

Scope of Food Technology in India and Abroad

Food has become a high-profit industry by reason of the scope it offers for value addition, particularly with the food processing industry getting recognized in India as a high-priority area.

In order to achieve the expected returns on investment through good quality and right value addition, application of technology has become imperative, leading to an unprecedented demand for scientists, technologists and other professionals who can manage the emerging challenges of the food processing industry effectively.

This role of professionals and trained personnel in the food industry as well as in the various R&D areas of food Science and technology is immense.

In simple words "There is huge requirement for Food Technology professionals in India and abroad".

The concept of processed foods has caught the imagination of consumers in recent years because of their enhanced convenience, variety, nutrition and taste. The challenge therefore lies in continuously developing new variations of food items, as well as new processes that will maximize its appeal and shelf-life, and minimize the use of chemicals and preservatives.

The food processing industry covers a range of food products. These include the basic or primary foods such as wheat and rice products, sugar, oil and pulses and the processes for converting them into edible form and the processed foods such as biscuits and bakery products, confectionery, dairy products, breakfast foods, meat and fish products, fruit and vegetable products and all such items which are processed and packaged to enhance and prolong their edible life.

The swelling consumerism has seen the introduction of a range of new products like ready-to-eat snack foods, breakfast cereals, textures vegetable protein foods and so on. Different brands of the same item and attractive packaging vie for the consumers attention.

Food technology in simpler terms is the application of food science in manufacturing good products, which are safe, wholesome and nutritious. The food processing industry covers a range of food products. These include the basic or primary foods, such as wheat and rice products, sugar, oil and pulse, and the processes for converting them into edible form.

The Food technology is a branch of science in which the food science is applied in manufacturing and preservations of food products. The food technologists study the chemical, physical and microbiological makeup of the food.

The food is processed, preserved, packaged and stored according to the specifications by industry and government. The research and development in food technology has resulted into the production of safe and nutritious foods. The food processing industries manufacture a large variety of food products. They include the primary foods like rice and wheat products, oil, sugar and pulses. They are processed to convert into edible form. Food technology courses can be a good career options. There is increasing scope of food technology courses in India.

Food Science and Technology also covers topic of special, current interest such as :

- **Alternative food processing technologies**
- **Environment-friendly processes**
- **Genetically modified foods**
- **Functional foods**
- **Consumer behavior**
- **Food microstructure**

Food Science is the discipline in which biology, physical science, & engineering are used to study the nature of foods, the causes of their deterioration, & the principles underlying food processing. Food Technology is the application of food science to the selection, preservation, processing, packaging, distribution & use of safe, nutritious & wholesome food.

A Food Scientist studies the physical, microbiological & chemical makeup of food. Depending on their area of specialization, food scientist may develop ways to process, preserve, pack, or store food, according to industry & government specifications & regulations.

In short Food Technology Is a science which begins with productions of the proper raw material in the farm & goes to the table of the consumer through the food processing & manufacturing industry, packaging industry, storage points & the market. Thereby it is linked to a wide variety of sister science including biotechnology, agriculture, microbiology, engineering etc.

The importance of food science & food industry has greatly enhanced in scenario of India today. India is an agricultural country. It is self sufficient as far as productions or agricultural yield is concerned. In fact, India is the second largest producer of fruits & vegetables in the world. But due to gross insufficiency of food processing, lack of proper transport & storage facilities, etc our farmer doesn't get the value for his toil.

Our farmer who deserves to be the 'greatest hero' turns out to be the 'greatest loser'. The hope of today's India therefore is the **Food Technologist** who can increase the value of our agricultural yield to a hundred fold. This is the reason that our government has offered maximum support to this industry, in the current five year plan