

CONTENTS

<i>List of Plates</i>	<i>page ix</i>
<i>Editors' Preface</i>	<i>xi</i>
<i>List of Contributors</i>	<i>xiii</i>
<i>Introduction</i>	<i>xv</i>
Chap. I ECONOMICS, SUPPLY AND DISTRIBUTION OF FOODS IN THE UNITED KINGDOM	1
2 THE PRINCIPAL FOODSTUFFS	11
Meat	11
Fish	22
Eggs	36
Fresh fruits and vegetables	47
Potatoes	60
Cereals	70
The structure of cereal grains	72
Quality in wheat and oats	88
Mineral constituents of wheat and flour	101
The scientific principles of flour <i>milling</i>	109
3 THE BASIC CONSTITUENTS OF FOODS	121
Proteins	121
Mucopolysaccharides and mucoproteins	131
Carbohydrates	135
Fats	141
4 SOME ASPECTS OF QUALITY IN FOODS	154
The physical and chemical basis of quality	154
The fine structure of biological tissues	160
The histological structure of plant tissues	167

5	THE MICRO-ORGANISMS	171
	Introduction	171
	Moulds	171
	Yeasts and bacteria	181
	Principles of the control of microbial spoilage	188
	Micro-organisms as sources of proteins and fats	194
6	CHEMICAL MECHANISMS OF SPOILAGE	199
	Rancidity in edible fats and fat-containing foods	199
	The 'Maillard' or 'browning' reaction	228
7	THE PRINCIPLES OF FOOD PRESERVATION	240
	General introduction	240
	Some aspects of fruit and vegetable canning	247
	Refrigeration:	250
	Mechanical principles	250
	Animal produce	253
	Fish	257
	Fresh fruits and vegetables	261
	The 'Quick Freezing' of fruits, vegetables and packaged foods	266
	Food cargoes	269
	Dehydration	276
	Sugar preserves	292
<i>Appendix</i>	Organization of research and information services on food science	305
	<i>Index to authors</i>	311
	<i>Index to subjects</i>	315