



- Register
- Login
- Go to SciVal Suite
- Hub
- ScienceDirect
- Scopus
- SciTopics
- Applications

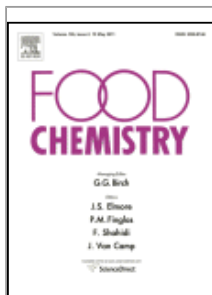
Home

Help

Articles All fields Author  
 Images Journal/Book title Volume Issue Page

Advanced search

Search tips



### Food Chemistry

Copyright © 2011 Elsevier Ltd. All rights reserved

[Sample Issue Online](#) | [About this Journal](#) | [Submit your Article](#) | [Shortcut link to this Title](#)

New Article Feed

Alert me about new Volumes /

Issues

**Warning:** Your selection(s) could not be saved due to an internal error. Please try again.

Add to Favorites

< Previous vol/iss | Next vol/iss >

Font Size: **A** **A** **A**

Add to my Quick Links

Volume 126, Issue 2, Pages 395-820 (15 May 2011)

= Full-text available

= Abstract only

Articles in Press

Volumes 121 - 126 (2010 - 2011)

Volume 126, Issue 3  
pp. 821-1514 (1 June 2011)

Volume 126, Issue 2  
pp. 395-820 (15 May 2011)

Volume 126, Issue 1  
pp. 1-394 (1 May 2011)

Volume 125, Issue 4  
pp. 1131-1520 (15 April 2011)

Volume 125, Issue 3  
pp. 803-1130 (1 April 2011)

Volume 125, Issue 2  
pp. 277-802 (15 March 2011)

Volume 125, Issue 1  
pp. 1-276 (1 March 2011)

Volume 124, Issue 4  
pp. 1289-1776 (15 February 2011)

Open all previews <span style="float: right;">articles 1 - 62</span>	
<b>Editorial Board/Aims &amp; Scope</b>	
1	<b>Page IFC</b> Show preview    PDF (59 K)   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a>
<b>General Papers</b>	
2	<b>Isolation of antibacterial components from infusion of <i>Caesalpinia paraguariensis</i> bark. A bio-guided phytochemical study</b> Original Research Article Pages 395-404 M.A. Sgariglia, J.R. Soberón, D.A. Sampietro, E.N. Quiroga, M.A. Vattuone Show preview    PDF (973 K)   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a>
<b>Research highlights</b>	

-  [Volume 124, Issue 3](#)  
pp. 697-1288 (1 February 2011)
-  [Volume 124, Issue 2](#)  
pp. 411-696 (15 January 2011)
-  [Volume 124, Issue 1](#)  
pp. 1-410 (1 January 2011)
-  [Volume 123, Issue 4](#)  
pp. 959-1356 (15 December 2010)
-  [Volume 123, Issue 3](#)  
pp. 563-958 (1 December 2010)
-  [Volume 123, Issue 2](#)  
pp. 203-562 (15 November 2010)
-  [Volume 123, Issue 1](#)  
pp. 1-202 (1 November 2010)
-  [Volume 122, Issue 4](#)  
pp. 937-1350 (15 October 2010)
-  [Volume 122, Issue 3](#)  
pp. 471-936 (1 October 2010)
-  [Volume 122, Issue 2](#)  
pp. 387-470 (15 September 2010)  
5th Conference on Water in Food
-  [Volume 122, Issue 1](#)  
pp. 1-386 (1 September 2010)
-  [Volume 121, Issue 4](#)  
pp. 923-1318 (15 August 2010)
-  [Volume 121, Issue 3](#)  
pp. 639-922 (1 August 2010)
-  [Volume 121, Issue 2](#)  
pp. 307-638 (15 July 2010)
-  [Volume 121, Issue 1](#)  
pp. 1-306 (1 July 2010)
-  [Volumes 111 - 120 \(2008 - 2010\)](#)
-  [Volumes 101 - 110 \(2007 - 2008\)](#)
-  [Volumes 91 - 100 \(2005 - 2007\)](#)
-  [Volumes 81 - 90 \(2003 - 2005\)](#)
-  [Volumes 71 - 80 \(2000 - 2003\)](#)
-  [Volumes 61 - 70 \(1998 - 2000\)](#)
-  [Volumes 51 - 60 \(1994 - 1997\)](#)
-  [Volumes 41 - 50 \(1991 - 1994\)](#)
-  [Volumes 31 - 40 \(1989 - 1991\)](#)
-  [Volumes 21 - 30 \(1986 - 1988\)](#)
-  [Volumes 11 - 20 \(1983 - 1986\)](#)
-  [Volumes 1 - 10 \(1976 - 1983\)](#)

► *Caesalpinia paraguariensis* bark extracts show bioactivity against food spoilage bacteria. ► Isolation of bioactive components from infusion by bio-guided purification. ► Ellagic acid and 3-O-methylgallic acid show bioactivity more potent than sodium benzoate. ► Extracts and components shown to be safe for human consumption.

3



[Changes in fatty acid composition in muscle of three farmed carp fish species \(\*Labeo rohita\*, \*Cirrhinus mrigala\*, \*Catla catla\*\) raised under the same conditions](#) Original Research Article

Pages 405-410

Nusrat N. Memon, Farah N. Talpur, M.I. Bhangar, Aamna Balouch

 [Show preview](#) |  [PDF \(253 K\)](#) | [Related articles](#) | [Related reference work articles](#)

#### Research highlights

► Present study reveals that farm fish species are nutritious with high level of long chain PUFA. ► Docosahexanoic acid and eicopentanoic acid were the major PUFA found in analysed species. ► The percentage of *n-3* was found higher than the *n-6*. ► The *n-3:n-6* was calculated within the recommended ratio. ► Results have shown considerable differences in muscle FA among fish species with same diet.

4



[Vitamin C and carotenoids in organic and conventional fruits grown in Brazil](#) Original Research Article

Pages 411-416

Pollyanna C. Cardoso, Ana Paula B. Tomazini, Paulo C. Stringheta, Sônia M.R. Ribeiro, Helena M. Pinheiro-Sant'Ana

 [Show preview](#) |  [PDF \(345 K\)](#) | [Related articles](#) | [Related reference work articles](#)

#### Research highlights

► Organic acerola presented higher concentration of AA and total vitamin C. ► Organic and conventional fruits were considered excellent sources of vitamin C. ► The studied fruits contribute to meet the nutritional requirements of vitamin A. ► Acerola was the most important source of provitamin A. ► There was no evidence of the nutritional superiority of the organically grown fruits.

5



[Phenolic acids and flavonoids in leaf and floral stem of cultivated and wild \*Cynara cardunculus\* L. genotypes](#) Original Research Article

Pages 417-422

Gaetano Pandino, Sara Lombardo, Giovanni Mauromicale, Gary Williamson

 [Show preview](#) |  [PDF \(259 K\)](#) | [Related articles](#) | [Related reference work articles](#)

#### Research highlights

► Globe artichoke leaf high in luteolin derivatives. ► Apigenin derivatives main compounds in leaf of wild and cultivated cardoon. ► Caffeoylquinic acids usually are the main phenolic compounds in the floral stem. ► The antioxidant capacity in leaf and floral stem was dependent on the phenolic acid and flavonoid profile.

6



[In vitro model to correlate viscosity and bile acid-binding capacity of digested water-soluble and insoluble dietary fibres](#) Original Research Article

Pages 423-428

Christian Zacherl, Peter Eisner, Karl-Heinz Engel

 [Show preview](#) |  [PDF \(604 K\)](#) | [Related articles](#) | [Related reference work articles](#)

#### Research highlights

► A model for the determination of the bile acid-binding of dietary fibres was developed. ► For some fibres clear correlations between viscosity and bile acid-binding were observed. ► Heat damaged oat fibre had good bile acid-binding despite of low viscosity. ► Bile acid-binding is not solely based on viscosity but also on additional binding forces.

**Congress  
on Steroid  
Research**
















**27-29 March  
2011**

**Chicago,  
USA**



**REGISTER  
NOW!**

**Early Bird  
Deadline:  
22 January  
2011**

7		<p><b>Protective effects of the crude extracts from yam (<i>Dioscorea alata</i>) peel on <i>tert</i>-butylhydroperoxide-induced oxidative stress in mouse liver cells</b> <small>Original Research Article</small>  <i>Pages 429-434</i>            Cheng-Kuang Hsu, Jan-Ying Yeh, Ji-Hung Wei</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (916 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Yam peel shows antioxidant activity in mouse liver cell lines. ► Yam peel water extract increases oxidant-induced cytotoxicity in mouse Hepa 1-6 cells. ► Yam peel ethanol extract reduces oxidant-induced cytotoxicity in mouse FL83B cells. ► GPx activity plays important role on reducing t-BHP-induced oxidative stress.</p>
8		<p><b>Modelling the effect of asparaginase in reducing acrylamide formation in biscuits</b> <small>Original Research Article</small>  <i>Pages 435-440</i>            Monica Anese, Barbara Quarta, Jesus Frias</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (322 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Intermediate asparaginase concentration and low incubation temperature and time reduce acrylamide formation in biscuits. ► Asparaginase does not affect the colour of the final product. ► Modelled the effect of the natural variability associated to baking in acrylamide concentration.</p>
9		<p><b>Identification of (furan-2-yl)methylated benzene diols and triols as a novel class of bitter compounds in roasted coffee</b> <small>Original Research Article</small>  <i>Pages 441-449</i>            Stefanie Kreppenhof, Oliver Frank, Thomas Hofmann</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (517 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Hydroxybenzenes react with furanaldehydes to form (furan-2-yl)methylated benzenes. ► (Furan-2-yl)methylated benzenes are formed upon coffee roasting. ► (Furan-2-yl)methylated benzenes exhibit potent bitter taste. ► Formation of (furan-2-yl)methylated benzenes runs via the furfuryl cation.</p>
10		<p><b>Quality attributes and cell wall properties of strawberries (<i>Fragaria annanassa</i> Duch.) under calcium chloride treatment</b> <small>Original Research Article</small>  <i>Pages 450-459</i>            Fusheng Chen, Hui Liu, Hongshun Yang, Shaojuan Lai, Xiaoli Cheng, Ying Xin, Bao Yang, Hongjiang Hou, Yongzhi Yao, Shaobing Zhang, Guanbao Bu, Yun Deng</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (1581 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Strawberry firmness was not significantly affected by CaCl<sub>2</sub> treatment. ► Strawberry softening due to modifications of pectin chains. ► CaCl<sub>2</sub> treatment slowed the breakdown of pectin chains from nanoscale analysis. ► A schematic model of strawberry pectin degradation during storage was proposed.</p>
11		<p><b>Amino acid profile of raw and as-eaten products of spinach (<i>Spinacia oleracea</i> L.)</b> <small>Original Research Article</small>  <i>Pages 460-465</i>            Zofia Lisiewska, Waldemar Kmiecik, Piotr Gębczyński, Lidia Sobczyńska</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (180 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p>

**Research highlights**

► As-eaten products contained more amino acids per 100 g than raw spinach. ► As-eaten products and raw spinach contained similar amounts of amino acids per 16 g N. ► Traditional and ready-to-eat products did not differ in amino acids content. ► Cystine with methionine was the limiting amino acid in the as-eaten spinach product.

12

**Grape skin extract inhibits mammalian intestinal  $\alpha$ -glucosidase activity and suppresses postprandial glycemic response in streptozocin-treated mice** Original Research Article

Pages 466-471

Lei Zhang, Shelly Hogan, Jianrong Li, Shi Sun, Corene Canning, Shao Jian Zheng, Kequan Zhou

[Show preview](#) | [PDF \(412 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► Norton grape skin (GSE) inhibits yeast and rat  $\alpha$ -glucosidases. ► Norton GSE does not significantly inhibit pancreatic  $\alpha$ -amylase. ► Norton GSE reduced postprandial blood glucose in mice.

13

**A new cytotoxic cyclic pentadepsipeptide, neo-N-methylsalsalvamide produced by *Fusarium solani* KCCM90040, isolated from potato** Original Research Article

Pages 472-478

Hyuk-Hwan Song, Hee-Seok Lee, Chan Lee

[Show preview](#) | [PDF \(630 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► A new cytotoxic cyclic pentadepsipeptide was produced by *Fusarium solani* KCCM90040. ► Neo-N-methylsalsalvamide consists of one hydroxy acid and four amino acids. ► Neo-N-methylsalsalvamide exhibits *in vitro* cytotoxic effects against human cancer cell lines.

14

**Composition of fatty acids in the muscle of black-bone silky chicken (*Gallus gallus domesticus brissen*) and its bioactivity in mice** Original Research Article

Pages 479-483

Yinggang Tian, Sheng Zhu, Mingyong Xie, Weiya Wang, Hongjing Wu, Deming Gong

[Show preview](#) | [PDF \(168 K\)](#) | [Supplementary content](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► There was lowest total lipid (TL) content in black-bone silky chicken. ► TL from black-bone silky chicken has anti-fatigue activities. ► TL from black-bone silky chicken inhibits oxygen consumption.

15

**Free-radical-scavenging and anti-inflammatory effect of yak milk casein before and after enzymatic hydrolysis** Original Research Article
















Pages 484-490

Xue-Ying Mao, Xue Cheng, Xu Wang, Si-Jia Wu

[Show preview](#) | [PDF \(778 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► Yak casein enzymatic hydrolysate possesses free-radical-scavenging activity. ► It can decrease the production of NO, IL-1 $\beta$ , IL-6 and TNF- $\alpha$ . ► It possesses antioxidative and anti-inflammatory activities.

16		<p><b>Increasing the antioxidant power of tea extracts by biotransformation of polyphenols</b> <small>Original Research Article</small>  <i>Pages 491-497</i>            J.A. Macedo, V. Battestin, M.L. Ribeiro, G.A. Macedo</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (583 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Antioxidant power of green tea and yerba mate biotransformed by tannase was tested. ► Tea extracts, chlorogenic acid and EGCG were assessed using ORAC and DPPH assays. ► Green tea antioxidant power of enzyme-treated increased 55% compared to untreated tea. ► Yerba mate antioxidant power increased by 43% compared to untreated tea. ► The antioxidant power of the standards was also highly increased by enzyme treatment.</p>
17		<p><b>Factors affecting lipase digestibility of emulsified lipids using an <i>in vitro</i> digestion model: Proposal for a standardised pH-stat method</b> <small>Original Research Article</small>  <i>Pages 498-505</i>            Yan Li, Min Hu, David Julian McClements</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (501 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Lipid digestion depends on oil droplet characteristics. ► Lipid digestion depends on simulated intestinal fluid composition. Digestion rate increases with decreasing droplet concentration and size. ► Digestion rate increases with decreasing bile, and increasing lipase and calcium. ► A standardised pH-stat titration method is proposed to model lipid digestion.</p>
18		<p><b>Impact of mild acid hydrolysis on structure and digestion properties of waxy maize starch</b> <small>Original Research Article</small>  <i>Pages 506-513</i>            Ming Miao, Bo Jiang, Tao Zhang, Zhengyu Jin, Wanmeng Mu</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (600 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Amorphous regions of starch granules is preferentially acid degraded. ► Shortest A chains and long B chains affect the digestion properties of starch. ► Slowly digestible starch mainly consists of amorphous and ordered crystalline regions.</p>
19		<p><b>Health-promoting substances and antioxidant properties of <i>Opuntia sp.</i> fruits. Changes in bioactive-compound contents during ripening process</b> <small>Original Research Article</small>  <i>Pages 514-519</i>            Yanina S. Coria Cayupán, María J. Ochoa, Mónica A. Nazareno</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (437 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Pigment composition was analysed in <i>Opuntia megacantha</i> fruits during ripening. ► Antiradical activity of fruits increased during their ripening in the plant. ► Chlorophyll content in immature fruits was higher in the skins than in the pulps. ► Betalain levels in pulps were higher in mature and immature fruits than in peels. ► Pulp colour due to betalains took place before this change was observed in peels.</p>
20		<p><b>Xylan chitosan conjugate - A potential food preservative</b> <small>Original Research Article</small>  <i>Pages 520-525</i>            Xiaoxia Li, Xiaowen Shi, Miao Wang, Yumin Du</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (391 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p>

► A novel conjugate based on xylan and chitosan was prepared. ► Maillard reaction occurred between the natural polysaccharides. ► The conjugate was endowed with high antioxidant and antibacterial activities. ► The conjugate can be used as the food preservation.

21



**Structural variation and rheological properties of water-extractable arabinoxylans from six Greek wheat cultivars** Original Research Article

Pages 526-536

A. Skendi, C.G. Biliaderis, M.S. Izydorczyk, M. Zervou, P. Zoumpoulakis

[Show preview](#) | [PDF \(798 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► The structure and rheological properties of arabinoxylans from bread wheat cultivars were studied. ► Genotype had an impact on the molecular characteristics of the water-extractable arabinoxylans. ► Variations in un-, di-, and mono-substituted xylose residues were unraveled by 2D NMR spectroscopy. ► The physical properties could not be solely explained by structural variations of arabinoxylans.

22



**Iron fortification of finger millet (*Eleusine coracana*) flour with EDTA and folic acid as co-fortificants** Original Research Article

Pages 537-542

Bhumika Tripathi, Kalpana Platel

[Show preview](#) | [PDF \(434 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► Finger millet flour was explored for its suitability as a vehicle for fortification with iron. ► Ferrous fumarate and ferric pyrophosphate used as fortificants were found to be equally effective. ► Inclusion of EDTA and folic acid along with the iron salts significantly increased the bioaccessibility of iron from the fortified flours. ► The fortified flours were stable up to a period of 60 days. ► Heat processing of the flours improved the bioaccessibility of iron from them.

23



**Biochemical characterisation of MX-4, a plant cysteine protease of broad specificity and high stability** Original Research Article

Pages 543-552

María del Carmen Oliver-Salvador, Zhirui Lian, Richard A. Laursen, Víctor M. Bolaños-García, Manuel Soriano-García

[Show preview](#) | [PDF \(1367 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► Mexican plant cysteine protease. ► Protease with broad specificity and high stability. ► Protease a suitable novel analytical tool for the proteomic analysis of peptide fragments. ► Protease with great potential interest in the food industry.

24



**Investigation of  $\alpha$ -glucosidase inhibitory activity of wheat bran and germ** Original Research Article


Pages 553-561




Lei Liu, Myrna A. Deseo, Carol Morris, Kelly M. Winter, David N. Leach

[Show preview](#) | [PDF \(603 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► Lipophilic components in wheat bran and germ inhibit  $\alpha$ -glucosidase hydrolysis. ► Phytochemicals in wheat bran and germ contribute to its low GI property. ► Phosphatidic acids are potent inhibitors of  $\alpha$ -glucosidase enzymic hydrolysis. ► Phosphate group in glycerides increases  $\alpha$ -glucosidase inhibitory activity. ► Unsaturated fatty acids in glycerides increase  $\alpha$ -glucosidase inhibitory activity.

25	<p> <a href="#">Preventive effects of rice bran oil on 1,2-dimethylhydrazine/dextran sodium sulphate-induced colon carcinogenesis in rats</a> <small>Original Research Article</small>  <i>Pages 562-567</i>                      Chun-Kuang Shih, Chia-Jung Ho, Sing-Chung Li, Shwu-Huey Yang, Wen-Chi Hou, Hsing-Hsien Cheng</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (190 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Rice bran is the by-product of the rice milling industry. ► The DMH/DSS was used to induce colon carcinogenesis in a rat model. ► Rice bran oil (RBO) can effectively reduce ACF, mucin-producing ACF, and MDF.</p>
26	<p> <a href="#">A stability study of green tea catechins during the biscuit making process</a> <small>Original Research Article</small>  <i>Pages 568-573</i>                      Amber Sharma, Weibiao Zhou</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (547 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► A RP-HPLC method was developed for the separation and quantification of tea catechins in green tea extract, biscuit dough, and biscuit samples. ► Green tea catechins were relatively stable in the biscuit dough. ► The relative stability of catechins in the biscuit system can be sequenced as (-)-CG &gt; (-)-GCG &gt; (-)-ECG &gt; (-)-EGCG. ► Percentages of (-)-EGCG and (-)-ECG in the dough and biscuit increased as the initial concentration of GTE was increased. ► Retention rates of green tea catechins were improved by reducing the pH of the dough.</p>
27	<p> <a href="#">Influence of pollen addition on mead elaboration: Physicochemical and sensory characteristics</a> <small>Original Research Article</small>  <i>Pages 574-582</i>                      A. Roldán, G.C.J. van Muiswinkel, C. Lasanta, V. Palacios, I. Caro</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (344 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Pollen could be a good and appropriate activator of alcoholic fermentation in the production of mead. ► Pollen addition improved fermentation rates, alcohol yields and the final characteristics of meads. ► An increase in the volatile contents of the meads and an improved sensory profile was observed with pollen addition; however, this improvement was not correlated with the concentration of pollen. ► The adequate dose of pollen was determined by the final characteristics and sensory profile of the meads. ► The addition of 30 g/hl of pollen is the dose most appropriate because, besides giving mead better accepted, would mean less use of pollen at industrial level.</p>
28	<p> <a href="#">Antioxidant activity of the fractions separated from the unsaponifiable matter of bene hull oil</a> <small>Original Research Article</small>  <i>Pages 583-589</i>                      Reza Farhoosh, Mohammad Hossein Tavassoli-Kafrani, Ali Sharif</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (331 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Introduce of the unsaponifiable matter (USM) of bene (a species of pistachio growing wild in Iran) hull oil (BHO) and their fractions separated as new sources of natural compounds with high antioxidant activity for food systems. ► Separation of the USM of BHO to different contributions of antioxidative fractions (seven fractions) which were able to inhibit lipid oxidation effectively by different mechanisms of action. ► Identification of some terpenoid fractions, particularly 4,4'-dimethyl sterols and triterpenic dialcohols, with high antioxidant activities.</p>

29		<p><b>Structural characteristics of oligosaccharides from soy sauce lees and their potential prebiotic effect on lactic acid bacteria</b> <small>Original Research Article</small>  <i>Pages 590-594</i>            Bao Yang, K. Nagendra Prasad, Haihui Xie, Sen Lin, Yueming Jiang</p> <p><a href="#">Show preview</a>   <a href="#">PDF (262 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Xylose and mannose constructed the molecular chain of SSLO. ► A dose-dependent behaviour was observed for the prebiotic effect of SSLO. ► SSLO had a poor DPPH radical scavenging activity. ► The prebiotic effect of SSLO was not correlated with antioxidant activity.</p>
30		<p><b>Apoptosis of human breast cancer cells induced by hemagglutinin from <i>Phaseolus vulgaris</i> cv. Legumi secchi</b> <small>Original Research Article</small>  <i>Pages 595-602</i>            Sze Kwan Lam, Tzi Bun Ng</p> <p><a href="#">Show preview</a>   <a href="#">PDF (1053 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Hemagglutinin from seeds of <i>Phaseolus vulgaris</i> cultivar "Legumi secchi". ► Antiproliferation of breast cancer MCF-7 cells. ► G2/M arrest/phosphatidylserine externalisation/mitochondrial membrane depolarisation. ► Death receptor-mediated: Fas ligands, caspase-8, BID, p53, caspase-9, Lamin A/C.</p>
31		<p><b>Monitoring the oxidation of almond oils by HS-SPME-GC-MS and ATR-FTIR: Application of volatile compounds determination to cultivar authenticity</b> <small>Original Research Article</small>  <i>Pages 603-609</i>            A. Beltrán, M. Ramos, N. Grané, M.L. Martín, M.C. Garrigós</p> <p><a href="#">Show preview</a>   <a href="#">PDF (787 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► HS-SPME-GC-MS and ATR-FTIR are used to monitor the oxidation of almond oils. ► Alkenals and alkadienals were the major compounds present in oxidised oils. ► Highlighted differences between Spanish and American almond oils were found. ► LDA has allowed the correctly classification of samples according to their origin.</p>
32		<p><b>Chemical composition of wild edible mushrooms and antioxidant properties of their water soluble polysaccharidic and ethanolic fractions</b> <small>Original Research Article</small>  <i>Pages 610-616</i>            Josiana A. Vaz, Lillian Barros, Anabela Martins, Celestino Santos-Buelga, M. Helena Vasconcelos, Isabel C.F.R. Ferreira</p> <p><a href="#">Show preview</a>   <a href="#">PDF (186 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► The studied mushrooms are widely appreciated in gastronomy. ► They revealed high protein and carbohydrate contents, and low fat levels. ► Water soluble polysaccharidic and ethanolic fractions revealed high antioxidant activity. ► Phenolic acids, tocopherols and ascorbic acid were the main antioxidants.</p>
33		<p><b>Antiproliferative activity of peptides prepared from enzymatic hydrolysates of tuna dark muscle on human breast cancer cell line MCF-7</b> <small>Original Research Article</small>  <i>Pages 617-622</i>            Kuo-Chiang Hsu, Eunice C.Y. Li-Chan, Chia-Ling Jao</p> <p><a href="#">Show preview</a>   <a href="#">PDF (320 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p>



**Research highlights**

► Peptides with MW between 390 and 1400 Da showed great antiproliferative activities. ► A peptide, LPHVLTPEAGAT (1206 Da), showed MCF-7 inhibition with IC<sub>50</sub> value of 8.1 µM. ► A peptide, PTAEGGVYMT (1124 Da), showed MCF-7 inhibition with IC<sub>50</sub> value of 8.8 µM.

34

**Effect of sterol biosynthesis-inhibiting (SBI) fungicides on the fermentation rate and quality of young ale beer** Original Research Article

Pages 623-629

Simón Navarro, Nuria Vela, Gabriel Pérez, Ginés Navarro

[Show preview](#)[PDF \(459 K\)](#)[Related articles](#)[Related reference work articles](#)**Research highlights**

► We study the influence of five SBI fungicides on the fermentation and quality of young ale beer. ► Even at low level, the fungicides provoke sluggish fermentation from the three days onwards. ► Noticeable differences in the extract and attenuation values were found in all treated samples. ► Colour intensity and tint values were statistically different in the beer containing fungicides.

35

**Interaction of milk  $\alpha$ - and  $\beta$ -caseins with tea polyphenols** Original Research Article

Pages 630-639

Imed Hasni, Philippe Bourassa, Saber Hamdani, Guy Samson, Robert Carpentier, Heidar-Ali Tajmir-Riahi

[Show preview](#)[PDF \(1740 K\)](#)[Related articles](#)[Related reference work articles](#)**Research highlights**

► Tea polyphenols weakly bind to both  $\alpha$ - and  $\beta$ -caseins. ► The order of binding increases as the number of OH group increased. ►  $\beta$ -Casein forms stronger complexes with tea polyphenols than  $\alpha$ -casein. ► Polyphenol–casein interaction is more hydrophobic than hydrophilic. ► Polyphenol binding alters casein secondary structure, leading to protein unfolding.

**Analytical Methods**

36

**Discrimination of young and mature leaves of *Melicope ptelefolia* using <sup>1</sup>H NMR and multivariate data analysis** Original Research Article

Pages 640-645

Nor Hassifi Shuib, Khozirah Shaari, Alfi Khatib, Maulidiani, Ralf Kneer, Seema Zareen, Salahudin Mohd. Raof, Nordin Hj. Lajis, Victor Neto

[Show preview](#)[PDF \(363 K\)](#)[Related articles](#)[Related reference work articles](#)**Research highlights**

► PCA showed a clear discrimination between the young and mature leaves extracts by PC3 and PC4. ► PC3 and PC4 accounted for 11.2% and 8.5% of variation, respectively. ► Young leaves contain higher levels of *p*-O-geranylcoumaric acid, 2,4,6-trihydroxy-3-geranylacetophenone, 2,4,6-trihydroxy-3-prenylacetophenone, and fatty acids.

37

**Analysis of multi-pesticide residues in the foods of animal origin by GC–MS coupled with accelerated solvent extraction and gel permeation chromatography cleanup** Original Research Article

Pages 646-654

Gang Wu, Xiaoxia Bao, Shanhong Zhao, Jianjian Wu, Ailiang Han, Qingfu Ye

[Show preview](#)[PDF \(356 K\)](#)[Related articles](#)[Related reference work articles](#)**Research highlights**

► A method was developed to determine 109 pesticides in the foods of animal origin. ► The samples were extracted by ASE and purified by GPC automatically. ► The prepared samples were analyzed by GC-MS with SIM mode. ► The recoveries and RSD values are considered acceptable for residue analysis.

38



**Quantification of *N*<sup>ε</sup>-carboxymethyl-lysine in selected chocolate-flavoured drink mixes using high-performance liquid chromatography–linear ion trap tandem mass spectrometry** Original Research Article

*Pages 655-663*  
Céline Niquet-Léridon, Frédéric J. Tessier

[Show preview](#) | [PDF \(472 K\)](#) | [Related articles](#) | [Related reference work articles](#)

#### Research highlights

► Chocolate-flavoured drink mixes have high *N*<sup>ε</sup>-carboxymethyl-lysine contents. ► LC–MS/MS has been developed for the analysis of CML and lysine in drink mixes. ► Delipidation is not needed prior to the analysis of CML in drink mixes. ► Reduction is recommended to prevent the formation of CML during acid hydrolysis. ► In drink mixes CML is formed essentially from carbohydrates but not from fat.

39



**Differentiation of blossom and honeydew honeys using multivariate analysis on the physicochemical parameters and sugar composition** Original Research Article

*Pages 664-672*  
A. Bentabol Manzanares, Z. Hernández García, B. Rodríguez Galdón, E. Rodríguez Rodríguez, C. Díaz Romero

[Show preview](#) | [PDF \(264 K\)](#) | [Related articles](#) | [Related reference work articles](#)

#### Research highlights

► There are some honey samples, commonly considered as blossom honeys, that could in fact be honeydew honeys. ► So, we have determined physicochemical parameters and sugar composition in these suspected honeydew and in blossom honeys. After application of multivariate analysis techniques, we have observed that both types of honeys were clearly different. Therefore, this is a useful tool to differentiate these types of honeys. ► The presence of honeydew honeys in the Canary Islands is reported and characterized for the first time.

40



**Can spectroscopy geographically classify Sauvignon Blanc wines from Australia and New Zealand?** Original Research Article

*Pages 673-678*  
D. Cozzolino, W.U. Cynkar, N. Shah, P.A. Smith

[Show preview](#) | [PDF \(720 K\)](#) | [Related articles](#) | [Related reference work articles](#)

#### Research highlights

► Combination of infrared and chemometrics opens the possibility to discriminate between Australian and New Zealand Sauvignon Blanc. ► This type of method used by the wine industry will guarantee the provenance of the wines to the consumers. ► This method will also help to study and understand the effect of climate change on grape and wine production.

41















**The reduction of Cu(II)/neocuproine complexes by some polyphenols: Total polyphenols determination in wine samples** Original Research Article
















*Pages 679-686*  
Gina Lee, Maura Vincenza Rossi, Nina Coichev, Horacio Dorigan Moya

[Show preview](#) | [PDF \(199 K\)](#) | [Related articles](#) | [Related reference work articles](#)

#### Research highlights

► A modified CUPRAC procedure was used to estimate the total polyphenols in wine. ► Fourteen wine samples were analysed and results expressed as tannic acid concentration. ► The proposed procedure is about 1.5 more sensitive than the Folin–Ciocalteu method. ► It is free from several interferences and does not require expensive equipments.

42		<p><b>Simplified extraction of tetracycline antibiotics from milk using a centrifugal ultrafiltration device</b> <small>Original Research Article</small>  <i>Pages 687-690</i>                      Kunihiro Kishida</p> <p>  <a href="#">Show preview</a>                         <a href="#">PDF (283 K)</a>                        <a href="#">Related articles</a>                        <a href="#">Related reference work articles</a> </p> <p><b>Research highlights</b></p> <p>► A simplified method for tetracycline antibiotics from milk is presented. ► Isolation is performed using a centrifugal ultrafiltration device. ► The method is easy to perform and suitable in short-handed laboratories.</p>
43		<p><b>Qualitative and quantitative changes in the essential oil of <i>Laurus nobilis</i> L. leaves as affected by different drying methods</b> <small>Original Research Article</small>  <i>Pages 691-697</i>                      Ibtissem Hamrouni Sellami, Wissem Aidi Wannas, Iness Bettaieb, Sarra Berrima, Thouraya Chahed, Brahim Marzouk, Ferid Limam</p> <p>  <a href="#">Show preview</a>                         <a href="#">PDF (276 K)</a>                        <a href="#">Related articles</a>                        <a href="#">Related reference work articles</a> </p> <p><b>Research highlights</b></p> <p>► Effects of drying methods on yield and composition of bay laurel leaves essential oil were studied. ► Essential oil yield increased when plant material was dried at air and by infra-red at 45 °C. ► Concentrations of the essential oil components increased in the case of air drying. ► Results suggest that drying influenced both the quality and the quantity of bay laurel oil.</p>
44		<p><b>Determination of hydrogen peroxide scavenging activity of phenolic acids by employing gold nanoshells precursor composites as nanoprobess</b> <small>Original Research Article</small>  <i>Pages 698-704</i>                      Xiaoyuan Ma, Hui Li, Jian Dong, Weiping Qian</p> <p>  <a href="#">Show preview</a>                         <a href="#">PDF (874 K)</a>                        <a href="#">Related articles</a>                        <a href="#">Related reference work articles</a> </p> <p><b>Research highlights</b></p> <p>► We have tested the antioxidant capacity of a series of phenolic acids and natural antioxidants successfully by utilizing the gold nanoshells precursor composites. ► The wavelength-based detection optical method shows superiority in evaluating colour samples which will avoid background interference. ► The assay provides an alternative perspective for the innovative detection scheme in combination with nanoscience and food/health industry.</p>
45		<p><b>Development of a SCAR marker for the identification of <i>Olea europaea</i> L.: A newly detected adulterant in commercial Mediterranean oregano</b> <small>Original Research Article</small>  <i>Pages 705-709</i>                      Matteo Marieschi, Anna Torelli, Alberto Bianchi, Renato Bruni</p> <p>  <a href="#">Show preview</a>                         <a href="#">PDF (305 K)</a>                        <a href="#">Related articles</a>                        <a href="#">Related reference work articles</a> </p> <p><b>Research highlights</b></p> <p>► A new contaminant of commercial oregano has been detected by means of pharmacognostic analysis. ► The contaminant has been identified as crushed leaves of <i>Olea europaea</i> L. ► A new method based on SCAR-PCR molecular markers has been developed. ► The new contaminant can be detected in amounts as low as 1% in multiple commercial batches.</p>

46		<p><a href="#">Quantification of (+)-catechin and (-)-epicatechin in coconut water by LC-MS</a> Original Research Article  <i>Pages 710-717</i>            Chia-Lin Chang, Rong-Tsun Wu</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (255 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► The LC-MS/MS analysis accelerated the quantitative analysis. ► The concentration of (+)-catechin in the coconut water was 0.344 mg/ml. ► The concentration of (-)-epicatechin in the coconut water was 0.242 mg/ml. ► Results obtained in this study will serve as quality control.</p>
47		<p><a href="#">About Sr isotopes in coffee 'Bourbon Pointu' of the Réunion Island</a> Original Research Article  <i>Pages 718-724</i>            I. Techer, J. Lancelot, F. Descroix, B. Guyot</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (555 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Sr isotopic composition of coffee beans can be used to recognize the geographical source of the production. ► Relation between the Sr isotopic characteristic of rock/soils and plant. ► The Bourbon Pointu coffee of the Réunion Island as a high hand brand coffee. ► Fertilizers in the Bourbon Pointu production are characterized by high Sr isotopic ratios.</p>
48		<p><a href="#">Dynamic prediction models for alkaloid content using NIR technology for the study and online analysis of parching in Areca Seed</a> Original Research Article  <i>Pages 725-730</i>            Jintao Xue, Chunjie Wu, Leilei Wang, Su Jiang, Guo Huang, Jiliang Zhang, Silan Wen, Liming Ye</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (820 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Dynamic prediction models for contents of arecoline, arecaidine and guvacine were developed by NIR for online analysis of the Areca Seed parching process. ► An online-type and non-contact temperature measurement system invented by us could control the temperature in the parching process. ► The time-temperature-content-drug efficacy dynamic law was analyzed. ► On the above foundation, the product quality can be monitored online to get the best quality.</p>
49		<p><a href="#">Hayward kiwifruits and Plant Growth Regulators: Detection and effects in post-harvest studied by Magnetic Resonance Imaging and Scanning Electron Microscopy</a> Original Research Article  <i>Pages 731-736</i>            Anna Taglienti, Paolo Sequi, Caterina Cafiero, Sara Cozzolino, Mena Ritota, G. Ceredi, Massimiliano Valentini</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (550 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► Recognition of the use of hormones in organic kiwifruits farming. ► Post-harvest evaluation of kiwifruits treated with synthetic hormones. ► View of the modification of the kiwifruits internal structure as a function of PGR use and type. ► Non destructive assessment of PGR use in kiwifruit at any stage of cultivation, ripening and storage.</p>
50		<p><a href="#">UHPLC-MS/MS highly sensitive determination of aflatoxins, the aflatoxin metabolite M1 and ochratoxin A in baby food and milk</a> Original Research Article  <i>Pages 737-744</i>            Eduardo Belrán, María Ibáñez, Juan Vicente Sancho, Miguel Ángel Cortés, Vicent Yusà, Félix Hernández</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (502 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p>

**Research highlights**

► The high sensitivity required for aflatoxins made necessary a pre-concentration step. ► Solid phase extraction with immunoaffinity columns. ► Fast high-resolution of UHPLC. ► Enhanced selectivity obtained with triple quadrupole mass analysers in SRM mode.

51

**Spectrophotometric determination of melamine in milk by rank annihilation factor analysis based on pH gradual change-UV spectral data** Original Research Article*Pages 745-750*

Yating Liu, Jian Deng, Lin An, Jun Liang, Fei Chen, Hui Wang

[Show preview](#) | [PDF \(635 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► We introduce a simple, sensitive, selective and low cost procedure for direct spectrophotometric determination of melamine in milk samples by applying RAFA to pH gradual change-UV spectral data (pH-spectra). ► We recorded the changing spectra and obtained the bilinear matrix of pH-spectra. Based on these data, the concentration of melamine in samples could be predicted by RAFA with satisfactory results. ► The complicated pre-separation operation is not needed. ► The approach is simple to producing second order data. ► The apparatus required in this method is easily obtainable.

52

**Quantitative analysis of quercetin using Raman spectroscopy** Original Research Article*Pages 751-755*

Yasushi Numata, Hiroyuki Tanaka

[Show preview](#) | [PDF \(541 K\)](#) | [Supplementary content](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► Availability of Raman spectroscopy for quantitative analysis was demonstrated. ► Raman spectroscopy was applied for determination of quercetin. ► Raman band ratio had good linearity with the analyte concentration.

53

**Development and validation of an HPLC-FLD method for rapid determination of histamine in skipjack tuna fish (*Katsuwonus pelamis*)** Original Research Article*Pages 756-761*

Saeed Tahmouzi, Ramin Khaksar, Mehran Ghasemlou

[Show preview](#) | [PDF \(360 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► This study compared and validated two HPLC methods. ► Recoveries greater than 55% could not be observed by HPLC-UV. ► Derivatization with pre-column o-phthalaldehyde was found efficient. ► Good recoveries were obtained at all spiking levels by HPLC-FLD.

54





**Fatty acids patterns in camel, moose, cow and human milk as determined with GC/MS after silver ion solid phase extraction** Original Research Article*Pages 762-771*













Julia Dreucker, Walter Vetter

[Show preview](#) | [PDF \(437 K\)](#) | [Related articles](#) | [Related reference work articles](#)

**Research highlights**

► Silver ion SPE was combined with GC/EI-MS-SIM for fatty acid analysis. ► Bulk samples of moose milk, camel milk, cow milk, and a human milk sample were analyzed. ► 87 Fatty acids were determined and evaluated.

55	 <b>Suitability of the TBA method for assessing lipid oxidation in a meat system with added phenolic-rich materials</b> <small>Original Research Article</small> <i>Pages 772-778</i> Rui Ganhão, Mario Estévez, David Morcuende <a href="#">Show preview</a>   <a href="#">PDF (312 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a>
<b>Research highlights</b>  ► Pigments from plant materials causes interferences during TBA-RS assessment of meat products. ► TBA distillation methods are suitable for avoiding interferences caused by fruit pigments. ► Interferences caused by browning reactions are avoided using TBA–MDA incubation at room temperature.	
56	 <b>Analysis of seven sulphonamides in milk by cloud point extraction and high performance liquid chromatography</b> <small>Original Research Article</small> <i>Pages 779-785</i> Wenjun Zhang, Chunming Duan, Minglin Wang <a href="#">Show preview</a>   <a href="#">PDF (373 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a>
<b>Research highlights</b>  ► This method is first applied to the determination of sulphonamides in milk. ► The experimental procedure consumes low organic solvent and operates simply. ► This method proved to be efficient, inexpensive and environmentally friendly. ► The study showed satisfactory recovery and relative standard deviation values.	
57	 <b>Immunodiagnostic analysis of transgenic vegetative insecticidal protein in genetically modified crops/produce</b> <small>Original Research Article</small> <i>Pages 786-792</i> Chandra K. Singh, Rajesh Kumar, Rajeshwar P. Sinha, Prakash C. Misra <a href="#">Show preview</a>   <a href="#">PDF (914 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a>
<b>Research highlights</b>  ► ELISA for Vip protein showed LOD 16 ppb and quantification range 31–500 ppb. ► This study provides a rapid screening of GM and non-GM samples. ► Provide valuable information and regulation of unauthorized GM samples. ► Study elicits valuable information for stable expression of Vip in GM samples.	
58	 <b>Multiresidue HPLC method to measure benzimidazole anthelmintics in plasma and egg from laying hens. Evaluation of albendazole metabolites residue profiles</b> <small>Original Research Article</small> <i>Pages 793-800</i> M. Bistoletti, L. Moreno, L. Alvarez, C. Lanusse <a href="#">Show preview</a>   <a href="#">PDF (320 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a>
<b>Research highlights</b>  ► The validation of a HPLC method to quantify 10 benzimidazole drugs is reported. ► The validation was performed in plasma and egg from laying hens. ► The plasma pharmacokinetic behaviour of albendazole was studied in hen. ► Albendazole and its sulphoxide and sulphone metabolites were measured in plasma. ► Residual egg concentrations of albendazole metabolites were detected.	

59	 <p><b>Quantitative analysis of glycoconjugate precursors of guaiacol in smoke-affected grapes using liquid chromatography–tandem mass spectrometry based stable isotope dilution analysis</b> <small>Original Research Article</small>  <i>Pages 801-806</i>            Kerry A. Dungey, Yoji Hayasaka, Kerry L. Wilkinson</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (541 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► A method for quantifying guaiacol glycoconjugates has been developed and validated. ► Glycoconjugates accumulated in grape berries following grapevine exposure to smoke. ► Higher concentrations of glycoconjugates were present in grape skins compared with pulp.</p>
60	 <p><b>Sensor-containing microspheres of chitosan crosslinked with 8-hydroxyquinoline-5-sulphonic acid for determination of Cu(II) in instant coffee</b> <small>Original Research Article</small>  <i>Pages 807-814</i>            Luciano Vitali, Iolanda Cruz Vieira, Almir Spinelli</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (576 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► A novel carbon paste electrode. ► The sensor contains chitosan microspheres and 8-hydroxyquinoline-5-sulphonic acid. ► It serves for determination of Cu(II) in instant coffee.</p>
61	 <p><b>Development of polyclonal antibody-based indirect competitive enzyme-linked immunosorbent assay for sodium saccharin residue in food samples</b> <small>Original Research Article</small>  <i>Pages 815-820</i>            Yu Wang, Zhen-Lin Xu, Yan-Yun Xie, Yuan-Xin Tian, Yu-Dong Shen, Glenn M. Young, Hong Wang, Hong-Tao Lei, Yuan-Ming Sun</p> <p> <a href="#">Show preview</a>    <a href="#">PDF (275 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p> <p><b>Research highlights</b></p> <p>► 6-Amino-saccharin was used as a hapten and coupled to bovine serum albumin (BSA) for immunogen to produce specific polyclonal antibody (PcAb) for sodium saccharin. ► The PcAb was characterized by indirect ELISA and indirect competitive ELISA (icELISA) for its sensitivity and specificity. ► The ELISA conditions were optimized and an icELISA method for sodium saccharin was final developed with good sensitivity and specificity. ► The icELISA was applied to determination of sodium saccharin residues in food samples and the results were confirmed by HPLC method.</p>
62	 <p><b>Calendar</b>  <i>Pages I-II</i></p> <p> <a href="#">Show preview</a>    <a href="#">PDF (108 K)</a>   <a href="#">Related articles</a>   <a href="#">Related reference work articles</a></p>

articles 1 - 62

[< Previous vol/iss](#) | [Next vol/iss >](#)

Home

Help

Browse

- About ScienceDirect
- What is ScienceDirect
- Contact and Support
- Contact and Support

Search

- Content details
- Set up
- How to use

My settings

- Subscriptions

- About Elsevier
- About Elsevier
- About SciVerse
- About SciVal
- Terms and Conditions
- Privacy policy



My alerts

[Developers](#)

[Information for advertisers](#)

Copyright © 2011 Elsevier B.V. All rights reserved. SciVerse® is a registered trademark of Elsevier Properties S.A., used under license. ScienceDirect® is a registered trademark of Elsevier B.V.