



Sector futures

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In 2000, the EU was the world's largest producer of all foodstuffs, exceeding the US production value by €80 billion. The sector is bigger than Europe's automotive, chemical, machinery and equipment industries, according to figures from the Confederation of the EU food and drink industry (CIAA). In the twenty-first century, there is no question that Europe can feed itself, but there are growing concerns about diet-related health problems and issues concerning the 'industrialisation' of the food system. How will the food and drink sector respond? This article provides a snapshot of the food and drink manufacturing sector in Europe, and considers the trends and drivers of change shaping its future.

We are what we eat

Food that tells you when it's going off, or even stays perpetually fresh. Fridges that reorder food when stocks are low and automatically arrange for your shopping to be delivered to your home. Foods that improve your health or prevent disease. Is this a plausible vision of the future? Or, rather, do we see a scary, 'Frankenstein' future with technological innovation causing catastrophic damage to our health and the environment?

Food is a subject dear to most people's hearts. Eating, shopping for food and cooking are fundamental activities. When it comes to consumer spending, food and drink is the biggest category. In 1999, EU consumer expenditure on food and non-alcoholic drinks represented about 13% of total household consumption (European Commission, 2002, p. 11)

While gathering and preparing food no longer dominates the lives of most Europeans in quite the way they once did, nevertheless, food is of key importance. Food not only provides the sustenance we need but is also closely tied to our health. It plays a key part in our lives socially and culturally – for families, friends and business. As a producing sector, it brings to bear powerful marketing and retail pressures.

Food is an emotive subject. While most of us would perhaps not think of ourselves as experts on the subject, we know what we like when it comes to eating and we hold strong opinions on many issues to do with food. This applies particularly when it comes to matters of food safety. Stories about Mad Cow Disease or GM foods are front-page news. Food scandals can even bring down governments: the crisis arising from dioxin-contaminated animal feed in Belgium is widely thought to have led to the defeat of the Dehaene administration in 1999.

This article is the first of three considering the future of the food and drink manufacturing sector¹. It provides a snapshot of the European food and drink industry, and examines trends and the major drivers of change influencing its future.

Defining the sector

The food and drink manufacturing industry is very broad but can be defined as the preparation of food and drink products ready for sale and consumption. It involves the sourcing of ingredients, processing, preservation and packaging. It also includes product research and design, taste testing and marketing. We can think of food and drink manufacturing as being a significant part of the food chain, which comprises agriculture and fishing, food and drink manufacturing, distribution and warehousing, wholesaling, retailing, food service and catering. As a consequence, future developments in any part of the food chain may impact on food manufacturing. Thus, while the focus of these features will be on the future of food and drink manufacturing, inevitably this must be seen within the context of the future of the food system as a whole.

¹ Tobacco is commonly grouped with food and drink but for the purposes of this article it is excluded.

Market structure

The food and drink manufacturing industry is made up of a number of product sub-sectors:

- cereal products (biscuits, bread and bakery products, breakfast cereals, cakes, desserts and cake mixes);
- beverages (including tea, coffee, soft drinks, alcoholic beverages, fruit juices, mineral water and spring water);
- confectionery and snacks;
- fish and fish products;
- fruit and vegetable processing (jams and preserves, herbs and spices, sauces and condiments, and salads);
- meat processing and meat products;
- oils and fats, margarines and spreads;
- poultry and poultry products.

The industry also produces a range of specialist products for a range of dietary requirements, and lifestyle, religious, cultural and personal preferences – infant formula and weaning foods, organic products, meat free meals, soya-based products, etc. Food and drink products are made available through a wide range of processes, e.g. frozen, chilled or at ambient temperature, packaged in glass jars and bottles, cans, plastic containers and packaging papers and board.

According to the **Confederation of the EU Food and Drink Industry (CIAA)**², food and drink manufacturing is Europe's leading industrial sector, worth over €600 billion in terms of production and €145 billion in added value³. The European food and drink industry transforms more than 70% of the agricultural raw materials produced in the EU and is a leading exporting sector with a total of €45 billion and a positive trade balance. Table 1 shows the EU's production and value added by sub-sector.

Table 1: *EU Food and drink production and added value by sub-sector, 2001*

	Production		Value added	
	€ billion	%	€ billion	%
Meat products	126	20.1	23	15.9
Fish products	15	2.4	2	1.4
Processed fruits and vegetables	36	5.8	9	6.2
Oils and fats	25	4	3	2.1
Dairy products	96	15.3	16	11
Flour and starch products	27	4.3	6	4.1
Animal feed	40	6.4	6	4.1
Various food products ^a	163	26	48	33.1
Beverages	98	15.7	32	22.1
Total	626	100	145	100

Note: ^a Includes among others confectionery, biscuits and food preparations.

Source: *CIAA Website*, *Statistics and trends, Sectors*

² http://www.ciaa.be/navigation/frames_uk/frameset1.htm

³ This represents the value above raw farm prices.

⁴ http://www.ciaa.be/navigation/frames_uk/frameset1.htm

Food and drink manufacturing is the EU's third-largest industrial employer with over 2.6 million employees. A breakdown of employees by sub-sector is shown in Table 2.

Table 2: EU Food and drink industry employment by sub-sector, 2001

	Employees	
	(000s)	%
Meat products	624	22.3
Fish products	93	3.3
Processed fruits and vegetables	168	6.0
Oils and fats	48	1.7
Dairy products	274	9.8
Flour and starch products	78	2.8
Animal feed	98	3.5
Various food products ^a	1,078	38.6
Beverages	335	12
Total	2,796	100

Note: ^a Includes among others confectionery, biscuits and food preparations.

Source: *CIAA Website*⁵, *Statistics and trends, Sectors*.

The sector is characterised by a relatively large number of companies: some 30,000 companies across the former EU15. Table 3 provides a breakdown of production, value added, employees and the number of companies by Member State (EU15).

Table 3: EU Food and drink production, added value and industry structure, 2001

	Production € billion ^a	Value added € billion	Employees (000s)	Number of companies
Austria	11 ^b	2	79 ^b	1,264 ^b
Belgium	24 ^b	5	62	723
Denmark	17 ^b	4	87 ^b	450
Finland	8 ^b	2	34	336
France	115 ^c	21	392 ^c	3,604
Germany	110	27	597	6,035
Greece	5	1	43	1,036 ^b
Ireland	15	4	47	687
Italy	93	24	268	6,800 ^d
Luxembourg	1	0.3	4 ^b	226
Netherlands	39 ^b	6	147 ^b	855
Portugal	10 ^b	2	104 ^b	1,916 ^d
Spain	67	14	371 ^b	3,040
Sweden	13 ^c	3	53	244
United Kingdom	98 ^b	30	506 ^b	2,319
EU15	626	145	2,796	29,635

Note: ^a current prices; ^b more than one employee; ^c more than three employees; ^d more than nine employees.

Source: *CIAA Website*⁶, *Statistics and trends, Countries*

⁵ http://www.ciaa.be/navigation/frames_uk/frameset1.htm

⁶ http://www.ciaa.be/navigation/frames_uk/frameset1.htm

Table 3 also shows that France, Germany, Italy and the UK are the major food manufacturing countries within the EU, accounting for about two-thirds of the production of the EU15.

Despite the numerous small companies in the sector, food and drink manufacturing, globally and in Europe, is increasingly dominated by a small number of very big players. Table 4 shows the top 10 food manufacturers worldwide, a list dominated by US companies such as Cargill, Kraft Foods⁷, PepsiCo and Coca Cola. But Europe has its giant food manufacturers too – Unilever, Diageo and Danone figure in the top 10, a list that also includes Nestlé, which by some measures is the largest food company of all.

Table 4: *Top 10 food manufacturers worldwide, ranked by turnover, 2002*

Company	Country	Sales € billion	Sales in Europe € billion	Food/drink sales in Europe € billion	Total employees (000s)	European employees (000s)	Food/drink sectors
Cargill	USA	54.9				90	Grain products
Nestlé	Switzerland	52.6		17.7	230	92	Cereal, dairy, beverages, confectionery
Kraft Foods	USA	42.5			175		Dairy, snacks, alcoholic beverages, confectionery, coffee
Unilever	NL/UK	32.1	20.2		279	75	Dairy, beverages, dressings, frozen foods, cooking products
ConAgra	USA	30.8			89		Meat, processed foods
PepsiCo	USA	30.0					Snacks, beverages, cereal products
Coca Cola	USA	22.4					Beverages
Diageo	UK	19.0	4.1				Alcoholic beverages, dough products
Master-foods	USA	14.8	12.4		25	13	Snacks, beverages, ready meals
Danone	France	14.5	9.2	9.2	101	38	Dairy, beverages, biscuits, cereals

Source: *CIAA Website*⁸, *Statistics and trends, Top food manufacturers, 2002*

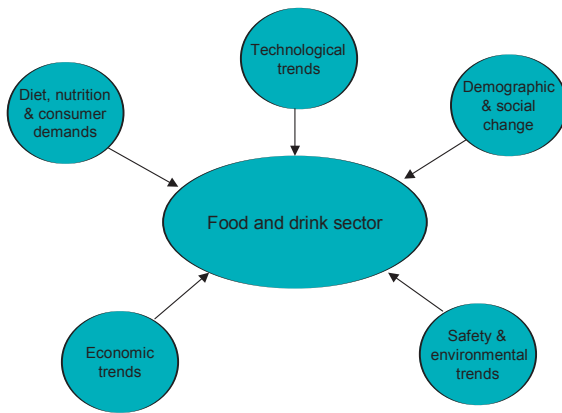
Trends and drivers of change

As indicated earlier, since the food and drink manufacturing sector is an intrinsic part of the food chain, it is influenced by a range of factors acting on other parts of the food system. As a result, there is a large quantity of material relevant to the future of the food sector as a whole – e.g. market surveys, reports on GM foods, farming and the environment, diet and health, etc. Perhaps surprisingly, there are relatively few futures or foresight studies available in the public domain that focus squarely on food and drink manufacturing. This article, therefore, has drawn on the wide variety of relevant material to identify trends and drivers of change. The trends cover five broad areas, as shown in Figure 1, and within these are several drivers of change, many of which are interrelated both with each other and across the different broad trends.

⁷ Now merged with General Foods and owned by Altria (the new name for Philip Morris).

⁸ http://www.ciaa.be/navigation/frames_uk/frameset1.htm

Figure 1: Factors affecting the food and drink sector



Economic trends

Globalisation and regionalisation

A key driver of change for the food system is globalisation. The international integration of markets means that agricultural and food products are increasingly traded across national borders. This trend will strengthen as open markets are coupled with growing consumer demand for variety and year-round availability of fresh produce (Schweikhardt and Whipple, 2001, p. 3). Within Europe, the accession of new Member States from Eastern Europe, which took place in May 2004, will bring both easier access to agricultural supplies as well as new consumers. Macroeconomic policy and exchange rates will therefore have a greater influence on the food system in the future. Food retailing, too, is becoming more international, although the much-talked-about global ambitions of retailers, such as Wal Mart, Ahold and Tesco, are still some way off. For the time being, their influence is more transregional in nature (Rugman and Girod, 2002, p. 1).

Over the past 30 years, energy has been relatively cheap and has fuelled the creation of an increasingly global food chain. Relatively low oil costs makes it possible to provide all-year round foods, allows vegetables and fruits to be flown in from Africa, and shoppers to drive to out of town supermarkets. The current situation in the Middle East highlights the possibility of dramatically higher energy costs, which could have a profound impact on the organisation of the whole food system.

Competition and consolidation

As already indicated, although there are a large number of small firms in the sector, there has been considerable consolidation through mergers and acquisitions in recent years, leading to the creation of huge corporations that dominate food manufacturing. The variety of pressures on the industry – globalisation, price and availability of raw materials, increasing regulation in food safety, health and traceability, costs of innovation – all contribute to the need to achieve economies of scale and the trend towards further consolidation. A key driver has been the desire to achieve dominant market positions through creating and controlling global brands, such as Heineken, Pringles, etc.

According to Connor (2003, p. 2), the market share of the top 20 US food manufacturers has doubled since 1967. In the US, 100 firms now account for 80% of all the value added in food and drink manufacturing. A similar picture is emerging in terms of suppliers to the farming and food sector, e.g. animal feedstock producers, agrochemicals.

Despite the presence of food manufacturing giants, it is food retailers who increasingly control the food chain with their ability to exert enormous influence over both consumers and suppliers (Lang, 2003, p. 2). Concentration in retailing has also been growing. According to **M+M Planet Retail**⁹, in 2003, the world's top 30 grocery retailers accounted for about one-third of retail sales worldwide and for about two-thirds in Europe, with the leading 10 European retailers representing 40% of total retail sales. Table 5 shows the top 10 grocery retailers worldwide, with Wal Mart the biggest player by far. But Europe's own retail giants, such as Carrefour, Ahold and Tesco, are also prominent. This trend suggests that food retailing in Europe will be characterised by fewer, bigger players, more international in their structure, with US retailers seeking to increase their presence significantly. Some analysts predict that global food retailing will be dominated by as few as four to five players in the near future (Cap Gemini Ernst and Young, 2002, p. 1).

Table 5: *Top 10 grocery retailers worldwide, 2003*

	Company	Country of origin	Net sales € billion	Grocery sales € billion
1	Wal Mart	USA	227	99.2
2	Carrefour	France	70.5	54.6
3	Ahold	Netherlands	56.1	47.1
4	Kroger	USA	47.6	33.5
5	Tesco	UK	44.6	33.2
6	Aldi	Germany	36.3	30.4
7	Rewe	Germany	39.2	29.6
8	Metro	Germany	53.6	27.1
9	ITM	France	33.1	25.8
10	Schwarz Group	Germany	29.5	24.5

Source: Adapted from **M+M Planet Retail**¹⁰, Press release, 1 June 2004

While concentration in food manufacturing and retailing looks set to continue, there is also a growing demand for specialist products in niche markets, e.g. ethnic, organic and vegetarian foods. This offers opportunities, especially for small and medium-sized firms.

The desire for cheap food

A central objective of food policies in the past was to ensure the supply of 'cheap food'. This meant securing food supplies by subsidising agriculture – without it, farmers would become gradually poorer in relation to the rest of the population and leave the land. **The Common Agricultural Policy**¹¹ (CAP) is predicated on these principles. In its current form, the CAP now seems incompatible with the more prevalent principles that competition and open markets are the best way to deliver choice, quality and low prices. Thus, reform of the CAP is likely to continue, with subsidy gradually being decoupled from production (CIAA, 2003). However, the farming lobby is a powerful one and reform is likely to be slow and painful.

⁹ <http://www.planetretail.net/>

¹⁰ <http://www.planetretail.net/>

¹¹ http://europa.eu.int/comm/publications/archives/booklets/move/13/txt_en.htm

Moving up the food value chain

In the nineteenth century, Ernst Engel observed that, as family income increases, the proportion spent on food declines. Engel's Law means that poorer families spend a higher proportion of their income on food than wealthier families. Food products generally have a low price elasticity of demand, i.e. changes in price have little influence on demand, simply because there is a limit to how much one person can eat. This is reflected in the fact that, for at least the past 100 years, farm and food prices have been steadily declining. Wood, Sebastian and Scherr (2000, p. 31) estimate that the real price of food declined by about 40% between 1961 and 2000. Table 6 shows expenditure for consumption of food and non-alcoholic beverages in 1995 and 1999 (European Commission, 2002a, p.11), and illustrates that the proportion of consumer spending on food is continuing to fall. It also shows that the proportion of income spent on food varies considerably across Europe – ranging in 1999 from almost 20% in Portugal to less than 10% in the UK.

Table 6: *Expenditure for consumption of food and non-alcoholic beverages, 1995/1999, as a % of total household consumption*

	1999	1995
EU15	12.9	14.2
EUR	13.6	14.6
P	19.1	20.7
EL	16.8	18.2
E	15.3	17.7
I	15.0	16.8
F	14.4	15.1
B	13.2	14.5
DK	13.0	14.0
FIN	13.0	14.8
S	12.6	14.4
A	12.4	13.4
IRL	12.0	15.7
D	11.8	12.5
NL	11.6	13.0
UK	9.7	11.2

Source: *European Commission, 2002a, p.11*

These economic trends mean that the overall size of the market for food is diminishing relative to other sectors in the economy. There is, therefore, considerable incentive for farmers as well as food manufacturers to 'add value' to their products to increase sales turnover, e.g. bread instead of flour, a ready prepared meal instead of the raw ingredients. All actors in the food system will tend to 'move up' the food value chain in search of consumers with greater disposable income, to segment the market and offer a wider variety of choice, especially specialist and luxury products. These are long-term trends that will inevitably continue.

New delivery methods

Shopping for food, either to eat at home, on the move or in a restaurant, is a key activity in the food system both for consumers and for the industry. Food distribution has been increasing through non-traditional convenience outlets such as petrol stations, kiosks, video shops and leisure centres, and through vending machines. This is important in attempts to gain market share in the fast-growing convenience food market. Online shopping for food also seems likely to grow (see below).

Technological trends

Industrial processes have been applied to agriculture and food for a number of years in pursuit of the provision of secure and affordable food supplies. Technology has now advanced to the stage where, theoretically, it could revolutionise the production, processing and distribution of food. There are two broad areas in which technology will affect the food system: in producing and processing novel foods; and in the application of information and communication technologies (ICT).

Novel food

The application of science and technology to food and agriculture is a very large topic. Agricultural scientists seek to use science and technology to produce novel crops, crops with better yields or particular properties. Food scientists look for ways to alter the flavour of foods, extend shelf life or create new products with health benefits. Food manufacturers also look for innovation in production processes and packaging.

The production of novel foods also includes biotechnology and genetic modification, which is currently a key issue for consumers, citizens, and the food and drink industry. It is, of course, a huge subject and one that can only be introduced here (see the European Commission's **Food and Feed Safety**¹² website and **GM Nation? The Public Debate**¹³ website for an overview of the issues). 'Genetic engineering' covers a wide range of ways to change a gene or a small number of genes in a species or between different species. For centuries, plant and animal breeding has sought to enhance genetic traits. However, over the past 25 years, it has become possible to manipulate specific genes at a molecular level in the laboratory. Genetic material may be extracted from a living organism, isolated and manipulated, and either replaced in the same organism, or transferred to a different one.

Genetic engineering has many potential benefits; some of those relevant to food and agriculture include:

- better resistance to weeds, pests, and disease;
- better texture, flavour, nutritional value;
- longer shelf life, easier shipment;
- better yield, more efficient use of land;
- fewer herbicides and other chemicals.

Genetic modification of animals is also possible, for instance by adding human genes to cattle to produce nutritionally improved milk.

Those against GM foods argue that it is dangerous for us 'to play God', that we don't know what we are doing and that we haven't properly evaluated the risks to human health and the environment. Those in favour argue that genetic manipulation has been going on for centuries, that it is not possible to 'prove' that something is 100% safe, that labelling should allow consumers to decide and that the potential benefits (including solving world hunger) are far too important to throw away.

¹² http://europa.eu.int/comm/food/food/biotechnology/index_en.htm

¹³ <http://www.gmnation.org.uk/>

The debate has become polarised and, unlike the US, Europe's consumers have rejected the introduction of GM foods on a large scale, for the time being at least. Opinion polling in 2002 showed that, while Europeans support medical applications of biotechnology, they are sceptical about EU agricultural and food-related biotechnology. Depending on the Member State, between 30% and 65% reject all reasons for buying GM foods (European Commission, 2004, p. 2).

The EU imposed a moratorium on importing bio-engineered food in 1999, causing friction with the US which began action within the World Trade Organisation in 2003 to get the ban lifted. The EU softened its position, introducing regulations concerned with approval and labelling (see [Question and Answers on the regulation of GMOs in the EU](#)¹⁴). Essentially, the legislation allows GM foods to be imported and sold in the EU provided they are labelled. European Commissioner for Health and Consumer Protection, David Byrne, told the European Parliament: 'We have now come to the stage where we must lift the *de facto* moratorium. I believe we have got in place legislation [...] to enable consumers to make the choice for themselves whether to consume GM foods or not.' In May 2004, the European Commission endorsed an application by Swiss firm Syngenta to import genetically modified maize into the EU, the first approval under the new rules. Nevertheless, the debate over the introduction of GM foods is far from over and the food industry anxiously awaits the outcome.

Application of ICT

The food and drink industry will be affected by further application of information and communication technologies (ICT) in the food system; for example, ICT are a key driver for consolidation in the sector.

ICT also directly impact on food distribution, with most large retailers experimenting in eCommerce and online shopping for food. Home shopping for food has yet to take off in a big way – most people still prefer to shop at a supermarket in person. According to Jupiter Research, US online groceries were expected to reach sales of \$2.4 billion in 2004, which is only 0.4% of the total grocery market of \$570 billion. Online sales are expected to grow to \$6.5 billion by 2008, still only 1% of the estimated total market, but at an annual growth rate of 42% (CNN, 2004).

ICT are increasingly being used to improve efficiency in all steps of the production, processing and distribution of food. There is nothing especially new in this but the integration of information systems has perhaps the greatest potential to affect the food sector. In particular, food retailers are able to gather vast amounts of information about consumer preferences that can be used to determine the kinds of foods that the food manufacturers produce. Similarly, both retailers and manufacturers will exert increasing influence over farmers.

Demographic and social change

Population dynamics

Engel's Law also means that long-term demographic and social changes have significant effects on the market for food and drink: changes in the size and make-up of the population, the way they live their lives and the wealth of consumers will influence the demand for different kinds of food products. Overall, Europe's population is expected to peak in 2022 (see the European Commission's report, [The social situation in the European Union 2003](#)¹⁵), but the situation varies greatly from country to country. Italy's population for instance, is expected to start falling early in this decade, while Ireland's will continue to increase until the middle of this century (European Commission, 2003, p. 116).

¹⁴ <http://europa.eu.int/rapid/pressReleasesAction.do?reference=MEMO/04/102&format=HTML&aged=0&language=EN&guiLanguage=en>

¹⁵ http://europa.eu.int/comm/employment_social/social_situation/docs/SSR2003_en.pdf

Apart from overall population size, there are many demographic and social changes, which could possibly have an influence on the kinds of food demanded and produced. These include (European Commission, 2003, pp. 116-117):

- fewer children and having children later in life;
- fewer and later marriages and more marital breakdowns;
- increase in non-marital unions and a rise in births outside marriage;
- trend towards smaller households with:
 - more people living alone
 - increase in single parent families
 - falling number of couples with children.

Another factor shaping the food industry is the demand for ethnic foods, as a result of migration and foreign travel.

Segmenting the market

In seeking to maximise market share, major food manufacturers have sought to segment the market, targeting new products at adults, children, teens and 'tweens', products aimed specifically at men or women, or ethnic groups (or those who like ethnic foods). In targeting clearly defined consumer groups, manufacturers also seek 'to deliver precise product benefits', e.g. indulgence, novelty or health (Euromonitor, 2002, p. 4). So called 'functional foods' have ingredients (or 'nutraceuticals') incorporated within them to give specific medical or physiological benefits, e.g. spreads that reduce cholesterol or pro-biotic yoghurt drinks (3i, 2003, p. 10).

Dashboard dining

The Kerry Group estimates that as much as 15% of all food consumed daily in the US is now eaten in the car, a phenomenon known as dashboard dining (Feeney, 2002, p. 4). Moreover, the average time to prepare a meal in the UK is now less than 15 minutes, down from over two hours in the 1930s (3i, 2003, p. 8). While some European countries may be slower to follow these trends, nevertheless, greater time pressure on many people's lives is increasing the demand for convenience foods and ready meals, snacking and snatched meals, and eating out. This tendency towards more informal eating will continue to boost demand for packaged and processed foods, and ready meals (Euromonitor, 2002, p. 4).

Safety and environmental trends

Food safety

Safety and environmental concerns seem certain to grow and shape the farming and food system in Europe. Crises over **BSE**¹⁶, **foot and mouth disease**¹⁷, **dioxin-contaminated animal feed**¹⁸, as well as the GM food debate, have put the spotlight on food safety and the impact of food and farming on the environment as never before. The Belgian dioxin scandal, in particular, prompted the European Commission to adopt a **White Paper on food safety**¹⁹ covering all aspects

¹⁶ http://europa.eu.int/comm/food/food/biosafety/bse/bse13_en.pdf

¹⁷ http://europa.eu.int/comm/food/animal/diseases/controlmeasures/fmd_en.htm

¹⁸ <http://www.foodsafetynetwork.ca/crisis/belgian-dioxin-crisis-feb01-00.htm>

¹⁹ http://europa.eu.int/comm/dgs/health_consumer/library/pub/pub06_en.pdf

of food products from ‘farm to table’. The White Paper led to a landmark **General Food Law Regulation**²⁰ in 2002, which set out the general principles of food law, and provided the legal basis for the creation of the **European Food Safety Authority**²¹ (EFSA).

From the food and drink manufacturing industry’s perspective, food safety is crucial in building consumer confidence in its products. However, the need to ensure safety should not prevent the sector from responding to consumer demand, e.g. through bringing innovative new products to market. Above all, ‘the industry needs transparent, predictable, efficient and responsive decision-making procedures to encourage innovation’ (CIAA, 2001). Thus, the European Food Safety Authority is seen as the catalyst to streamline the EU decision-making process when it comes to food matters.

Sustainable development

The importance of sustainable development has been steadily growing since the Rio world summit in 1992. Europe’s strategy is laid down in a **Communication on a sustainable Europe for a better world**²². Although issues of food safety, public health and labelling are mentioned, the strategy does not treat at any length the relationship between food and the environment. The Common Agricultural Policy addresses sustainable development in agriculture and the European Commission has prepared an **Action plan for organic food and farming**²³.

According to the CIAA, from the food and drink industry’s perspective, sustainable development means achieving three long-term goals:

- to protect the environment where agricultural raw materials are grown and in which the industry operates;
- to improve access to quality and healthy food for consumers;
- to enhance economic growth.

The CIAA’s report, **Industry as a partner for sustainable development: Food and drink**²⁴, presents an overview of the progress made within the food and drink industry since the Rio Summit, particularly regarding improvements in eco-efficiency in manufacturing. Examples of these measures are that:

- many companies have established Environmental Performance Indicators. These indicators show a reduction in the consumption of energy by up to 58% and of water by up to 28% since 1990;
- food and drink companies have adopted voluntary environmental and quality management systems based on ISO standards;
- food and drink industries have increasingly communicated their efforts and achievements through sustainability reports and/or environmental and social reports.

²⁰ http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_031/l_03120020201en00010024.pdf

²¹ <http://www.efsa.eu.int/>

²² http://europa.eu.int/eur-lex/en/com/cnc/2001/com2001_0264en01.pdf

²³ http://europa.eu.int/comm/agriculture/qual/organic/plan/index_en.htm

²⁴ <http://www.uneptie.org/outreach/wssd/docs/sectors/final/food-drink.pdf>

It is undoubtedly true that the food and drink sector, conscious of campaigns against companies such as Monsanto, Nestlé, and McDonalds, will want to promote its green credentials for public relations purposes. Nevertheless, there does seem to be some substance behind the spin. Modern food production systems use industrial processes that aim to liberate food production from nature and its seasons to produce food at low prices. However, environmental issues can no longer be ignored and there is an opportunity for the food and drink sector to demonstrate its corporate and social responsibility.

Green procurement

The food industry and retailers have responded to calls for more easily available organic food, but this stops far short of what environmental campaigners would like to see. Part of such a campaign is to encourage shorter food chains, with more locally produced food available in local outlets to reduce environmental impact. Green procurement initiatives from public sector organisations could have a substantial impact on reducing ‘food miles’. For instance, the combined national health services of the EU Member States produce billions of meals for patients each year. However, national and EU public procurement regulations are based upon notions of achieving value for money rather than promoting good environmental or health practice. This issue has been recognised by the European Commission, which has now published an **interpretative communication on public procurement and the environment**²⁵. It explains how public authorities can apply environmental considerations to their purchasing, while ensuring value for money for taxpayers and equal access for all Community suppliers.

Trends in diet, nutrition and consumer demand

Arguably the most important driver of change is trends in consumer demand. The factors that influence consumer demand for food and drink products are complex and include many of the topics discussed above. The list below summarises some of the main factors involved in this complexity:

- demographic and socio-economic change;
- busier lifestyles;
- health, nutrition and safety concerns;
- environmental and ethical concerns;
- migration and demand for ‘ethnic foods’.

Perhaps the main topic not discussed so far is the relationship between diet and health. A 2002 status report on nutrition in Europe recognised that good nutrition can help to reduce the prevalence of many common diseases, such as cardiovascular disease, cancer, diabetes and obesity (European Commission, 2002b, p. 5). Dietary habits and intakes depend on individual choices (cultural influences, food preferences) as well as socio-economic and environmental factors (affordability and availability of food products, quality and safety of products, etc). The EC Treaty, the White Paper on food safety, Community action programmes in public health (e.g. the **Eurodiet**²⁶ project), all illustrate the European Union’s responsibility for, and commitment to, improving nutrition and health.

²⁵ <http://europa.eu.int/comm/environment/gpp/index.htm>

²⁶ http://europa.eu.int/comm/health/ph_determinants/life_style/nutrition/report01_en.pdf

However, there is growing frustration among health professionals when it comes to what people are eating. For instance, the UK's **Food and health action plan**²⁷ (Department of Health, 2003, p. 18) found that:

- advice on healthy eating is consistent and well established based on sound evidence;
- few people currently follow Government advice for a healthy diet;
- most people eat more saturated fat, salt and sugar and less fruit and vegetables than experts recommend;
- the diet of people on low incomes is an area of particular concern.

If diet-related diseases continue to grow, health professionals may be successful in persuading policymakers that the traditional health education approach is insufficient. Among the ideas that are gaining currency are linking social insurance contributions to body mass index in Austria (Ananova, 2004), and a tax on fatty foods in the UK (BBC, 2004).

Looking to the future

This first article in the series looking at the food and drink sector within the European Union considers the sector as it is today in the light of the main trends and issues which are driving change. The next article will seek to identify possible scenarios for the sector and consider their implications.

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