Food Supply Chain Management

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Contents

	Preface	. V
	Forewords Contributors	ix xiii
1	Introduction to the UK Food Supply Chain M. Bourlakis and P. Weightman	1
2	The Food Consumer and the Supply Chain D. Marshall	11
3	Perceived Risk and Product Safety in the Food Supply Chain S. Kuznesof and M. Brennan	32
4	Procurement in the Food and Drink Industry in the early 21st Century J. Allinson	49
5	The UK Livestock System D. Harvey	62
6	UK Crop Production S. Wilcockson	83
7	Food Manufacturing D. Hughes	99
8	Food Retailing, Wholesaling and Catering J. Dawson	116
9	Partnerships and Alliances in UK Supermarket Supply Networks R. Duffy and A. Fearne	136
10	New Product Development and Information Technology in Food Supply Chain Management: The Case of Tesco <i>M. Francis</i>	153

iv Contents

11	Third Party Logistics in the Food Supply Chain A.C. McKinnon	165
12	Temperature Controlled Supply Chains D. Smith and L. Sparks	179
13	Factors Influencing Supply and Demand for Organic Foods G. Butler, H. Newton, M. Bourlakis and C. Leifert	199
14	The US Food Supply Chain J.R. Stock	211
15	The Future of Food Supply Chain Management C. Bourlakis and M. Bourlakis	221
	Index	231

Preface

Food is always a matter of interest, a means of providing energy, the raw material that builds and maintains our well-being, a defence against illness, a pleasure to consume when well prepared and presented, a basis for social interaction and enjoyment at home, in a restaurant, canteen or perhaps even hospital or school. Our ancient ancestors spent more than half of their waking hours searching for, gathering, hunting and preparing food.

Clearly we have progressed. For example, television and magazines have large audiences eager for entertainment and instruction on methods of food preparation and presentation, of novelties, of variations on a theme, exotic and ethnic foods or perhaps the simple basics such as ensuring an egg is fresh, boiled, fried or poached to perfection. Yet, whoever we may be, we rely on a secure supply of food, and that is more or less taken for granted in richer countries. Consumers' concerns are price, ease of acquisition and preparation, and quality as measured by preferences for colour, taste and consistency.

By and large, all these are met for the majority of people in developed countries for most of the time. We live at a time of abundantly supplied shops, stores, supermarkets and fast food outlets. Supporting all of these is a supply chain, a series of links and inter-dependencies from farm to fork, from plough to plate. It is the behind-the-scenes production and preparation that delivers hour by hour, week by week, through almost seamless seasons, providing us with food at a price we like and in a place we want it. The food supply chain is a managed process, a combination of knowledge and skills, spanning electronics, biology and the social sciences of economics, human behaviour, psychology, and more. All are set in a legal framework of minimum standards and basic rules.

The food supply chain embraces a wide range of disciplines. This book brings together the most important of them and aims to provide an understanding of the chain, to support those who manage parts of the chain and to enhance the development of research activities in the discipline. It will therefore be of interest to students, managers, researchers and policy decision-makers with an interest in food supply chain management.

The book follows a 'farm to fork' structure. Each chapter starts with aims and an introduction, and concludes with study questions that students in particular may find useful. The editors introduce the food chain environment, setting the scene by describing its major parameters and descriptors. Consumer satisfaction is the main objective of every chain, and two chapters by David Marshall, Sharron Kuznesof and Mary Brennan relate to this. They discuss, among other things, the product choice process, purchasing behaviour and aspects of perceptions of risk concerning food safety. The procurement function is introduced in a further chapter by Johanne Allinson.

Aspects of crop and livestock production are addressed by Stephen Wilcockson and David Harvey. Their chapters illustrate the critical role of agriculture and primary producer within the food supply chain that has been neglected by many books.

Food manufacturing, the processors, assemblers and preparers of near ready or table ready food are described by David Hughes, while wholesalers, retailers and caterers are discussed by John Dawson. Networks and alliances between links in the food chain are illustrated by Rachel Duffy and Andrew Fearne, and Mark Francis describes new product development and the use of information technology by Tesco, the UK's leading food retailer.

In Chapter 11, Alan McKinnon stresses the pivotal role of third party logistics firms in the modern food supply chain, while temperature-controlled supply chains are addressed by David Smith and Leigh Sparks in the following chapter.

Chapter 13 has been written by a research team led by Carlo Leifert and contributes to our understanding of the organic food supply chain, which is based on a traditional way of growing crops without the support of modern fertilisers, herbicides and pesticides. Following that, James Stock discusses the US food supply chain, since many of the innovations to the UK and European supply chains (e.g. efficient consumer response) originated on the west side of the Atlantic.

In the last chapter, Costantine and Michael Bourlakis provide a synoptic view of the trends within the food supply chain's dynamic system and the likely direction of its future management.

It is our aim to promote knowledge and understanding of the UK food supply chain; however, we anticipate that the book will prove useful to readers based in other countries in Europe and around the world. We are delighted to be able to include knowledge and expertise from contributors based primarily in leading UK universities. Many of the contributors are currently working at the University of Newcastle upon Tyne, or are either graduates or former staff members. This is hardly surprising, since Newcastle was the first English university to introduce a Chair of Agriculture, in 1892, and the first UK university to introduce a professorship in food marketing in 1963.

The food industry has developed massively, from the fundamentals of production, harvesting and storage, to a situation where productivity is enhanced through genetics, chemistry, mechanisation and management. There was a time in the memory of at least one of the authors when the UK struggled to match supply with demand, but food production and supply have moved on, so that quality, safety, presentation

and ease of use are at the top of the list of consumers' demands. This book will provide an understanding of how the supply chain works and how it will develop to meet these needs.

M. Bourlakis and P. Weightman