

JOB PROFILE: FOOD TECHNOLOGIST /SCIENTIST

WHAT DOES A FOOD SCIENTIST DO?

Food scientists and technologists work in the food and drink industry. They create and present food and drink in a way that will tempt people to buy it, and also make sure that products are fresh, safe and attractive. Food scientists generally carry out research using their knowledge of the composition of food materials and their behaviour under various conditions.

Food technologists are more concerned with converting raw food materials into food products. However, their duties often overlap.

Food scientists are involved in the application of biology, chemistry, physics, biochemistry, microbiology, genetics, biotechnology, radiation science, enzymes and nutrition. This keeps food fresh, safe and attractive and enables research into ways of producing food more quickly and cheaply. Much of the work involves quality assurance and food safety.

Food technologists plan the manufacture of food and drink products. They work on newly discovered ingredients to invent new recipes and ideas, and modify foods such as the creation of fat-free products. The work involves conducting experiments and producing sample products, and designing the processes and machinery for making products in

large quantities. Food scientists and technologists also have knowledge of chemical engineering, production planning, market and consumer research, and financial management.

WHAT'S A WORKING WEEK LIKE?

Food scientists and technologists work a 35-40 hour week, often working shifts. Food scientists tend to work in laboratories, research departments, or in quality inspection and control on production lines.

Food technologists spend much of their time in factories monitoring production processes and machinery operations. Laboratory and factory conditions will vary depending on the type of operation being managed. Protective clothing may be worn as work could involve using food materials of varying quality.

WHAT SKILLS WOULD I NEED TO BECOME A FOOD SCIENTIST/FOOD TECHNOLOGIST?

To be a food scientist or technologist you should:

- Be good at science, particularly biology and chemistry, but also physics and maths
- Be logical and focused in your approach to work
- Be able to pay attention to detail
- Have good problem-solving skills
- Have high standards of cleanliness
- Be prepared to keep to strict hygiene rules
- Have good verbal and written communication skills to explain ideas to other scientists, factory supervisors and operatives

- Be well organised and able to prioritise tasks

HOW DO I BECOME A FOOD SCIENTIST/FOOD TECHNOLOGIST?

A Higher National Certificate or Diploma (HNC/HND) or a degree is normally the route required.

A relevant subject such as general sciences, food sciences, food studies, food technology or in a specialist area like baking or meat technology is most useful.

Entry requirements for a degree are five GCSEs (A-C)/ S grades (1-3) plus two A levels/three Highers, often including chemistry or biology. Equivalent qualifications may be accepted.

An Access to Higher Education qualification may also be accepted for entry to certain courses. If experienced in a related field, you may be able to gain recognition of skills through Accredited Prior Learning (APL). Please check with colleges or universities for exact entry requirements.

Some graduates continue to study for a postgraduate diploma or an MSc in Food Science before starting work.

Entry into the industry is possible as a laboratory assistant or technician, for which at least four GCSEs (A-C)/S grades (1-3), usually including english, maths, biology and chemistry would be required.

TRAINING FOR WORK

Foundation and Advanced Modern Apprenticeships (MAPPs) may be available for people aged 16-24 please see below:

England: www.realworkrealpay.co.uk

Scotland: www.scottish-enterprise.com/modern-apprenticeships
Wales :

www.elwa.ac.uk/elwaweb/portal.aspx

Northern Ireland:<http://www.tea-ni.org.uk>

ONGOING DEVELOPMENT

Food scientists and technologists work for food manufacturers, retailers and supermarket chains, government research establishments, universities, local authorities and independent organisations which undertake research or develop new products. Opportunities are available for work in quality control and product development for supermarket chains.

This could involve travel to warehouses, distribution centres and suppliers factories. There are promotion prospects into management and occasional opportunities to specialise, these are usually within large organisations. There also opportunities to work abroad for some of the larger organisations.

SALARIES

(Figures are intended as a guideline only)

Laboratory technicians earn between £12,000 and £15,000 a year.

Salaries for research and development scientists and technologists range from £25,000 to £35,000.

Food scientists and technologists in senior management positions could earn over £65,000.