines for the use of AOAC voluntary consensus standards to evaluate characteristics of a method of analysis, **App G**

Staphylococcus

biochemical identification methods, **Ch 17**, pp 280–282

enterotoxin in foods, **Ch 17**, pp 90–98, 106–109

- hemolytic, incidence in eggs and egg products, **Ch 17**, p 3
microbiological methods, **Ch 17**, pp 4–5
- Staphylococcus aureus**
in dairy foods, enumeration of, **Ch 17**, pp 104–105
in foods, **Ch 17**, pp 89–90
isolated from foods, **Ch 17**, pp 98–99
in meat, seafood, and poultry, enumeration of, **Ch 17**, pp 105–106
in processed and prepared foods, enumeration of, **Ch 17**, pp 101–103
in selected foods, rapid enumeration of, **Ch 17**, pp 99–101
testing disinfectants against, **Ch 6**, pp 3, 13–18
- Starch**
in animal feed, **Ch 4**, pp 57–59
in baking powders, **Ch 25**, pp 3–4
in beer, **Ch 27**, p 8
in brewing sugars and syrups, **Ch 27**, p 37
in cacao products, **Ch 31**, pp 15–16
in cereals and cereal products, **Ch 32**, pp 55–58
in condensed or dried milk products, **Ch 4**, p 59
in confectionery, **Ch 44**, p 24
dessert powders, **Ch 38**, pp 2–3
in face powders, **Ch 15**, p 13
filth in, **Ch 16**, p 25
in food dressings, **Ch 43**, pp 11–12
in fruits and fruit products, **Ch 37**, p 18
high fructose starch syrup in honey, **Ch 44**, pp 32–33
in meat, **Ch 39**, pp 22–23
in peanut butter, **Ch 40**, pp 2–3
in plants, **Ch 3**, p 29
in prepared mustard, **Ch 43**, pp 7–8
resistant, in starch and plant materials, **Ch 45**, pp 128–130
in roasted coffee, **Ch 30**, p 5
in spices, **Ch 43**, p 3
in wheat flour, **Ch 32**, p 18
- Starch gel-zone electrophoresis method**
identification of fish species, **Ch 35**, pp 27–28
- Starchy flour**
in meat, **Ch 39**, p 17
- Steam distillation methods**
acidity of fruit products, **Ch 37**, p 11
essential oil in hops and hop pellets, **Ch 27**, pp 35–36
lemon and orange oil residue, **Ch 36**, p 20
oils of lemon, orange, or lime in oil base flavors, **Ch 36**, pp 17–18
protein (crude) in animal feed, forage (plant tissue), grain, and oilseeds, **Ch 4**, pp 34–36
- Steam distillation-spectrophotometric method**
furfural in distilled liquors, **Ch 26**, p 14
- Stearic acid**
in face powders, **Ch 15**, pp 11–12
- Steinhoff methods**
glucose in corn syrups and sugars, **Ch 44**, p 51
- Stereochemical composition**
amphetamine drugs, **Ch 18**, p 27
- Sterigmatocystin**
in barley and wheat, **Ch 49**, pp 81–82
- Sterility, commercial**
of canned, low-acid foods, **Ch 17**, pp 110–114
- Steroids**
adrenocortico, **Ch 21**, pp 8–14
progestational, **Ch 21**, pp 6–8
- Sterol acetate melting point method**
vegetable fats in butterfat, **Ch 41**, pp 47–48
- Sterols**
in baked products, **Ch 32**, p 72
in bread, **Ch 32**, p 70
in macaroni products, **Ch 32**, pp 74–75
- Stigmasterol**
in saw palmetto raw materials and dietary supplements, **Ch 51**, pp 24–27
- Stirofos**
in finished drinking water, **Ch 10**, pp 41–47
- Stone cell and group count**
of cacao products, **Ch 31**, pp 7–9
- Stramonium alkaloids**
in drug ointments, **Ch 20**, p 6
- Strawberries**
dodine pesticide residues in, **Ch 10**, p 72
mold in frozen products, **Ch 16**, p 75
organochlorine pesticide residues in, **Ch 10**, pp 10–12
organophosphorus pesticide residues in, **Ch 10**, pp 10–12, 36–39
thiram residues in, **Ch 10**, pp 96–99
- Streamlined enzymatic methods**
beta-D-glucan in oats, **Ch 32**, pp 64–66
- Streptococci**
incidence in eggs and egg products, **Ch 17**, p 3
- Streptomycin**
in feeds, **Ch 5**, pp 78–79
in milk, **Ch 33**, pp 50–52
- Strontium**
in plants, **Ch 3**, p 2–3
in water, **Ch 11**, pp 15–16
- Strontium-89**
in milk, **Ch 13**, pp 3–6
- Strontium-90**
in milk, **Ch 13**, pp 3–6
in water, **Ch 13**, pp 1–3
- Strychnine**
in drug tablets, **Ch 20**, p 26
in drugs, **Ch 20**, pp 16–17
in liquid drug preparations, **Ch 20**, p 26
- Sublimation method**
saccharin in food, **Ch 47**, p 55
- Sublingual drug tablets**
nitroglycerin in, **Ch 18**, pp 39–40
- Submersion methods**
fat (crude) in meat and meat products, **Ch 39**, pp 3–4
- Randall/Soxtec/extraction, fat (crude) in feeds, cereal grains, and forages, **Ch 4**, pp 41–44
- Subsidiary dyes**
in color additives, **Ch 46**, pp 21–22
- Substrate supporting disc method**
confirmed total coliforms and *E. coli* in all foods, **Ch 17**, pp 41–43
- Succinic acid**
in eggs, **Ch 34**, pp 7–10
- Suckling mouse assay**
E. coli enterotoxins, **Ch 17**, pp 76–78
- Sucrose**
in animal feed, **Ch 4**, pp 56–57
in cacao products, **Ch 31**, p 13
in cane and beet final molasses, **Ch 44**, pp 21–23
in confectionery, **Ch 44**, p 24
in cordials and liqueurs, **Ch 26**, p 21
in eggs, **Ch 34**, pp 5–6
in food dressings, **Ch 43**, p 9
in fruit juices, **Ch 37**, p 15
in fruits and fruit products, **Ch 37**, p 18
in gelatin, **Ch 38**, p 2
in honey, **Ch 44**, pp 28–32
in lemon, orange, and lime extracts, **Ch 36**, p 19
in maple products, **Ch 44**, p 38
in milk chocolate, **Ch 31**, p 13
in molasses, **Ch 44**, p 19
in nonalcoholic beverages, **Ch 29**, p 6
in nuts and nut products, **Ch 40**, p 2
in plants, **Ch 3**, p 28
in presweetened cereals, **Ch 32**, pp 62–63
in starch dessert powders, **Ch 38**, p 3
in sugar beets, **Ch 44**, pp 47–48
in sugars and syrups, **Ch 44**, pp 4–8
in sweetened condensed milk, **Ch 33**, p 71
in vanilla extract, **Ch 36**, p 8
in wheat flour, **Ch 32**, pp 12–14
in wines, **Ch 28**, p 5
- Sugar beets**
sucrose in, **Ch 44**, pp 47–48
- Sugar inversion methods**
glucose and sucrose in eggs, **Ch 34**, pp 5–6
nonsugar solids in wines, **Ch 28**, p 4
- Sugars and sugar products.** *see also specific sugars*
in animal feed, (total), **Ch 4**, p 56
arabinose in sugars and syrups, **Ch 44**, p 15
ash of sugars and syrups, **Ch 44**, p 3
in baked products, **Ch 32**, p 72
in beer, (reducing), **Ch 27**, p 7
beet or cane sugar in maple syrups, **Ch 44**, pp 42–47
beet sugar in fruit juices, **Ch 37**, pp 27–31
in bread, **Ch 32**, p 70
brewing sugars and syrups, **Ch 27**, p 38
in canned vegetables, **Ch 42**, p 8
color of raw cane sugars, **Ch 44**, p 1
confectionery, **Ch 44**, pp 24–25

- corn syrup in sugars and syrups, **Ch 44**, p 8
- corn syrups and other starch derived sweeteners, **Ch 44**, pp 48–53
- dextran in raw cane sugar, **Ch 44**, pp 16–18
- extraneous materials in, **Ch 16**, pp 36–37
- in food dressings, **Ch 43**, p 9
- fructose in raw cane sugar, **Ch 44**, pp 12–15
- fructose in sugars and syrups, **Ch 44**, pp 11–12
- fruit content of frozen fruit-sugar mixtures, **Ch 37**, p 2
- galactose in sugars and syrups, **Ch 44**, p 15
- glucose in raw cane sugar, **Ch 44**, pp 12–15
- glucose in sugars and syrups, **Ch 44**, pp 8, 10–11
- in honey, **Ch 44**, pp 28–36
- invert sugar in sugars and syrups, **Ch 44**, pp 9–10
- lactose in sugars and syrups, **Ch 44**, p 15
- lead in syrups, **Ch 9**, pp 33–35
- in licorice extracts, **Ch 36**, p 29
- maltose in sugars and syrups, **Ch 44**, p 15
- maple, sap, maple syrup, and maple syrup products, **Ch 44**, pp 37–47
- moisture in sugars, **Ch 44**, p 1
- molasses and molasses products, **Ch 44**, pp 18–23
- nitrogen in sugars and syrups, **Ch 44**, pp 3–4
- in nonalcoholic beverages, **Ch 29**, p 6
- plant sugars (C-4) in honey, **Ch 44**, pp 33–36
- in plants, **Ch 3**, pp 26–28
- purity of lactose, **Ch 44**, p 16
- raffinose in sugars and syrups, **Ch 44**, pp 7–8
- reducing sugars in confectionery, **Ch 44**, p 24
- reducing sugars in corn syrups and sugars, **Ch 44**, p 51
- reducing sugars in fruits and fruit products, **Ch 37**, p 18
- reducing sugars in honey, **Ch 44**, p 28
- reducing sugars in maple products, **Ch 44**, p 38
- reducing sugars in nuts and nut products, **Ch 40**, p 2
- reducing sugars in wines, **Ch 28**, pp 4–5
- in roasted coffee, **Ch 30**, p 5
- sample preparation, **Ch 44**, p 1
- solids in syrups, **Ch 44**, pp 1–2
- sucrose in sugars and syrups, **Ch 44**, pp 4–8
- sugar-beet-derived syrups in frozen concentrated orange juice, **Ch 37**, pp 26–27
- sugar beets, **Ch 44**, pp 47–48
- sugars and syrups, **Ch 44**, pp 1–18
- sugars in cane and beet final molasses, **Ch 44**, pp 21–23
- sugars (total) in molasses as invert sugar, **Ch 44**, pp 19–20
- thermophilic bacterial spores in, **Ch 17**, pp 112–113
- in vinegar, **Ch 43**, p 12
- in wheat flour, **Ch 32**, pp 12–14
- in wort, **Ch 27**, p 39
- xylose in sugars and syrups, **Ch 44**, p 15
- Sulfabromomethazine**
in animal tissues, **Ch 23**, pp 18–19
- Sulfachloropyridazine**
in raw bovine milk, **Ch 23**, pp 15–18
- Sulfadiazine**
in drugs, **Ch 19**, pp 24–25
in raw bovine milk, **Ch 23**, pp 15–18
- Sulfadimethoxine**
in animal tissues, **Ch 23**, pp 18–19
in feeds, **Ch 5**, pp 33–34
in raw bovine milk, **Ch 23**, pp 14–18
- Sulfaguandine**
in feeds, **Ch 5**, p 34
- Sulfamerazine**
in drugs, **Ch 19**, pp 24–25
in feeds, **Ch 5**, pp 37–38
in raw bovine milk, **Ch 23**, pp 15–18
- Sulfamethazine**
in animal tissues, **Ch 23**, pp 18–19
in drugs, **Ch 19**, pp 24–25
in feeds, **Ch 5**, pp 35, 37–38, 40–44
in milk, **Ch 33**, pp 50–52
in raw bovine milk, **Ch 23**, pp 14–18
in swine tissues, **Ch 23**, pp 11–14
- Sulfamethoxazole**
in drug tablets, **Ch 19**, pp 25–26
in milk, **Ch 33**, pp 50–52
- Sulfanilamide**
in drugs, **Ch 19**, p 25
- Sulfanilic acid**
in FD&C Yellow No. 5, **Ch 46**, pp 17–18
in FD&C Yellow No. 6, **Ch 46**, pp 19–21
- Sulfanitran**
in feeds, **Ch 5**, pp 35–36
- Sulfapyridine**
in animal tissues, **Ch 23**, pp 18–19
in raw bovine milk, **Ch 23**, pp 15–18
- Sulfaquinoxaline**
in animal tissues, **Ch 23**, pp 18–19
in feeds, **Ch 5**, pp 3–4, 36–38
in raw bovine milk, **Ch 23**, pp 14–18
- Sulfasoxazole**
in milk, **Ch 33**, pp 50–52
- Sulfated ash**
in color additives, **Ch 46**, p 23
- Sulfates**
in baking powders, **Ch 25**, p 5
in deodorants, **Ch 15**, p 9
in salt, **Ch 11**, p 32
in vinegars, **Ch 43**, p 13
in water, **Ch 11**, pp 23–24, 29–31
in wines, **Ch 28**, p 9
- Sulfathiazole**
in animal tissues, **Ch 23**, pp 18–19
in feeds, **Ch 5**, pp 37–38
in raw bovine milk, **Ch 23**, pp 15–18
- Sulfide sulphur**
in calcium silicate slags, **Ch 1**, p 4
- Sulfides**
in depilatory powders, **Ch 15**, p 11
in lime sulfur solutions and dry lime sulfur, **Ch 7**, p 19
- Sulfisoxazole**
in drug tablets, solutions, and ointments, **Ch 19**, p 26
- Sulfites**
in beverages, **Ch 47**, pp 35–38
in foods, **Ch 47**, pp 32–38
in meats, **Ch 47**, pp 31–32
in wines, **Ch 47**, p 37
- Sulfonamide drugs**, **Ch 19**, pp 24–26
- Sulfonamides**
in animal tissues, **Ch 23**, pp 18–19
in feeds, **Ch 5**, pp 37–38
in raw bovine milk, **Ch 23**, pp 15–18
- Sulfonated dyes**
lower, in color additives, **Ch 46**, pp 21–22
- Sulfonethylmethane**
in drugs, **Ch 19**, p 18
- Sulfonmethane**
in drugs, **Ch 19**, p 18
- Sulfonphthalein indicators**
for colorimetric pH comparisons, **App A**, p 3
- Sulfoxide pesticides**, **Ch 7**, p 135
- Sulfur**
in ash of fruit products, **Ch 37**, p 9
in color additives, **Ch 46**, p 13
in dry lime sulfur, **Ch 7**, pp 18–19
in fertilizers, **Ch 2**, p 39–40
in fruit products, **Ch 37**, p 9
in lime sulfur pesticide formulations, **Ch 7**, pp 18–19
microchemical determination, **Ch 12**, pp 10–12
in plants, **Ch 3**, p 26
- Sulfur amino acids**
in food, feed ingredients, and processed foods, **Ch 45**, p 88
- Sulfur-containing drugs**, **Ch 19**, pp 30–35
- Sulfur dioxide**
in beer, **Ch 27**, pp 15–16
in beverages, **Ch 47**, pp 35–37
in dried fruit, **Ch 47**, p 31
in food, **Ch 47**, pp 30–31, 33–37
in meat extracts and similar products, **Ch 39**, p 25
in meats, **Ch 47**, p 38
in wines, **Ch 28**, p 17, **Ch 47**, p 37
- Sulfuric acid**
drying over, moisture in animal feeds, **Ch 4**, p 2
standard solutions, **App A**, p 8
- Sulfurous acid**
in dried fruit, **Ch 47**, p 31
in food, **Ch 47**, pp 30–31
in meats, **Ch 47**, p 38
in wines, **Ch 28**, p 17
- Sulprofos**
in pesticide formulations, **Ch 7**, pp 127–128

- Sunset yellow FCF color additive**
analysis of, **Ch 46**, p 6
in foods, **Ch 46**, pp 1–2
- Suntan preparations**
amyl *p*-dimethylaminobenzoate in,
Ch 15, p 15
vanishing cream, **Ch 15**, p 16
- Supercritical fluid extraction**
pesticide residues in nonfatty foods,
Ch 10, pp 12–17
- Supercritical fluid extraction methods**
oil in oilseeds, **Ch 41**, pp 68–71
- Supplements.** *see* **Dietary supplements; Vitamins and other nutrients**
- Surface plasmon resonance**
vitamin B₁₂ in fortified bovine milk-based formula powder, fortified soya-based formula powder, vitamin premix, and dietary supplements,
Ch 50, pp 36–38
vitamin B₁₂ in infant formula and adult nutritionals, **Ch 50**, pp 75–77
- Surface plating method**
S. aureus in foods, **Ch 17**, p 90
- Sweep codistillation method**
organophosphorus pesticide residues,
Ch 10, pp 36–39
- Sweep oscillographic polarographic confirmatory method**
organophosphorus pesticide residues,
Ch 10, pp 39–40
- Sweetened condensed milk.** *see also*
Condensed milk
ash of, **Ch 33**, p 71
fat in, **Ch 33**, p 71
lactic acid in, **Ch 33**, p 71
lactose in, **Ch 33**, p 71
protein in, **Ch 33**, p 71
sample preparation, **Ch 33**, p 71
sampling, **Ch 33**, p 71
solids in, **Ch 33**, p 71
sucrose in, **Ch 33**, p 71
- Sweeteners, nonnutritive**
in nonalcoholic beverages, **Ch 47**, p 47
- SWEP**
in water, **Ch 10**, pp 99–104
- Swimming pools**
disinfectants for, **Ch 6**, pp 42–44
- Sympathomimetic drugs**
microchemical tests, **Ch 18**, pp 51–52
- Synthetic color additives.** *see* **Color additives**
- Synthetic drugs**
amitriptyline in tablets and injectables,
Ch 18, p 33
clioquinol in creams and ointments,
Ch 18, pp 35–36
dichlorophene in drugs, **Ch 18**, pp 40–41
fluorescein sodium in drugs, **Ch 18**, pp 43–44
mannitol hexanitrate in drugs, **Ch 18**, pp 36–37
meprobamate in drugs, **Ch 18**, pp 38–39
methenamine in drugs, **Ch 18**, pp 41–42
methenamine in tablets, **Ch 18**, p 41
methenamine mandelate in drugs,
Ch 18, pp 41–42
methocarbamol in drugs, **Ch 18**, pp 33–34
methylene blue in drugs, **Ch 18**, p 43
microchemical tests, **Ch 18**, pp 47, 49–51, 53
nitrate esters in drugs, **Ch 18**, pp 34–35
nitroglycerin in drugs, **Ch 18**, p 34
nitroglycerin in sublingual drug tablets,
Ch 18, pp 39–40
penicillin V potassium in tablets, **Ch 18**, p 36
pentaerythrityl tetranitrate in drugs,
Ch 18, pp 37–39
phenazopyridine hydrochloride in drugs, **Ch 18**, pp 32–33
phenobarbital in drugs, **Ch 18**, pp 36–37
piperazine in drugs, **Ch 18**, p 44
- Synthetic pyrethroids**
in agricultural products, **Ch 10**, pp 94–96
- Syrups.** *see also* **Brewing sugars and syrups; Sugars and sugar products**
carbon stable isotope ratio of ethanol derived maple syrups, **Ch 37**, pp 33–37
conductivity value of maple syrup,
Ch 44, pp 39–40
corn syrup and cane sugar in maple syrup, **Ch 44**, pp 38–39
filth in, **Ch 16**, p 37
high fructose starch syrup in honey,
Ch 44, pp 32–33
lead in, **Ch 9**, pp 33–35
malic acid in maple syrup, **Ch 44**, p 40
solids in, **Ch 44**, pp 1–2
used in confectionery, alcohol in,
Ch 44, p 25
- Syrups (drugs)**
hypophosphites in, **Ch 18**, p 10
phenylalkanolamine salts in, **Ch 18**, p 26
- 2,4,5-T**
in finished drinking water, **Ch 10**, pp 106–113
in pesticide formulations, **Ch 7**, p 102
- Tamarind pulp**
filth in, **Ch 16**, p 53
- Tankage fertilizers**
mechanical analysis of, **Ch 2**, p 3
- Tannin**
in cloves and allspice, **Ch 43**, p 3
in distilled liquors, **Ch 26**, p 17
in wines, **Ch 28**, p 12
- Tarragon**
filth in, **Ch 16**, pp 44–47
- Tartaric acid**
in baking powders, **Ch 25**, p 3
in cheese, **Ch 33**, p 88
in cordials and liqueurs, **Ch 26**, p 21
in fruits and fruit products, **Ch 37**, p 11
in nonalcoholic beverages, **Ch 29**, p 2
in tartrate powders, **Ch 25**, p 3
in wines, **Ch 28**, p 11
- Tartrate powders**
cream of tartar in, **Ch 25**, p 3
tartaric acid (free or combined) in,
Ch 25, p 3
- Tartrazine**
analysis of, **Ch 46**, p 6
in foods, **Ch 46**, pp 1–2
in macaroni products, **Ch 32**, p 76
- Taurine**
in pet food, **Ch 4**, pp 19–20
in powdered infant formula, **Ch 50**, pp 8–10
in powdered milk, **Ch 50**, pp 8–10
- TDE**
multiresidue methods, **Ch 10**, pp 1–10
- Tea**
ash in, **Ch 30**, p 10
caffeine in, **Ch 30**, pp 11–12
copper in, **Ch 9**, pp 15–16; **Ch 30**, p 12
fiber (crude) in, **Ch 30**, p 12
filth in, **Ch 16**, pp 12–13
moisture in, **Ch 30**, p 12
nickel in, **Ch 9**, pp 15–16, 43; **Ch 30**, p 12
petroleum ether extract in, **Ch 30**, p 12
protein in, **Ch 30**, p 12
sample preparation, **Ch 30**, p 10
water extract of, **Ch 30**, p 12
- Tea seed oil**
in olive oil, **Ch 41**, p 54
- Tebuconazole**
in foods, **Ch 10**, pp 17–26
in fungicide and technical formulations,
Ch 7, pp 36–37
- Tebuthiuron**
in finished drinking water, **Ch 10**, pp 41–47
- TECRA *Listeria* visual immunoassay**
Listeria in foods, **Ch 17**, pp 234–240
- TECRA *Salmonella* ULTIMA™ immunoassay**
Salmonella in foods, **Ch 17**, pp 176–181
- TECRA *Salmonella* visual immunoassay**
Salmonella in foods, **Ch 17**, pp 153–156, pp 176–181
- TECRA SET method**
polyvalent, *Staphylococcal* enterotoxins in selected foods, **Ch 17**, pp 94–97
- TECRA Unique *Salmonella* test**
Salmonella in foods, **Ch 17**, p 181
- Temephos**
in pesticide formulations, **Ch 7**, pp 128–129
- Temperature correction method**
specific gravity of oils, **Ch 41**, p 2
- TEMPO® EC method**
automated enumeration of *E. coli* in foods, **Ch 17**, pp 86–88
- TEMPO® TVC method**
total viable count in food, automated enumeration, **Ch 16**, pp 6–8
- TEPP**
in pesticide formulations, **Ch 7**, pp 129
- Terbacil**
in finished drinking water, **Ch 10**, pp 41–47

- Terbufos**
in finished drinking water, **Ch 10**, pp 41–47
- Terbuthylazine**
in pesticide formulations, **Ch 7**, pp 50–51
- Terbutryn**
in finished drinking water, **Ch 10**, pp 41–47
in pesticide formulations, **Ch 7**, p 51
- Terpin hydrate**
in drug elixirs, **Ch 20**, pp 2–3
- Tertiary butyl alcohol**
in distilled liquors, **Ch 26**, p 14
- (1-2 Test)**
motile *Salmonella* in foods, **Ch 17**, pp 164–166
- Test strips**
nitrate in forages, **Ch 14**, pp 6–7
- Tetrabromofluorescein color additive**, **Ch 46**, p 8
- Tetrachloroethylene**
in drugs, **Ch 18**, p 2
- Tetrachlorotetrabromofluorescein color additive**, **Ch 46**, p 8
- Tetracycline**
in edible animal tissues, **Ch 23**, pp 22–26
in milk, **Ch 33**, pp 50–57
- Tetradifon**
in apples and cucumbers, **Ch 10**, pp 32–33
and pesticide formulations, **Ch 7**, p 103
- 1,3,5,7-Tetranitro-1,3,5,7-tetra-terazocine**
residues in soil, **Ch 10**, pp 136–138
in wastewater and groundwater, **Ch 11**, pp 27–28
- Tetrasul**
in apples and cucumbers, **Ch 10**, pp 32–33
- Tetrathionate broth**
colorimetric polyclonal immunoassay screening method, *Salmonella* in foods, **Ch 17**, pp 153–156, 176–181
- Tetryl**. see **Methyl-2,4,6-trinitrophenyl-nitramine**
- Texas fluid sampling method**, **Ch 2**, p 2
- Thallium**
in solid wastes, **Ch 9**, pp 46–50
in waters and wastewaters, **Ch 9**, pp 50–60
- Thallosulfate**
in rodenticide formulations, **Ch 7**, p 24
- Theobromine**
in cacao products, **Ch 31**, pp 16–17
in drugs, **Ch 19**, pp 16–17
in theobromine-calcium salicylate drugs, **Ch 20**, pp 7–8
- Theophylline**
in drugs, **Ch 20**, p 8
- Thermal energy analyzer methods**
ethyl carbamate in distilled spirits, **Ch 26**, pp 18–19
N-nitrosamines in minced fish-meat and surimi-meat frankfurters, **Ch 39**, pp 12–13
N-nitrosamines (volatile) in fried bacon, **Ch 39**, pp 9–11
N-nitrosopyrrolidine in fried bacon, **Ch 39**, pp 11–12
- Thermistor cryoscope method**
freezing point of milk, **Ch 33**, pp 5–7
- Thermistor method**
water (added) in milk, **Ch 33**, pp 33–34
- Thermoelectric-vapor pressure method**
molecular weight determination, **Ch 12**, p 1
- Thermophilic bacteria**
spores in sugars, **Ch 17**, pp 112–113
- Thiabendazole**
in feed supplements and premixes, **Ch 5**, pp 39–40
in feeds, **Ch 5**, pp 38–40
in foods, **Ch 10**, pp 17–26
- Thiamine**
in foods, **Ch 45**, p 14
in grain products, **Ch 45**, p 13
in human and pet foods, **Ch 45**, pp 11–13
in milk-based infant formula, **Ch 50**, pp 10–11
- Thiamine hydrochloride**
in vitamin preparations, **Ch 45**, pp 73–74
- Thiazide drugs**, **Ch 19**, pp 27–30
- Thickeners**
sauces containing, filth in, **Ch 16**, p 40
- Thiethylperazine**
microchemical tests, **Ch 18**, pp 47, 51
- Thin layer chromatographic-spectrophotometric methods**
biphenyl pesticide residues in citrus fruits, **Ch 10**, pp 61–62
- Thin layer chromatographic methods**
aflatoxin B₁ in eggs, **Ch 49**, pp 28–30
aflatoxin M₁ in dairy products, **Ch 49**, p 47
aflatoxin M₁ in milk, **Ch 33**, p 38
aflatoxin M₁ in milk and cheese, **Ch 49**, pp 47–48
aflatoxins B₁ and M₁ in liver, **Ch 49**, pp 49–50
aflatoxins in coconut, copra, and copra meal, **Ch 49**, p 13
aflatoxins in corn, **Ch 49**, pp 15–17
aflatoxins in cottonseed products, **Ch 49**, pp 24–26
aflatoxins in green coffee, **Ch 49**, p 30
aflatoxins in peanuts and peanut products, **Ch 49**, pp 10–13, 15–17
aflatoxins in pistachio nuts, **Ch 49**, p 30
aflatoxins in soybeans, **Ch 49**, p 30
aklomid in feeds, **Ch 5**, p 3
benzoic acid in food and beverages, **Ch 47**, pp 12–13
boron in caviar, **Ch 47**, pp 15–16
chlorotoluron in pesticide formulations, **Ch 7**, pp 29–31
chloroxuron in pesticide formulations, **Ch 7**, pp 29–31
coprostanol in mammalian feces, **Ch 16**, p 69
deoxynivalenol in wheat, **Ch 32**, p 54;
Ch 49, pp 54–55
dexamethasone in drug substance and elixirs, **Ch 21**, p 10
erucic acid in oils and fats, **Ch 41**, pp 29–30
FD&C color additives in foods, **Ch 46**, pp 3–4
flavoring additives in vanilla extract, **Ch 36**, pp 10–11
high fructose starch syrup in honey, **Ch 44**, pp 32–33
hydrocortisone in drugs, **Ch 21**, pp 8–9
identification of aflatoxin B₁, **Ch 49**, pp 31–32
identification of aflatoxins, **Ch 49**, pp 5, 31–34
metoxuron in pesticide formulations, **Ch 7**, pp 29–31
nonnutritive sweeteners in nonalcoholic beverages, **Ch 47**, p 47
ochratoxin A in green coffee, **Ch 49**, p 65
ochratoxins in barley, **Ch 49**, pp 63–64
organochlorine and organophosphorus pesticide residues, **Ch 10**, pp 2, 8–10
organochlorine pesticide contamination of pesticide formulations, **Ch 7**, pp 7–8
patulin in apple juice, **Ch 49**, pp 75–76
polycyclic aromatic hydrocarbons and benzo[*a*]pyrene in food, **Ch 48**, p 3
standards for aflatoxins, **Ch 49**, pp 3–5
sterigmatocystin in barley and wheat, **Ch 49**, pp 81–82
sulfonamide residues in animal tissues, **Ch 23**, pp 18–19
sulfonamides in feeds, **Ch 5**, pp 37–38
alpha-tocopherol and alpha-tocopherol acetate in foods and feeds, **Ch 45**, pp 40–41
uric acid on foods and containers, **Ch 16**, p 70
urine stains on foods and containers, **Ch 16**, pp 63–65
zearalenone in corn, **Ch 49**, pp 82–83
- Thin layer polyacrylamide gel isoelectric focusing method**
identification of cooked and frozen crabmeat, **Ch 35**, pp 31–32
identification of fish species, **Ch 35**, pp 30–31
- Thiocarbamates**
in herbicide formulations, **Ch 7**, p 38
- Thiocyanate**
in livestock or fly sprays, **Ch 7**, pp 134–135
- Thiocyanogen number**
of oils and fats, **Ch 41**, p 12
- Thiodicarb**
in technical products and formulations, **Ch 7**, pp 38–39
- Thioglycolate solutions**
in cold permanent waves for hair, **Ch 15**, p 14

- Thiophosphorus pesticides**, **Ch 7**, pp 104–130
- Thiosulfate**
in lime sulfur solutions and dry lime sulfur, **Ch 7**, p 19
- Thiosulfate methods, volumetric.** *see* **Volumetric thiosulfate methods**
- Thiouracil**
in drugs, **Ch 19**, p 31
- Thiourea**
in frozen peaches, **Ch 47**, pp 40–41
in orange juice, **Ch 47**, pp 39–40
in orange peel, **Ch 47**, p 41
- Thiram pesticides**
formulations, **Ch 7**, pp 39–40
residues in fruits and vegetables, **Ch 10**, pp 96–99
- Thonzylamine HCl**
with aspirin, phenacetin, and caffeine in drugs, **Ch 18**, pp 20–21
- Thorium**
in waters and wastewaters, **Ch 9**, pp 50–60
- Threonine**
in feed grade amino acids and premixes, **Ch 4**, pp 20–24
in feeds, **Ch 4**, pp 9–19
- Thrips.** *see also* **Insects**
in frozen blackberries and raspberries, **Ch 16**, pp 33–34
- Thujone**
in cordials and liqueurs, **Ch 26**, p 22
- Thyme**
essential oil in extract, **Ch 36**, p 25
filth in, **Ch 16**, pp 44–47
- Thymol**
in antiseptics, **Ch 19**, p 7
in drug substance, **Ch 19**, p 6
- Thyroid drugs**, **Ch 21**, p 14
- Tin**
in foods, **Ch 9**, pp 44–45
- Titanium**
in cheese, **Ch 9**, p 45; **Ch 33**, p 85
in face powders, (total), **Ch 15**, pp 12–13
in liming materials, **Ch 1**, p 8
- Titanium dioxide**
in liming materials, **Ch 1**, p 5
- Titanium oxide**
in face powders, **Ch 15**, p 13
- Titanium trichloride**
standard solutions, **App A**, p 8
- Titer test**
for oils and fats, **Ch 41**, pp 4–5
- Titrimetric methods**
acid value of butterfat, **Ch 33**, p 77
acidity of beer, **Ch 27**, pp 6–7
acidity of brewing sugars and syrups, **Ch 27**, pp 37–38
acidity of cheese, **Ch 33**, p 86
acidity of ether extract of eggs, **Ch 34**, p 7
acidity of food dressings, **Ch 43**, p 9
acidity of honey, **Ch 44**, p 37
acidity of milk, **Ch 33**, p 7
acidity of prepared mustard, **Ch 43**, p 7
acidity of water, **Ch 11**, pp 2–3
acidity (titratable) of wines, **Ch 28**, pp 9–10
acidity (volatile) of tragacanth drugs, **Ch 20**, p 33
acids (volatile) in oils and fats, **Ch 41**, pp 14–15
aldehydes as acetaldehyde in frozen vegetables, **Ch 42**, pp 12–13
aldehydes in distilled liquors, **Ch 26**, pp 9–11
alkalinity of ash of cacao products, **Ch 31**, p 2
alkalinity of ash of dry skim milk, **Ch 33**, p 72
alkalinity of ash of wines, **Ch 28**, p 6
alkalinity of water, **Ch 11**, p 3
alkoxyl groups determination, **Ch 12**, pp 12–14
allethrin (technical) and pesticide formulations, **Ch 7**, pp 56–57
aluminum in plants, **Ch 3**, p 7
amitrole in pesticide formulations, **Ch 7**, pp 45–46
amphetamine drugs, **Ch 18**, p 27
alpha-amylase in malt, **Ch 27**, pp 30–31
arsenic in plants, **Ch 3**, p 16
arsenic in sodium cacodylate, **Ch 18**, p 5
arsenic (water-soluble) in pesticide formulations, **Ch 7**, p 3
arsenious oxide, chlorine in calcium hypochlorite and bleaching powder, **Ch 7**, p 20
arsenious oxide, sodium hypochlorite solution pesticide formulations, **Ch 7**, p 20
aspirin in drugs, **Ch 19**, p 11
barium in water, **Ch 11**, pp 19–20
benzoic acid in drugs, **Ch 19**, p 1
benzoic acid in food, **Ch 47**, pp 11–12
bicarbonate in water, **Ch 11**, p 13
boric acid in food, **Ch 47**, p 17
boron in fertilizers, **Ch 2**, pp 31–32
bromate, resorcinol in hair lotions, **Ch 15**, p 14
bromate, salicylic acid in hair lotions, **Ch 15**, p 14
calcium (acid-soluble) in fertilizers, **Ch 2**, pp 32–33
calcium in beer, **Ch 27**, pp 12–13
calcium in canned vegetables, **Ch 42**, p 6
calcium in drugs and vitamin-mineral preparations, **Ch 18**, pp 6–7
calcium in liming materials, **Ch 1**, p 6
calcium in mechanically separated poultry and beef, **Ch 39**, pp 16–17
calcium in plants, **Ch 3**, pp 7–8
calcium in vitamin preparations, **Ch 18**, pp 8–9
calcium in wheat flour, **Ch 32**, p 4
calomel in ointments, **Ch 18**, p 16
calomel in tablets, **Ch 18**, pp 16–17
carbon dioxide in wines, **Ch 28**, p 15
carbonate in soda lye, **Ch 8**, p 1
carbonate in water, **Ch 11**, p 13
carbromal in drugs, **Ch 19**, pp 13–14
Carius combustion, sulfur determination, **Ch 12**, pp 10–11
catalase in frozen vegetables, **Ch 42**, p 13
catalytic combustion, sulfur determination, **Ch 12**, p 12
cation exchange capacity for peat, **Ch 2**, p 56
caustic values for liming materials, **Ch 1**, pp 2–3
chemical oxygen demand of water, **Ch 11**, pp 6–7
chenopodium oil in drugs, **Ch 20**, p 31
chloride in distilled liquors, **Ch 26**, pp 8–9
chlorides in prepared mustard, **Ch 43**, p 7
chlorine (soluble) in animal feed, **Ch 4**, pp 61–62
cholesterol in eggs, **Ch 34**, pp 3–5
cobalamin in vitamin preparations, **Ch 45**, pp 58–59
copper in copper naphthenate pesticide formulations, **Ch 7**, p 11
dalapon (sodium salt) in pesticide formulations, **Ch 7**, p 86
diacetylmorphine (heroin) in drug tablets, **Ch 22**, p 4
diastatic power of malt, **Ch 27**, pp 29–30
2,6-dichloroindophenol, ascorbic acid in vitamin preparations and juices, **Ch 45**, pp 22–23
2,6-dichloroindophenol, vitamin C in ready-to-feed milk-based infant formula, **Ch 50**, pp 11–12
dithiodiglycolic acid in cold permanent waves, **Ch 15**, pp 14–15
dodine in pesticide formulations, **Ch 7**, p 132
esters in distilled liquors, **Ch 26**, p 9
esters in lemon oil, **Ch 36**, pp 21–22
fat acidity of grains, **Ch 32**, p 54
fatty acids and butyric acid in butter, **Ch 33**, p 80
fatty acids (free) in crude and refined oils, **Ch 41**, pp 12–13
fluorine determination, **Ch 12**, pp 6–7
folic acid in infant formula, **Ch 50**, pp 25–26
folic acid in vitamin preparations, **Ch 45**, pp 59–60
formaldehyde, nitrogen (ammoniacal) in fertilizers, **Ch 2**, p 15
guaiacol in drugs, **Ch 19**, p 4
hardness of water, **Ch 11**, pp 14–15
hexylresorcinol in drugs, **Ch 19**, p 4
hydrocyanic acid in beans, **Ch 49**, pp 123–124
hydroxide in soda lye, **Ch 8**, p 1
iodine in drugs, **Ch 18**, pp 10–11
iodine in iodized salt, **Ch 11**, p 32
iodine in ointments, **Ch 18**, p 11
iron in fertilizers, **Ch 2**, p 35
iron in plants, **Ch 3**, pp 7, 11

- iron in vitamin preparations, **Ch 18**, pp 8–9
- iron in water, **Ch 11**, p 14
- isopropanol in lemon and orange flavors, **Ch 36**, p 17
- isopropanol in lemon extracts, **Ch 36**, pp 16–17
- lactose in bread, **Ch 32**, pp 70–71
- lead number (Wichmann) of vanilla extract, **Ch 36**, p 8
- lipid phosphorus in wheat flour, **Ch 32**, pp 17–18
- macro, calcium in plants, **Ch 3**, p 7
- magnesium (acid-soluble) in fertilizers, **Ch 2**, pp 36–37
- magnesium in drugs and vitamin-mineral preparations, **Ch 18**, pp 6–7
- magnesium in liming materials, **Ch 1**, p 6
- malic acid in fruits and fruit products, **Ch 37**, p 11
- Martius Yellow in color additives, **Ch 46**, p 21
- mercurous iodide in tablets, **Ch 18**, p 17
- mercury in mercurial ointments, **Ch 18**, p 17
- mercury in ointments of mercuric nitrate, **Ch 18**, p 17
- mercury in organic mercurial seed disinfectants, **Ch 7**, pp 22–23
- methanol in vanilla extract, **Ch 36**, p 9
- methenamine in deodorants, **Ch 15**, p 10
- methenamine in tablets, **Ch 18**, p 41
- methylene blue in drugs, **Ch 18**, p 43
- micro, calcium in plants, **Ch 3**, pp 7–8
- moisture in liquid molasses, **Ch 44**, pp 18–19
- monochloroacetic acid in nonalcoholic beverages and wines, **Ch 47**, pp 22–23
- monosodium glutamate in food, **Ch 47**, pp 55–56
- neutralizing value for calcium silicate slags, **Ch 1**, pp 3–4
- neutralizing value for liming materials, **Ch 1**, pp 1–2
- neutralizing value of baking chemicals, **Ch 25**, p 2; **Ch 32**, p 27
- niacin and niacinamide in vitamin preparations, **Ch 45**, pp 60–61
- nitrites in curing preparations, **Ch 47**, p 23
- nitrogen (ammonia) in water, **Ch 11**, p 10
- nitrogen (total) in water, **Ch 11**, pp 9–10
- oil (recoverable) in fruits and fruit products, **Ch 37**, p 19
- opium alkaloids, **Ch 20**, pp 1–2
- oxygen (dissolved) in water, **Ch 11**, pp 5–6
- oxyquinoline sulfate in drugs, **Ch 19**, pp 4–5
- pamaquine in drugs, **Ch 20**, p 17
- pantothenic acid in vitamin preparations, **Ch 45**, pp 61–62
- papain proteolytic activity, **Ch 47**, pp 43–44
- permanganate oxidation number for vinegar, **Ch 43**, p 14
- peroxidase in frozen vegetables, **Ch 42**, p 14
- peroxide value of oils and fats, **Ch 41**, pp 11–12
- phenazopyridine hydrochloride in drugs, **Ch 18**, pp 32–33
- phosphorus in vitamin preparations, **Ch 18**, pp 8–9
- potentiometric, fentin in pesticide formulations, **Ch 7**, p 13
- potentiometric, quaternary ammonium compounds, **Ch 7**, p 134
- propylene glycol in vanilla extract, **Ch 36**, p 2
- protein (crude) in animal feed and pet food, **Ch 4**, p 29
- quinine ethylcarbonate in drugs, **Ch 20**, p 16
- reducing substances in molasses, **Ch 44**, p 21
- riboflavin in vitamin preparations, **Ch 45**, p 63
- salicylic acid in drugs, **Ch 19**, p 1
- salt in butter, **Ch 33**, pp 76–77
- saponification number of oils and fats, **Ch 41**, p 12
- selenium in foods, **Ch 9**, p 44
- silica in liming materials, **Ch 1**, pp 4–5
- silver protein in drugs, **Ch 18**, p 17
- sodium chloride in nuts and nut products, **Ch 40**, p 2
- sodium TCA in pesticide formulations, **Ch 7**, p 103
- squalene in oils and fats, **Ch 41**, pp 45–46
- starch in meat, **Ch 39**, pp 22–23
- starch in plants, **Ch 3**, p 29
- subsidiary dyes in Red Nos. 6 and 7, **Ch 46**, p 21
- sugars (reducing and nonreducing) in wheat flour, **Ch 32**, pp 12–14
- sulfide sulphur in calcium silicate slags, **Ch 1**, p 4
- sulfides in depilatory powders, **Ch 15**, p 11
- sulfur (thiosulfate) in lime sulfur pesticide formulations, **Ch 7**, p 19
- sulfurous acid in meats, **Ch 47**, p 38
- tannin in cloves and allspice, **Ch 43**, p 3
- tartaric acid in wines, **Ch 28**, p 11
- TEPP in pesticide formulations, **Ch 7**, pp 129
- thymol in antiseptics, **Ch 19**, p 7
- thymol in drug substance, **Ch 19**, p 6
- total color in color additives, **Ch 46**, pp 11–12
- urea in deodorants, **Ch 15**, p 11
- vitamin assays, **Ch 45**, p 57
- Volhard, chloroform or carbon tetrachloride in drugs, **Ch 18**, p 2
- Volhard, potassium bromide (effervescent) with caffeine in drugs, **Ch 18**, p 9
- TLVIA.** see **TECRA Listeria visual immunoassay**
- TNB.** see **1,3,5-Trinitrobenzene**
- TNT.** see **2,4,6-Trinitrotoluene**
- Tobacco**
- alkaloids (total as nicotine) in, **Ch 3**, pp 35–37
- chlorides in, **Ch 3**, p 34
- cigarette filler, **Ch 3**, pp 35, 39–41
- glycerol in cigarette filler and ground tobacco, **Ch 3**, p 35
- ground, **Ch 3**, p 35
- maleic hydrazide residues in dust, **Ch 10**, pp 85–86
- menthol in cigarette filler, **Ch 3**, pp 39–41
- moisture in, **Ch 3**, p 33–34
- nicotine in environmental smoke, **Ch 3**, pp 37–39
- nicotine on Cambridge filter pads, **Ch 3**, p 37
- nitrogen in, **Ch 3**, p 34
- potassium in, **Ch 3**, pp 34–35
- propylene glycol in cigarette filler and ground tobacco, **Ch 3**, p 35
- triethylene glycol in cigarette filler and ground tobacco, **Ch 3**, p 35
- Tobacco products**
- nicotine in, **Ch 7**, pp 68–69
- Tobacco smoke**
- nicotine in environmental smoke, **Ch 3**, pp 37–39
- Tocopherol**
- isomers in mixed tocopherols concentrate, **Ch 45**, pp 44–45
- α-Tocopherol**
- in foods and feeds, **Ch 45**, pp 38–41
- nomenclature rules, **Ch 45**, p 38
- all-rac-alpha-Tocopherol**
- in drugs and food or feed supplements, **Ch 45**, pp 41–43
- in milk-based infant formula, **Ch 50**, pp 4–5
- RRR-Tocopherol**
- in drugs and food or feed supplements, **Ch 45**, pp 41–43
- α-Tocopherol acetate**
- in foods and feeds, **Ch 45**, pp 38–41, 43–44
- in supplemental vitamin E concentrates, **Ch 45**, pp 45–46
- Tofu**
- filth in, **Ch 16**, pp 38–39
- Toilet preparations.** see **Flavor extracts and toilet preparations**
- Toiletries.** see also **Cosmetics**
- efficacy of preservation of non-eye area water-miscible formulations, **Ch 15**, pp 3–6
- Toluene**
- distillation with, moisture in animal feed, **Ch 4**, pp 1–2

- 4-Toluene-azo-2-naphthol-3-carboxylic acid**
in D&C Red Nos. 6 and 7, **Ch 46**, p 21
- p-Toluenesulfonamide**
residues in ice cream, **Ch 33**, pp 98–100
- Tolyfluaniid**
in foods, **Ch 10**, pp 17–26
- Tomatoes**
benzoic acid in products, **Ch 47**, p 12
calcium in canned products, **Ch 42**, p 6
canned, mold in, **Ch 16**, p 75
canned and comminuted products, filth in, **Ch 16**, pp 43–44
organochlorine and organophosphorus pesticide residues in, **Ch 10**, pp 10–12
powder, mold in, **Ch 16**, p 76
products, filth in, **Ch 16**, pp 43–44
products, mold in, **Ch 16**, p 75
rot in comminuted products, **Ch 16**, pp 79–80
sauce, mold in, **Ch 16**, p 76
solids (total) in processed products, **Ch 42**, pp 4–6
soup, mold in, **Ch 16**, p 75
specific gravity of canned products, **Ch 42**, p 6
synthetic pyrethroids in, **Ch 10**, pp 94–96
thiram residues in, **Ch 10**, pp 96–99
yeasts and spores in products, **Ch 16**, p 80
- Toney Red color additive**, **Ch 46**, p 8
- Total Plate Count-Color Indicator method**
detection and quantification of total aerobic microorganisms, **Ch 17**, pp 12–16
- Toxicity**
of aflatoxin B₁, **Ch 49**, p 34
- Toxin estimation method**
C. perfringens in foods, **Ch 17**, pp 119–120
- α-Toxin estimation method**
C. perfringens in foods, **Ch 17**, pp 119–120
- Toxins. see Natural toxins**
- 2,4,5-TP**
in finished drinking water, **Ch 10**, pp 106–113
- TPC-CI method. see Total Plate Count-Color Indicator method**
- TPTZ colorimetric method**
iron in distilled liquors, **Ch 26**, p 8
iron in wines, **Ch 28**, p 9
- Trace elements. see Metals and other elements**
- Tragacanth drugs**
acidity (volatile) of, **Ch 20**, p 33
- Trap flask method**
filth in green leafy vegetables, **Ch 16**, p 42
Wildman trap flask, **Ch 16**, p 2
- Travers method, modified**
fluorine in pesticide formulations, **Ch 7**, p 6
- Tree nut meats. see Nuts and nut products**
- Triadimefon**
in finished drinking water, **Ch 10**, pp 41–47
technical and pesticide formulations, **Ch 7**, pp 40–41
- Triamino-s-triazine**
in fertilizer mixes, **Ch 2**, pp 20–21
- Triazine**
in pesticide formulations, **Ch 7**, pp 50–52
- Trichloroethylene**
in drugs, **Ch 18**, p 3
in grain, **Ch 10**, p 50
in spice oleoresins, **Ch 47**, p 56
- Trichophyton mentagrophytes**
determining fungicidal activity of disinfectants, **Ch 6**, pp 23–24
- Tricyclazole**
in finished drinking water, **Ch 10**, pp 41–47
- Trienzyme method**
folates (total) in cereal foods, **Ch 45**, pp 68–73
folates (total) in infant formula and adult nutritionals, **Ch 50**, pp 40–44
- Triethylene glycol**
in cased cigarette cut filler, **Ch 3**, p 35
in ground tobacco, **Ch 3**, p 35
- Trifluoromazine**
microchemical tests, **Ch 18**, pp 47, 51
- Trifluralin**
in foods, **Ch 10**, pp 17–26
in pesticide formulations, **Ch 7**, pp 77–78, 104
in water, **Ch 10**, pp 27–32
- Triglycerides**
in oils and fats, **Ch 41**, pp 46–47
polymerized, in oils and fats, **Ch 41**, pp 67–68
in vegetable oils, **Ch 41**, pp 65–67
- 2,4,5-Trihydroxybutyrophenone**
in oils, fats, and butter oil, **Ch 47**, pp 2–5
- Trimethobenzamide hydrochloride**
in drugs, **Ch 18**, p 55
- Trimethylamine nitrogen**
in seafood, **Ch 35**, p 9
- 1,3,5-Trinitro-1,3,5-triazine**
residues in soil, **Ch 10**, pp 136–138
in wastewater and groundwater, **Ch 11**, pp 27–28
- 1,3,5-Trinitrobenzene**
residues in soil, **Ch 10**, pp 136–138
- 2,4,6-Trinitrotoluene**
residues in soil, **Ch 10**, pp 136–138
in wastewater and groundwater, **Ch 11**, pp 27–28
- Triple signature QFlow-JBAIDS polymerase chain reaction-National Guard Bureau Method**
Bacillus anthracis spores on filters and in liquid suspensions derived from surface swabbings, **Ch 17**, p 278
- Tripolidine HCl**
in drug combinations, **Ch 20**, pp 10–11
- Tristearin**
in lard, **Ch 41**, pp 54–55
- Trisulfapyrimidines**
in drugs, **Ch 19**, p 24
- Tritium**
in water, **Ch 13**, p 1
- Tropane alkaloid drugs**, **Ch 20**, pp 6–7
- Tryptophan**
in foods and food and feed ingredients, **Ch 45**, pp 87–88
- Tuberculocidal activity**
of disinfectants, **Ch 6**, pp 37–41
- Tuna (canned)**
cadaverine in, **Ch 35**, pp 20–23
putrescine in, **Ch 35**, pp 20–23
- Turbidimetric methods**
chlortetracycline HCl in feeds, **Ch 5**, pp 67–68
cobalamin in milk-based formula, **Ch 50**, pp 22–24
cobalamin in vitamin preparations, **Ch 45**, p 59
critical temperature of dissolution of oil from butter or margarine, **Ch 33**, p 77
fat in milk, **Ch 33**, pp 24–26
folic acid in infant formula, **Ch 50**, p 26
folic acid in vitamin preparations, **Ch 45**, p 60
monensin in feeds, **Ch 5**, pp 72–73
niacin and niacinamide in ready-to-feed milk-based infant formulas, **Ch 50**, p 21
niacin and niacinamide in vitamin preparations, **Ch 45**, p 61
pantothenic acid in milk-based infant formula, **Ch 50**, pp 26–28
pantothenic acid in vitamin preparations, **Ch 45**, p 62
riboflavin in vitamin preparations, **Ch 45**, p 63
sulfate in water, **Ch 11**, pp 23–24
vitamin assays, **Ch 45**, pp 57–58
- Turkey. see Poultry and poultry products**
- Turmeric**
filth in, **Ch 16**, pp 44–47
- Turnip greens**
filth in, **Ch 16**, pp 41–42
- Turnips**
N-methylcarbamate residues in tops, **Ch 10**, pp 51–52
- Twenty-hour method**
Reveal for *E. coli* O157:H7 test in selected foods and environmental swabs, **Ch 17**, pp 83–86
- Tylosin**
in feeds, **Ch 4**, p 73; **Ch 5**, p 79
- Ultra performance liquid chromatography/tandem mass spectrometry**
folates (total) in infant formula and adult nutritionals, **Ch 50**, pp 40–44
vitamin A in infant formula and adult nutritionals, **Ch 50**, pp 44–48

- vitamin D in infant formula and adult/pediatric nutritional formula, **Ch 50**, pp 57–59
- vitamin D₂ and vitamin D₃ in infant formula and adult nutritionals, **Ch 50**, pp 59–62
- Ultraviolet absorption method**
santonin in drug mixtures, **Ch 20**, p 32
- Ultraviolet detection**
Aconitum alkaloids in dietary supplements and raw botanical materials, **Ch 51**, pp 7–10
- aristolochic acid I in botanicals and dietary supplements potentially contaminated with aristolochic acid I, **Ch 51**, pp 27–31
- ephedrine and pseudoephedrine in botanicals and dietary supplements, **Ch 51**, pp 5–7
- hydrastine and berberine in goldenseal raw materials, extracts, and dietary supplements, **Ch 51**, pp 31–33
- isoflavones in dietary supplements, supplement ingredients, and soy foods, **Ch 45**, pp 121–128
- pesticide residues in water, **Ch 10**, pp 99–104
- vitamin A in infant formula and adult nutritionals, **Ch 50**, pp 44–48
- vitamin B₁₂ in infant formula powder and adult nutritionals, **Ch 50**, pp 48–50
- Ultraviolet light examination**
urine stains on foods and containers, **Ch 16**, pp 61–62
- Ultraviolet screening method**
vanillin in vanilla extract, **Ch 36**, pp 4–5
- Ultraviolet spectrophotometric methods**
benzaldehyde in almond extract, **Ch 36**, p 23
- caffeine in tea, **Ch 30**, pp 11–12
- polycyclic aromatic hydrocarbons and benzo[*a*]pyrene in food, **Ch 48**, p 3
- Ultraviolet spectroscopic methods**
benfluralin in pesticide formulations, **Ch 7**, p 77
- trifluralin in pesticide formulations, **Ch 7**, p 77
- gamma-Undecalactone**
in cordials and liqueurs, **Ch 26**, p 22
- in nonalcoholic beverages, **Ch 29**, p 6
- Unsaponifiable matter**
in cocoa butter, **Ch 31**, p 11
- in eggs, separation of, **Ch 34**, pp 3–4
- Unsaponifiable residue**
of macaroni products, **Ch 32**, p 74
- of oils and fats, **Ch 41**, p 45
- of wheat flour, **Ch 32**, p 18
- Unulfonated residues**
mineral oil-soap emulsions, **Ch 7**, p 22
- of mineral oils, **Ch 7**, p 21
- Uppsala method**
total dietary fiber in foods and food products, **Ch 45**, pp 105–110
- Uranine color additive**, **Ch 46**, p 9
- Uranium**
in waters and wastewaters, **Ch 9**, pp 50–60
- Uranyl acetate method**
sodium in plants, **Ch 3**, p 14
- Urea**
in animal feeds, **Ch 4**, pp 36–37
- in deodorants, **Ch 15**, p 11
- in feeds, **Ch 14**, p 5
- in fertilizers, **Ch 2**, pp 18–20
- urease test, **Ch 16**, p 61
- 2-Isopropyl-4-pentenoyl urea**
in drugs, **Ch 19**, p 18
- Urea-formaldehyde fertilizers**, **Ch 2**, pp 18–20
- Urease-bromothymol blue-agar test**
urine on grain, **Ch 16**, p 63
- Urease methods**
nitrogen (ammoniacal) in animal feed, **Ch 4**, pp 36–37
- Salmonella* identification in foods, **Ch 17**, pp 134–136
- urea in animal feed, **Ch 4**, pp 36–37
- urea in fertilizers, **Ch 2**, p 18
- urea on foods and containers, **Ch 16**, pp 61–62
- Urethane**
in distilled spirits, **Ch 26**, pp 18–19
- Uric acid**
in flour, **Ch 16**, pp 70–71
- on foods and containers, **Ch 16**, pp 69–70
- in wheat flour, **Ch 32**, p 27
- Uridine 5'-monophosphate**
in infant formula and adult nutritional formula, **Ch 50**, pp 84–86
- Urine**
ephedrine alkaloids in, **Ch 51**, pp 1–5
- on grain, **Ch 16**, p 63
- nitrogen (total) in, **Ch 14**, pp 7–10
- stains on foods and containers, **Ch 16**, pp 61–65
- Uronic acid residues**
in foods and food products, **Ch 45**, pp 105–110
- U.S. EPA-ASTM-AOAC methods**
inorganic anions in water, **Ch 11**, pp 29–31
- Use-dilution methods**
disinfectants testing, **Ch 6**, pp 6–10, 14–22
- Vacuum-desiccation methods**
water (free) in fertilizers, **Ch 2**, p 5
- Vacuum drying methods**
moisture in meat, **Ch 39**, p 1
- moisture in sugars, **Ch 44**, p 1
- Vacuum oven methods**
moisture and volatile matter in oils and fats, **Ch 41**, p 1
- moisture in roasted coffee, **Ch 30**, pp 4–5
- solids and moisture in macaroni products, **Ch 32**, p 73
- solids and moisture in wheat flour, **Ch 32**, p 1
- solids (total) in dried yeast, **Ch 27**, p 41
- solids (total) in eggs, **Ch 34**, p 2
- Valeric acid**
in bread, **Ch 32**, pp 68–69
- in seafood, **Ch 35**, pp 14–15
- Valine**
in feeds, **Ch 4**, pp 9–19
- Van Slyke method**
nitrogen (amino) in meat, **Ch 39**, p 13
- Vanadium**
in solid wastes, **Ch 9**, pp 46–50
- in waters and wastewaters, **Ch 9**, pp 50–60
- Vanilla extract and its substitutes**
alcohol in, **Ch 36**, p 1
- ash of, **Ch 36**, p 8
- color in, **Ch 36**, p 9
- coumarin in, **Ch 36**, pp 6–8
- ethyl vanillin in, **Ch 36**, pp 2–8
- flavoring additives in, **Ch 36**, pp 10–11
- glycerol in, **Ch 36**, pp 1–2
- p*-hydroxybenzaldehyde in, **Ch 36**, pp 2–4
- p*-hydroxybenzoic acid in, **Ch 36**, pp 2–4
- lead number (Wichmann) of, **Ch 36**, p 8
- methanol in, **Ch 36**, p 9
- nonvanillin vanilla volatiles in, **Ch 36**, pp 12–13
- organic acids in, **Ch 36**, pp 11–12
- plant material (foreign) in, **Ch 36**, pp 9–10
- propylene glycol in, **Ch 36**, p 2
- site-specific deuterium/hydrogen ratios, **Ch 36**, pp 13–15
- solids (total) in, **Ch 36**, p 8
- specific gravity of, **Ch 36**, p 1
- sucrose in, **Ch 36**, p 8
- vanilla resins in, **Ch 36**, p 9
- vanillic acid in, **Ch 36**, pp 2–4
- vanillin in, **Ch 36**, pp 2–8
- Vanilla resins**
in vanilla extract, **Ch 36**, p 9
- Vanillic acid**
in vanilla extract and artificial vanilla flavor, **Ch 36**, pp 2–4
- Vanillin**
in vanilla extract, **Ch 36**, pp 2–8
- Vanishing cream**
analysis of, **Ch 15**, p 16
- Vapor pressure osmometric method**
water (added) in milk, **Ch 33**, pp 34–35
- Vegetable fats**
in butterfat, **Ch 41**, pp 47–49
- Vegetable oils**
animal fats in, **Ch 41**, pp 50–52
- cis*- and *trans*-octadecenoic isomers and general fatty acid composition in hydrogenated oils, **Ch 41**, pp 33–37
- polymers and oxidation products of heated oils, **Ch 41**, p 31
- triglycerides (by partition numbers) in, **Ch 41**, pp 65–67
- Vegetable products (canned)**
acids (total) in, **Ch 42**, p 8
- ash of, **Ch 42**, p 6
- calcium in, **Ch 42**, p 6

- drained weight, **Ch 42**, p 1
field corn in mixtures of field and sweet corn, **Ch 42**, p 9
lactic acid in, **Ch 42**, p 9
oxalic acid in, **Ch 42**, pp 8–9
pH of acidified foods, **Ch 42**, pp 2–3
sample preparation, **Ch 42**, p 1
sodium chloride in, **Ch 42**, pp 7–8
solids (alcohol-insoluble) in canned peas, **Ch 42**, p 4
solids (insoluble) in, **Ch 42**, p 4
solids (soluble) in, **Ch 42**, p 4
solids (soluble) in tomato products, **Ch 42**, pp 5–6
solids (total) in, **Ch 42**, p 4
solids (total) in processed tomato products, **Ch 42**, pp 4–5
specific gravity of, **Ch 42**, p 6
sugars in, **Ch 42**, p 8
water activity of, **Ch 42**, pp 1–2
- Vegetable products (dried)**
water in, **Ch 42**, pp 9–10
- Vegetable products (frozen)**
aldehydes as acetaldehyde in, **Ch 42**, pp 12–13
catalase in, **Ch 42**, p 13
fibrous material in green beans, **Ch 42**, p 12
moisture in french-fried potatoes, **Ch 42**, p 14
net contents of food containers, **Ch 42**, p 10
peroxidase in, **Ch 42**, p 14
solids (alcohol-insoluble) in peas, **Ch 42**, p 11
solids (total) in spinach, **Ch 42**, p 11
thawing, **Ch 42**, p 10
- Vegetable tissues**
in animal feed, microscopy identification of, **Ch 4**, p 72
- Vegetables and vegetable products**
azinphos-methyl pesticide residues in, **Ch 10**, pp 58–59
bean and peas, weevils in, **Ch 16**, p 37
bean curd (dried), filth in, **Ch 16**, pp 39–40
bean paste, filth in, **Ch 16**, pp 37–38
beans, hydrocyanic acid in, **Ch 49**, pp 123–124
broccoli (canned), filth in, **Ch 16**, pp 40–41
canned and comminuted tomato products, filth in, **Ch 16**, pp 43–44
captan pesticide residues in, **Ch 10**, p 63
carbaryl residues in spinach, **Ch 10**, p 65
comminuted, mold in, **Ch 16**, pp 78–79
comminuted tomato products, rot in, **Ch 16**, pp 79–80
corn, aflatoxins in, **Ch 49**, pp 6–9, 14–24, 26–28
corn, ochratoxin A in, **Ch 49**, pp 69–71
corn, zearalenone in, **Ch 49**, pp 82–86
corn (canned, whole, and cream-style), foreign matter in, **Ch 16**, p 41
corn (cream style), mold in, **Ch 16**, p 79
dichlone residues in, **Ch 10**, pp 69–70
diquat and paraquat residues in potatoes, **Ch 10**, pp 70–72
ethylenethiourea pesticide residues in, **Ch 10**, pp 74–76
extraneous materials in, **Ch 16**, pp 37–47, 75–80
fiber (insoluble dietary), **Ch 32**, pp 5–12
flakes, filth in, **Ch 16**, pp 44–47
green leafy vegetables, filth in, **Ch 16**, pp 41–42
Listeria in, **Ch 17**, pp 234–262
maleic hydrazide residues in, **Ch 10**, pp 85–86
N-methylcarbamate insecticide and metabolite residues in potatoes, **Ch 10**, pp 55–58
N-methylcarbamate insecticide residues, **Ch 10**, pp 51–52
mold in, **Ch 16**, pp 75–80
mushrooms, filth in, **Ch 16**, pp 42–43
naphthyleneacetic acid residues in potatoes, **Ch 10**, pp 89–90
nicotine residues, **Ch 10**, pp 90–91
organochlorine pesticide residues in, **Ch 10**, pp 10–12, 32–33
organophosphorus pesticide residues, **Ch 10**, pp 35–39
organophosphorus pesticide residues in green beans, **Ch 10**, pp 10–12, 35–36
piperonyl butoxide pesticide residues in, **Ch 10**, pp 93–94
potato products (dehydrated), filth in, **Ch 16**, p 43
potato tubers, glycoalkaloids in, **Ch 49**, pp 124–126
pureed infant food, filth in, **Ch 16**, p 42
Salmonella in, **Ch 17**, pp 216–219
Salmonella in spinach, **Ch 16**, pp 8–11
sauces containing soy sauce, thickeners and spices, filth in, **Ch 16**, p 40
sauerkraut, filth in, **Ch 16**, p 43
soil in frozen products, **Ch 16**, pp 35–36
spinach (frozen), soil in, **Ch 16**, p 42
synthetic pyrethroids in, **Ch 10**, pp 94–96
thiram residues in, **Ch 10**, pp 96–99
tofu, filth in, **Ch 16**, pp 38–39
tomato powder, mold in, **Ch 16**, p 76
tomato products, mold in, **Ch 16**, p 75
tomato products, yeasts and spores in, **Ch 16**, p 80
tomato sauce, mold in, **Ch 16**, p 76
tomato soup, mold in, **Ch 16**, p 75
tomatoes (canned), mold in, **Ch 16**, p 75
total viable count in bagged lettuce, automated enumeration, **Ch 16**, pp 6–8
- Vernolate**
in finished drinking water, **Ch 10**, pp 41–47
- Veterinary analytical toxicology**
arsenic in liver tissue, **Ch 14**, p 1
cholinesterase activity in whole blood, **Ch 14**, pp 3–4
cholinesterase in blood, **Ch 14**, pp 4–5
copper in liver, **Ch 14**, pp 1–2
copper in serum, **Ch 14**, p 2
nitrate in forages, **Ch 14**, pp 5–7
nitrogen (total) in urine, **Ch 14**, pp 7–10
pesticide residues, **Ch 14**, p 5
urea in feeds, **Ch 14**, p 5
zinc in serum, **Ch 14**, pp 2–3
- Vibrio cholerae**
in oysters, **Ch 17**, pp 263–265
- Vibrio vulnificus**
identification of, **Ch 17**, pp 265–267
- VIDAS LIS assay screening method**
Listeria in foods, **Ch 17**, pp 258–259
- VIDAS Listeria monocytogenes II test**
L. monocytogenes in food, **Ch 17**, pp 256–257
- VIDAS Listeria spp. Xpress method**
Listeria in food, **Ch 17**, pp 260–262
- VIDAS Salmonella assay**
Salmonella in food, **Ch 16**, pp 8–11; **Ch 17**, pp 158–160
- VIDAS SET 2**
Staphylococcal enterotoxins in foods, **Ch 17**, pp 106–109
- Villavecchia test**
sesame oil in oils and fats, **Ch 41**, p 54
- Vinegar**
acids in, **Ch 43**, p 12
alcohol in, **Ch 43**, p 13
ash of, **Ch 43**, p 12
color in, **Ch 43**, p 13
dextrin in, **Ch 43**, p 13
glycerol in, **Ch 43**, p 13
organoleptic examination of, **Ch 43**, p 12
permanganate oxidation number, **Ch 43**, p 14
phosphorus in, **Ch 43**, p 12
polarization of, **Ch 43**, p 13
reducing substances in, **Ch 43**, pp 12–13
sample preparation, **Ch 43**, p 12
solids in, **Ch 43**, pp 12–13
sugars in, **Ch 43**, p 12
sulfates in, **Ch 43**, p 13
- Violet No. 2, Ch 46**, pp 9–10
- VIP. see Visual immunoprecipitate assay**
- Viruses**
in ground beef, **Ch 17**, p 268
poliovirus 1 in oysters, **Ch 17**, pp 268–269
- Viscometer methods**
viscosity of beer, **Ch 27**, p 3
- Viscosimeter method**
MacMichael, viscosity of acidulated flour-water suspension, **Ch 32**, pp 26–27
- Viscosity**
of acidulated flour-water suspension, **Ch 32**, pp 26–27
of beer, **Ch 27**, p 3
of fruit products, **Ch 37**, pp 3–4
of wort, **Ch 27**, p 39

Visual immunoassay

- Listeria* in foods, **Ch 17**, pp 234–240
Salmonella in foods, **Ch 17**, pp 176–181

Visual immunoprecipitate assay

- E. coli* O157:H7, in selected foods, **Ch 17**, pp 68–72
L. monocytogenes and related *Listeria* spp. in selected foods, **Ch 17**, pp 244–250
Salmonella in foods, **Ch 17**, pp 185–190

Visual methods

- haze of beer after chilling, **Ch 27**, p 2

Vitamin A

- in foods, **Ch 45**, pp 6–9, 52–55
 in fortified fluid milk, **Ch 45**, pp 3–6
 in infant formula and adult nutritionals, **Ch 50**, pp 44–48, 72–74
 in margarine, **Ch 45**, pp 1–3
 in milk, **Ch 50**, pp 1–2
 in milk-based infant formula, **Ch 50**, pp 1–3
 in mixed feeds, premixes, and human and pet foods, **Ch 45**, pp 6–9

Vitamin AD concentrates

- vitamin D in, **Ch 45**, pp 32–33

Vitamin assays, Ch 45, pp 55–58**Vitamin B₁**

- in foods, **Ch 45**, pp 11–14
 in grain products, **Ch 45**, p 13
 in human and pet foods, **Ch 45**, pp 11–13
 in milk-based infant formula, **Ch 50**, pp 10–11
 in vitamin preparations, **Ch 45**, pp 73–74

Vitamin B₂

- in foods, **Ch 45**, pp 14–17
 microbiological assays, **Ch 45**, pp 62–63
 in ready-to-feed milk-based infant formula, **Ch 50**, p 8
 in vitamin preparations, **Ch 45**, pp 14–17, 62–63

Vitamin B₆

- in food extracts, **Ch 45**, pp 66–68
 in ready-to-feed milk-based infant formulas, **Ch 50**, pp 20–21
 in reconstituted infant formula, **Ch 50**, pp 34–36

Vitamin B₁₂

- in fortified bovine milk-based formula powder, fortified soya-based formula powder, vitamin premix, and dietary supplements, **Ch 50**, pp 36–38
 in infant formula powder and adult nutritionals, **Ch 50**, pp 48–57, 72–74
 microbiological assays, **Ch 45**, pp 55–58
 in milk-based infant formulas, **Ch 50**, pp 22–24
 in vitamin preparations, **Ch 45**, pp 58–59

Vitamin C

- in food, **Ch 45**, pp 24–25
 in juices, **Ch 45**, pp 22–23

- in ready-to-feed milk-based infant formulas, **Ch 50**, pp 11–12
 in vitamin preparations, **Ch 45**, pp 22–24

Vitamin D

- in fortified milk and milkpowder, **Ch 45**, p 33
 in infant formula and adult/pediatric nutritional formula, **Ch 50**, pp 57–59
 in infant formulas and enteral products, **Ch 50**, pp 28–30
 in milk, vitamin preparations, and feed concentrates, **Ch 45**, pp 74–78
 in mixed feeds, premixes, and pet foods, **Ch 45**, pp 33–35
 in multivitamin preparations, **Ch 45**, pp 30–32
 in vitamin AD concentrates, **Ch 45**, pp 32–33
 in vitamin preparations, **Ch 45**, pp 25–32

Vitamin D₂

- in infant formula and adult nutritionals, **Ch 50**, pp 59–65
 in milk, vitamin preparations, and feed concentrates, **Ch 45**, pp 74–78
 in mixed feeds, premixes and pet foods, **Ch 45**, pp 33–35
 in multivitamin preparations, **Ch 45**, pp 30–32
 in vitamin preparations, **Ch 45**, pp 25–29

Vitamin D₃

- in infant formula and adult nutritionals, **Ch 50**, pp 59–65
 in milk, vitamin preparations, and feed concentrates, **Ch 45**, pp 74–78
 in mixed feeds, premixes and pet foods, **Ch 45**, pp 33–35
 in multivitamin preparations, **Ch 45**, pp 30–32
 in poultry feed supplements, **Ch 45**, p 78
 in ready-to-feed milk based formula, **Ch 50**, pp 5–6
 in selected foods, **Ch 45**, pp 35–37
 in vitamin preparations, **Ch 45**, pp 25–29

Vitamin E

- in drugs, **Ch 45**, pp 46–47
 in milk-based infant formula, **Ch 50**, pp 4–5
 nomenclature rules, **Ch 45**, p 38
 α -tocopherol acetate in foods and feeds, **Ch 45**, pp 38–41, 43–44
 α -tocopherol acetate in supplemental concentrates, **Ch 45**, pp 45–46
RRR- or *all-rac*- α -tocopherol in drugs and food or feed supplements, **Ch 45**, pp 41–43
 α -tocopherol in foods and feeds, **Ch 45**, pp 38–41
 tocopherol isomers in mixed tocopherols concentrate, **Ch 45**, pp 44–45

Vitamin K

- in milk and infant formulas, **Ch 50**, pp 32–34

Vitamin K₁

- in feed premixes, **Ch 45**, pp 48–49
trans-Vitamin K₁ in ready-to-feed milk-based infant formula, **Ch 50**, pp 6–8

Vitamin preparations

- amino acids in, **Ch 45**, pp 64–66
 ascorbic acid in, **Ch 45**, pp 22–24
 calcium pantothenate in, **Ch 45**, p 48
 cobalamin in, **Ch 45**, pp 58–59
 folic acid in, **Ch 45**, pp 59–60
 niacin in, **Ch 45**, pp 60–61
 niacinamide in, **Ch 45**, pp 21, 60–61
 pantothenic acid in, **Ch 45**, pp 61–62
 riboflavin in, **Ch 45**, pp 14–17, 62–63
 thiamine hydrochloride in, **Ch 45**, pp 73–74
 vitamin C in, **Ch 45**, pp 22–24
 vitamin D in, **Ch 45**, pp 25–32, 74–78
 vitamin D in multivitamin preparations, **Ch 45**, pp 30–32

Vitamins and other nutrients. see also specific vitamins and nutrients

- bioassay methods, **Ch 45**, pp 73–85
 calcium, phosphorus and iron in preparations, **Ch 18**, pp 8–9
 calcium and magnesium in preparations, **Ch 18**, pp 6–7
 chemical methods, **Ch 45**, pp 1–55
 in enriched bread, **Ch 32**, pp 69–70
 in enriched macaroni and noodle products, **Ch 32**, p 73
 microbiological methods, **Ch 45**, pp 55–73
 nutritionally related components, **Ch 45**, pp 85–136

Vitek 2 Gram-Negative method

- Salmonella*, *E. coli*, and *Enterobacteriaceae* identification, **Ch 17**, pp 279–280

Vitek 2 Gram-Positive method

- Listeria* and *Staphylococcus* spp. identification, **Ch 17**, pp 280–282

Vitek GNI+ method

- E. coli* in foods, **Ch 17**, pp 139–141
Enterobacteriaceae in foods, **Ch 17**, pp 139–141
Listeria identification, **Ch 17**, pp 226–229
Salmonella spp. in foods, **Ch 17**, pp 139–141

Vitek GPI

- Listeria* identification, **Ch 17**, pp 226–229

Voice print identification, Ch 24, pp 3–4**Volatile acids**

- in oils and fats, **Ch 41**, pp 14–15

Volatile bases

- in fish, **Ch 35**, pp 34–36

Volatile esters

- in cordials and liqueurs, **Ch 26**, p 22

Volatile matter

- in color additives, **Ch 46**, p 13
 in oils and fats, **Ch 41**, p 1

Volatile oils

- eugenol in, **Ch 43**, p 5
- in ginger, **Ch 43**, p 5
- in mustard seed, **Ch 43**, p 5
- refractive index of, **Ch 43**, p 4
- specific gravity of, **Ch 43**, p 4
- in spices, **Ch 43**, pp 3–5

Volatility

- herbicide formulations (ester forms of hormone-type), **Ch 7**, p 8

Volatilization method

- mercury in organic mercurial seed disinfectants, **Ch 7**, p 22

Volhard method

- chloride in cheese, **Ch 33**, p 84
- chloroform or carbon tetrachloride in drugs, **Ch 18**, p 2
- potassium bromide (effervescent) with caffeine in drugs, **Ch 18**, p 9
- silver nitrate standard solution, **App A**, p 6

Voltammetric methods

- cadmium and lead in foods, **Ch 9**, pp 2–5
- lead in evaporated milk, **Ch 9**, pp 30–31
- lead in fruit juice, **Ch 9**, pp 30–31

Volume weight

- of peat, **Ch 2**, pp 55–56

Volumes

- of peat, **Ch 2**, pp 54–55

Volumetric methods. see also Lane-

Eynon volumetric method

- carbon dioxide in wines, **Ch 28**, p 14
- chloride in plants, **Ch 3**, pp 17–18
- copper in fertilizers, **Ch 2**, pp 34–35
- magnesium (acid-soluble) in fertilizers, **Ch 2**, p 37
- Ofner, invert sugar in sugars and syrups, **Ch 44**, p 10
- parathion in pesticide formulations, **Ch 7**, p 122
- phosphorus in fruits and fruit products, **Ch 37**, p 8
- quinacrine hydrochloride in drugs, **Ch 20**, p 17
- salt in meat, **Ch 39**, p 4
- salt in seafood, **Ch 35**, pp 9–10
- tin in foods, **Ch 9**, p 44

Volumetric sodium tetraphenylboron method

- potassium in fertilizers, **Ch 2**, pp 28–29

Volumetric thiosulfate methods

- copper in Bordeaux mixture pesticide formulations, **Ch 7**, pp 16–17
- copper in calcium arsenate pesticide formulations, **Ch 7**, p 17
- copper in copper carbonate pesticide formulations, **Ch 7**, p 11
- copper in lead arsenate pesticide formulations, **Ch 7**, p 16
- copper in Paris Green pesticide formulations, **Ch 7**, pp 9, 16
- copper in pesticide formulations, **Ch 7**, p 4

Walnuts

- Salmonella* in, **Ch 17**, pp 212–216

Warfarin

- in rodenticide formulations, **Ch 7**, p 135

Warfarin potassium

- in drugs, **Ch 19**, pp 20–22

Warfarin sodium

- in drugs, **Ch 19**, pp 20–23

Waste, solid

- metals in, **Ch 9**, pp 46–50

Wastewater. see also Water

- anions, inorganic, **Ch 11**, pp 29–31
- bromide in, **Ch 11**, pp 29–31
- chloride in, **Ch 11**, pp 29–31
- chromium (dissolved hexavalent) in, **Ch 9**, pp 60–62
- 2,4-DNT in, **Ch 11**, pp 27–28
- fluoride in, **Ch 11**, pp 29–31
- HMX in, **Ch 11**, pp 27–28
- nitrate-N in, **Ch 11**, pp 29–31
- nitrite-N in, **Ch 11**, pp 29–31
- orthophosphate in, **Ch 11**, pp 29–31
- RDX in, **Ch 11**, pp 27–28
- sulfate in, **Ch 11**, pp 29–31
- TNT in, **Ch 11**, pp 27–28
- trace elements in, **Ch 9**, pp 50–60

Water. see also Groundwater; Moisture;

Wastewater

- acidity of, **Ch 11**, pp 2–3
- alkalinity of, **Ch 11**, p 3
- aluminum in, **Ch 11**, pp 14–15
- aminomethylphosphonic acid in environmental water, **Ch 10**, pp 77–78
- anions, inorganic, **Ch 11**, pp 29–31
- arsenic in, **Ch 11**, pp 24–25
- atrazine in, **Ch 10**, pp 47–50
- barium in, **Ch 11**, pp 19–20
- bicarbonate in, **Ch 11**, p 13
- biochemical oxygen demand of, **Ch 11**, pp 3–5
- boric acid in, **Ch 11**, pp 24–25
- bromide in, **Ch 11**, pp 24–25, 29–31
- bromine in, **Ch 11**, p 24
- cadmium in, **Ch 11**, pp 16–17
- calcium in, **Ch 11**, p 15
- carbonate in, **Ch 11**, p 13
- chemical oxygen demand of, **Ch 11**, pp 6–7
- chloride in, **Ch 11**, pp 11–12, 29–31
- chlorinated acidic pesticide residues in finished drinking water, **Ch 10**, pp 106–113
- chromium (dissolved hexavalent) in, **Ch 9**, pp 60–62
- chromium in, **Ch 11**, pp 16–17
- constituents in, reporting results, **Ch 11**, pp 25–27
- copper in, **Ch 11**, pp 16–17
- in cosmetics, **Ch 15**, pp 1–2
- 1,2-dibromo-3-chloropropane in, **Ch 10**, pp 113–116
- 1,2-dibromoethane in, **Ch 10**, pp 113–116
- disinfectants for swimming pools, **Ch 6**, pp 42–44
- in dried vegetables, **Ch 42**, p 10
- E. coli* in, **Ch 17**, p 41

ethylene thiourea residues in finished

- drinking water, **Ch 10**, pp 104–106
- in fertilizers, **Ch 2**, pp 4–5
- fluoride in, **Ch 11**, pp 12–13, 29–31
- glyphosate in environmental water, **Ch 10**, pp 77–78
- hardness of, **Ch 11**, pp 14–15
- hydrogen sulfide in, **Ch 11**, p 13
- iodide in, **Ch 11**, pp 24–25
- iodine in, **Ch 11**, p 24
- iron in, **Ch 11**, pp 14, 16–17
- lead in, **Ch 11**, pp 16–17, 25
- magnesium in, **Ch 11**, pp 16–17
- manganese in, **Ch 11**, pp 16–17, 24
- mercury in, **Ch 11**, pp 18–19
- N*-methylcarbamoyloximes and *N*-methylcarbamates in finished drinking water, **Ch 10**, pp 52–55
- nitrogen (ammonia) in, **Ch 11**, p 10
- nitrogen- and phosphorus-containing pesticide residues in finished drinking water, **Ch 10**, pp 41–47
- nitrogen (nitrate) in, **Ch 11**, pp 11, 29–31
- nitrogen (nitrite) in, **Ch 11**, pp 29–31
- nitrogen (total) in, **Ch 11**, pp 9–10
- organic carbon in, **Ch 11**, pp 7–9
- organochlorine pesticide residues in, **Ch 10**, pp 27–32
- orthophosphate in, **Ch 11**, pp 29–31
- oxygen (dissolved) in, **Ch 11**, pp 5–6
- pesticide residues in finished drinking water, **Ch 10**, pp 99–104
- pH of, **Ch 11**, p 2
- phosphorus in, **Ch 11**, pp 21–23
- potassium in, **Ch 11**, p 20
- Salmonella* in spent irrigation water, **Ch 16**, pp 8–11
- shellfish growing waters, fecal coliforms in, **Ch 17**, pp 39–41
- silica in, **Ch 11**, pp 13–14
- silver in, **Ch 11**, pp 16–17
- sodium in, **Ch 11**, pp 20–21
- solids in, **Ch 11**, p 7
- specific conductance of, **Ch 11**, pp 1–2
- specific gravity of, **Ch 11**, p 1
- strontium-90 in, **Ch 13**, pp 1–3
- strontium in, **Ch 11**, pp 15–16
- sulfate in, **Ch 11**, pp 23–24, 29–31
- total coliforms in, **Ch 17**, p 41
- trace elements in, **Ch 9**, pp 50–60
- tritium in, **Ch 13**, p 1
- zinc in, **Ch 11**, pp 16–17

Water activity

- of canned vegetables, **Ch 42**, pp 1–2

Water (added)

- in cream, **Ch 33**, p 66
- in milk, **Ch 33**, pp 30–35
- in processed Florida orange juice, **Ch 37**, pp 22–24
- in sausage, **Ch 39**, p 2

Water capacity

- of peat, **Ch 2**, pp 54–55

Water extract

- of tea, **Ch 30**, p 12

Water-holding capacity

- of peat, **Ch 2**, pp 55–56

- Water-insoluble inorganic residue**
in peanut butter, **Ch 16**, p 19
- Water-insoluble matter**
in salt, **Ch 11**, p 31
- Water saturation**
of peat, **Ch 2**, pp 55–56
- Water volume.** *see* **Volume**
- Weevils**
in beans and peas, **Ch 16**, p 37
- Weight, drained**
of canned vegetables, **Ch 42**, p 1
- Weight (apparent) per unit volume**
of fats and oils, **Ch 41**, pp 2–3
- Wet ashing methods**
calcium in animal feed, **Ch 4**, p 61
lipids and lipid phosphorus in eggs,
Ch 34, p 3
- Wet-digestion method**
potassium in fertilizers, **Ch 2**, p 23
- Wet sieving**
liming materials, **Ch 1**, p 1
- Wheat**
deoxynivalenol in, **Ch 32**, p 54; **Ch 49**,
pp 54–56
filth in, **Ch 16**, p 21
insect infestation (internal), **Ch 16**,
pp 19–20
piperonyl butoxide pesticide residues
in, **Ch 10**, pp 93–94
protein in, **Ch 32**, pp 50–54
sterigmatocystin in, **Ch 49**, pp 81–82
synthetic pyrethroids in, **Ch 10**,
pp 94–96
zearalenone in, **Ch 49**, pp 84–86
- Wheat flour**
alpha-amylase in, **Ch 32**, pp 22–25
ash of, **Ch 32**, p 2
benzoyl peroxide bleach (benzoic acid)
in, **Ch 32**, pp 19–20
bromates in, **Ch 32**, pp 20–21
calcium in, **Ch 32**, p 4
carbon dioxide (total) in self-rising flour,
Ch 32, p 5
chlorine in fat of, **Ch 32**, pp 18–19
diastatic activity of, **Ch 32**, p 21
ether extract in, **Ch 32**, p 5
extract (cold-water soluble) of, **Ch 32**,
p 1
fat acidity, **Ch 32**, p 12
fat in, **Ch 32**, p 5
fiber in, **Ch 32**, pp 5–12, 31–41
gliaden as a measure of gluten, **Ch 32**,
pp 15–17, 41–43
hydroxypropyl methylcellulose in,
Ch 32, pp 27–31
inorganic material (added) in
phosphated flour, **Ch 32**, p 2
iodates in, **Ch 32**, pp 20–21
iron in, **Ch 32**, pp 2–4
lipid phosphorus in, **Ch 32**, pp 17–18
lipids in, **Ch 32**, p 17
malted wheat flour, proteolytic activity
of, **Ch 32**, pp 25–26
methylcellulose in, **Ch 32**, pp 27–31
moisture in, **Ch 32**, p 1
nitrogen in, **Ch 32**, p 14
nitrogen (nitrite) in, **Ch 32**, p 18
pH of, **Ch 32**, p 12
phosphated, ash of, **Ch 32**, p 2
phosphated, inorganic material added
in, **Ch 32**, p 2
phosphorus in, **Ch 32**, p 4
pigment in, **Ch 32**, p 21
protein in, **Ch 32**, pp 14–15
proteolytic activity of, **Ch 32**, pp 25–26
sampling of, **Ch 32**, p 1
self-rising, ash of, **Ch 32**, p 2
self-rising, carbon dioxide (total) in,
Ch 32, p 5
solids (total) in, **Ch 32**, p 1
starch in, **Ch 32**, p 18
sugars (reducing and nonreducing) in,
Ch 32, pp 12–14
unsaponifiable residue of, **Ch 32**, p 18
uric acid in, **Ch 32**, p 27
viscosity of acidulated flour-water
suspension, **Ch 32**, pp 26–27
- Wheat germ**
filth in, **Ch 16**, p 23
- Wheat gluten**
filth in, **Ch 16**, p 25
- Wheat meal**
filth in, **Ch 16**, p 22
- Whey cheese**
fat in, **Ch 33**, p 87
- White flour**
bromates in, **Ch 32**, pp 20–21
filth (pre- and post-milling) in, **Ch 16**,
p 23
iodates in, **Ch 32**, pp 20–21
- White pepper**
filth in, **Ch 16**, pp 44–48, 52
- White wheat flour**
measurement of α -amylase activity,
Ch 32, pp 23–25
- WHO-AOAC method**
cadmium and lead in cookware, **Ch 9**,
pp 5–6
- WHO methods.** *see* **FAO/WHO-AOAC
methods**
- Whole wheat cereals**
filth in, **Ch 16**, p 28
- Whole wheat flour**
filth in, **Ch 16**, pp 22–23
- Wichmann lead number**
of vanilla extract, **Ch 36**, p 8
- WIIR.** *see* **Water-insoluble inorganic
residue**
- Wijs method**
iodine absorption number of oils and
fats, **Ch 41**, p 7
iodine value of fats and oils, **Ch 41**,
pp 7–9
- Wildman trap flask,** **Ch 16**, p 2
- Wiley method**
melting point of fats and fatty acids,
Ch 41, p 4
- Willard-Winter distillation method**
fluoride in plants, **Ch 3**, p 19
- Williams field test**
alcohol by volume in distilled liquors,
Ch 26, pp 5–6
- Wines**
acidity of, **Ch 28**, pp 9–11
alcohol in, **Ch 28**, pp 1–3
aldehydes in, **Ch 28**, p 13
alkalinity of ash, **Ch 28**, p 6
anthocyanin pigment content of, **Ch 37**,
pp 37–39
 β -asarone in, **Ch 28**, p 18
ash of, **Ch 28**, p 6
caloric content of, **Ch 28**, p 6
caramel in, **Ch 28**, p 13
carbohydrate content of, **Ch 28**, p 6
carbon dioxide in, **Ch 28**, pp 13–15
chlorides in, **Ch 28**, pp 6–7
citric acid in, **Ch 28**, pp 11–12
copper in, **Ch 28**, p 7
coumarin in, **Ch 28**, p 19
cyanide in, **Ch 28**, p 15
diethylcarbonate in, **Ch 28**, p 18
dry, glycerol in, **Ch 28**, p 3
ethyl carbamate in, **Ch 28**, pp 15–17
extract of, **Ch 28**, p 4
flavors in, **Ch 28**, pp 18–19
fluoride in, **Ch 28**, pp 7–8
fructose in, **Ch 28**, pp 5–6
glucose in, **Ch 28**, pp 5–6
glycerol in, **Ch 28**, pp 3–4
iron in, **Ch 28**, pp 8–9
lactic acid in, **Ch 28**, p 12
malic acid in, **Ch 28**, p 11
monochloroacetic acid in, **Ch 47**,
pp 22–23
nitrogen (total) in, **Ch 28**, p 12
ochratoxin A in, **Ch 49**, pp 73–75
pentosans in, **Ch 28**, p 13
pH of, **Ch 28**, p 9
phosphorus in, **Ch 28**, p 9
physical examination, **Ch 28**, p 1
potassium in, **Ch 28**, p 9
preservatives in, **Ch 28**, pp 17–18
sodium in, **Ch 28**, p 9
solids, nonsugar in, **Ch 28**, p 4
sorbic acid in, **Ch 28**, pp 17–18
specific gravity of, **Ch 28**, p 1
sucrose in, **Ch 28**, p 5
sugars (reducing) in, **Ch 28**, pp 4–5
sulfates in, **Ch 28**, p 9
sulfites in, **Ch 47**, p 37
sulfurous acid in, **Ch 28**, p 17
sweet, glycerol in, **Ch 28**, p 4
tannin in, **Ch 28**, p 12
tartaric acid in, **Ch 28**, p 11
white, color of, **Ch 28**, p 1
- Wintergreen extract,** **Ch 36**, pp 24–25
- Winton lead number**
of maple products, **Ch 44**, p 39
- Wort**
characteristics of, **Ch 27**, pp 38–39
extract from beer, **Ch 27**, p 4
laboratory, color of, **Ch 27**, p 28
laboratory, nitrogen in, **Ch 27**, p 29
laboratory, protein in, **Ch 27**, p 29
nitrogen in, **Ch 27**, pp 9, 39
protein in, **Ch 27**, p 9
specific gravity of, **Ch 27**, p 3
- Wu micro method**
glucose in sugars and syrups, **Ch 44**,
p 10

- Xanthine alkaloids**, Ch 18, p 53; Ch 20, pp 7–8
- Xanthophylls**
in dried plant materials and mixed feeds, Ch 45, pp 10–11
- Xanthoproteic test**
protein in animal feed, Ch 4, p 24
- Xanthidrol test**
urea on foods and containers, Ch 16, pp 61–62
- Xylenol method**
nitrites and nitrites in meat, Ch 39, p 8
- Xylose**
in sugars and syrups, Ch 44, p 15
- Yeast**
count for maple syrup, Ch 44, pp 41–42
counts in foods, Ch 17, pp 17–21
in foods, detection and quantification, Ch 17, pp 21–26
protein in, Ch 27, p 41
Salmonella in, Ch 17, pp 128–132, 190–202
sampling of, Ch 27, pp 39–40
solids (total) in, Ch 27, pp 40–41
in tomato products, Ch 16, p 80
- Yellow AB color additive**
in foods, Ch 46, pp 1–2
in macaroni products, Ch 32, pp 75–76
- Yellow No. 5**
analysis of, Ch 46, p 6
in foods, Ch 46, pp 3–4
intermediates and reaction by-products in, Ch 46, pp 17–18
subsidiary dyes in, Ch 46, p 21
- Yellow No. 6**
in foods, Ch 46, pp 3–4
- intermediates in, Ch 46, pp 18–21
subsidiary dyes in, Ch 46, p 22
- Yellow No. 7**, Ch 46, pp 9–10
- Yellow No. 8**, Ch 46, p 9
- Yellow No. 10**
analysis of, Ch 46, p 9
phthalic acid derivatives in, Ch 46, p 21
- Yellow No. 11**
analysis of, Ch 46, pp 9–10
phthalic acid derivatives in, Ch 46, p 21
- Yellow OB color additive**
in foods, Ch 46, pp 1–2
in macaroni products, Ch 32, pp 75–76
- YM-11 agar**
yeast and mold counts in foods, Ch 17, pp 17–19
- ZDBT colorimetric method**
copper in distilled liquors, Ch 26, p 7
- α -Zearalenol**
in corn, Ch 49, pp 83–84
- Zearalenone**
in corn, Ch 32, p 54; Ch 49, pp 82–86
in feed, Ch 49, pp 84–86
in wheat, Ch 49, pp 84–86
- Zeiss Butyrefractometer**
index of refraction of oils and fats, Ch 41, p 4
- Zerban-Sattler method**
glucose in cacao products, Ch 31, p 14
glucose in corn syrups and sugars, Ch 44, p 51
- Zinc**
in animal feed, Ch 4, pp 60–61
in deodorants, Ch 15, pp 6–7
in enteral products, Ch 50, pp 15–17
in face powders, (total), Ch 15, p 12
in fertilizers, Ch 2, pp 40–41
in foods, Ch 9, pp 1–3, 16–22, 45–46
in fortified food products, Ch 50, pp 65–72
in infant formulas, Ch 50, pp 15–18
in pesticide formulations, Ch 7, pp 4–5, 11
in pet foods, Ch 3, pp 5–7; Ch 4, pp 60–61; Ch 50, pp 15–17
in plants, Ch 3, pp 2–7, 14–16
in serum, Ch 14, pp 2–3
in solid wastes, Ch 9, pp 46–50
in water, Ch 11, pp 16–17
in waters and wastewaters, Ch 9, pp 50–60
- Zinc arsenite pesticides**, Ch 7, p 11
- Zinc chloride methods**
sulfur (sulfide) in lime sulfur pesticide formulations, Ch 7, p 19
- Zincon ion exchange method**
zinc in fertilizers, Ch 2, pp 40–41
- Zineb**
in pesticide formulations, Ch 7, p 32
- Ziram**
in pesticide formulations, Ch 7, p 32
- Zirconium**
in antiperspirant aerosols, (soluble), Ch 15, pp 7–8
- Zoalene**
in animal tissues, Ch 23, pp 19–20
in feeds, Ch 4, p 73; Ch 5, pp 16–17, 40