

Food technology



TopFoto

The food and drink industries are part of a chain linking farming and growing through to food processing, manufacture and finally to the sale of food in supermarkets and restaurants. Dr Ken Spears tells us about some of the many career areas in food technology.

There are some 30 000 businesses in the UK involved in food and drink, not including shops and supermarkets.

Every part of this chain offers exciting prospects for a career, from food research and developing new products, to packaging design or production engineering. There is also plenty of room for entrepreneurs in the food industry so you could set up your own food company — supermarkets, restaurants and cafés are always demanding new and innovative food and drink products.

Be what you want to be...

New product development

This is the 'lifblood' of the industry. Product development is a team-based activity involving developmental chefs, food scientists, nutritionists, marketing people to conduct consumer research, technologists to design the production lines, and packaging designers.

Quality management

Quality managers monitor the quality and safety of food ingredients and food products while they are made and transported. They include laboratory staff, microbiologists, hygiene managers and quality controllers.

Environmental health

Environmental health officers (EHOs) are employed by local councils to inspect food factories, shops, restaurants and catering outlets to ensure that food standards and hygiene are maintained. Local councils usually recruit trainee EHOs with A-levels. Look up environmental health on your local council website.

Buying

Supermarket chains employ buyers to visit food producers as part of their quality control. Buyers have experience in a particular area of food technology and work closely with food producers to develop new products and new food ranges. Some buyers get to travel, perhaps visiting salmon producers in Canada or spice manufacturers in the Far East.

Nutrition

Nutritionists are usually graduates with a wide knowledge of healthy eating and diet-related issues, such as obesity, heart disease and coeliac disease. Many are employed by health authorities, clinics and

Box 1 Did you know?

- The food and drink industry buys two-thirds of all fresh produce grown in the UK.
- As well as shops, there are over 30 000 UK businesses involved in food and drink.
- The food and drink industry employs over 650 000 people in the UK; 200 000 extra employees will be needed by 2012 to fill vacancies.
- The food and drink production industry has an annual turnover of £69 billion — 6% of the UK economy.
- Young people can expect starting salaries of £15–£18K, and graduates can expect to start on £20–£25K. Senior food scientists can earn £65K or more.

Box 2 A case study

The Institute of Food Science and Technology (IFST) is the professional body of food scientists and technologists. Its website (www.ifst.org) has a section on careers and training where you can find out what people like Cath Harris do.

Cath studied food quality, product development and nutrition at the University of Plymouth. After her degree she became a senior purchaser. Her job includes product quality, pricing, delivery deadlines and maintaining good supplier relationships.

I find it challenging to experiment with food groups and flavours. To make them blend well in taste and texture is very satisfying but the result can be hideous if you get it wrong! My interest in experimentation is related to product

development within the food industry and is probably the most proactive and exciting part of the sector.

It is essential to understand the bacteria in food substances and the effects they can have in food preparation, final serving and the shelf life of a finished product. My interest was stimulated by the microbiological part of my degree course.

During my work placement I joined my current company as a member of the quality assurance team. The company creates fine frozen seafood and vegetable-based products for the foodservice industry. I worked within the factory environment and learnt about production and people management, and gained a vast amount of technical knowledge.



Cath Harris

government agencies, but companies also employ their own nutritionists to give advice on healthy food production and to their customers.

Food research

Government research agencies carry out research to ensure good nutrition and food safety, and as part of a European team monitoring food quality. Careers in food research require scientific knowledge and skills at all levels, including laboratory assistants and technical officers. The research agencies have libraries and so also need librarians and information researchers.

Qualifications

The above examples should convince you that there is more to a career in food than putting cherries on the top of cakes. So how do you start your career? Your GCSEs and A-levels provide the basis for a range of higher qualifications, skills and work-based learning. An interest and enthusiasm for science and practical technology are useful.

National Vocational Qualifications (NVQs)

Some areas of the industry require NVQs. You can study for these while you are at work, but you also need to spend some time in a college of further education.

National Diploma

You can complete a National Diploma by part-time or full-time study. This can be combined with work-based learning and is intended for people interested in management. National Diplomas may be accepted for entry to degree programmes.

Degrees

These involve full-time study at a university. Some universities offer 'sandwich' courses where you spend a year on an industrial placement with an employer, like Cath Harris did (see Box 2.)



Brian Bell/SPL

Left: Researcher developing food with high mineral, vitamin and protein content

Box 3 Useful websites

Improve Ltd is the Sector Skills Council for the modern food and drink industries:

www.improveltd.co.uk

The *Grocer* magazine website has a careers supplement: www.careersinfoodanddrink.co.uk

The trade journal *Food Manufacture* also has a useful website: www.foodmanufacture.co.uk

Other useful websites include:

- Food and Drink Federation: www.fdf.org.uk
- The British Retail Consortium (BRC): www.brc.org.uk
- Meat and Livestock Commission: www.mlc.org.uk
- The Biscuit Cake Chocolate and Confectionery Alliance (BCCCA): www.bccca.org.uk

Dr Ken Spears is a food technologist who has industry experience. He has taught food technology in schools and at South Bank University.

Marks and Spencer reformulates each of its thousands of different food products every 3 years.