

# **Careers in Food Science**



#### Ever wonder...

Why gummy candies are so sour? How yogurt became a to-go food? What makes microwave pizza crispy?



Food scientists apply research, science, and engineering skills to ensure a safe, nutritious, and sustainable food supply.



### **The Food Industry**

The food manufacturing industry links farmers to consumers. It employs nearly 1.5 million people at 29,500+ locations. Each day, more than 1 million people process grains, fruits, vegetables, dairy products, and animal products into food items ready for consumers' local grocery shelves.

## What Doors Can Food Science Open for You?

Exciting opportunities exist in consumer research, teaching, regulatory affairs, basic research, and nutrition. Food scientists find work in industry, academia, and nonprofit and government institutions. A food science degree can lead to a varied and broad career in the \$1 trillion food industry.

# Do You Really Know What Food Science Is?

It's a field that includes chemistry, biochemistry, microbiology, physics, engineering, nutrition, biology, math, and other disciplines.

## Food Quality & Microbiology

Consumers today can eat without having to worry about whether food is safe. Food microbiologists play a critical role to ensure that a product is safe to consume. They have expertise in fermentation, food hygiene, food-borne diseases, food spoilage, preservation, quality control, and lab management. Food safety is very important to all segments of the food industry.

#### **Food Engineering**

Food engineers design and develop systems for processing, storing, packaging, and handling food. They work closely with food chemists and food microbiologists to ensure that safe, high quality foods are made available to consumers.

#### **Product Development**

Wouldn't it be exciting to see your new product idea appear on the grocery store shelf? Developers, working as part of a team, continually strive to create high quality, nutritious products that taste good and are affordable to consumers.

#### **Food Chemistry**

Food chemists develop and improve foods and beverages; analyze methods of cooking, canning, freezing, and packaging; and study the effects of processing on food. They also test samples to make sure foods meet food regulations, and experiment with new foods, additives, and preservatives.

#### **Sensory Science**

Have you ever wondered who makes sure that the food we eat looks, tastes, smells, and has a texture we will find pleasing? Sensory scientists work to understand the characteristics of foods, and how consumers perceive those characteristics, and then ensure that the foods we eat are not just safe and nutritious, but appealing as well.

#### Food Marketing & Sales

Picture yourself in a career where your creativity is used for advertising and promotion of food and food ingredients... a career where you use scientific and technical knowledge to sell products. Food marketing and sales professionals communicate through technical presentations, trade shows, print and virtual media, and face-to-face meetings with product developers.



# What Kind of Income Can You Make in Food Science?

Food scientists typically earn salaries competitive with other science and engineering degrees. And, most have successfully found a job or earned admission to graduate school months before graduation. Demand for food scientist graduates remains high. In 2017, food science graduates entering the field received a median starting salary of \$50,000, and starting salaries have continued to increase.

According to IFT's 2017 Employment & Salary Survey Report, the median salary for professionals working in the science of food is \$92,000. Also from the report, below are median salaries of more experienced workers in the food industry, by job function/title.

Director<br/>of ResearchFood<br/>ChemistFood<br/>EngineerFood Scientist/<br/>TechnologistNutritionistFood Marketing<br/>& Sales\$132,000\$82,000\$108,500\$71,820\$95,500\$112,000



#### Food Science and World Hunger

Food science is an essential ingredient for feeding the world. You can find food scientists working around the globe. Their talents and expertise are used to prevent food losses due to spoilage and contamination, address food safety, food quality, and food nutrition issues, and help develop food processing businesses in developing countries.

#### **Diversity in Food Science**

Food scientists come from many different backgrounds and from around the world. Bilingual skills can be a valuable asset, as is knowledge of ethnic foods, flavors, and cultures.

## The IFT Student Association (IFTSA)

The IFT Student Association is a student-run group within IFT, a membership society for food science and technology professionals. The IFTSA offers scholarships, networking opportunities, skills development, and more, all designed to help students pursuing degrees in food science build their résumés and prepare for a rewarding career in the food industry. Through IFTSA product development competitions, you could even win cash for designing food that might end up in production at a real food company.

#### Scholarships and Financial Aid

Scholarships are available for undergraduate and graduate education in food science. Most universities and food science departments provide funds in the form of tuition and teaching, as well as research assistantships. IFT's foundation, Feeding Tomorrow, also offers a variety of scholarships to student members of IFT. For a list of Feeding Tomorrow scholarships, visit **ift.org/scholarships**.

**Feeding Tomorrow, the Foundation of the Institute of Food Technologists.** We support programs that motivate the best young minds to pursue careers in the science of food, support and reward excellence for university students as they pursue careers in the profession, and leverage our community's knowledge in pursuit of food and nutrition solutions for those in need.

Through the support of generous donors, Feeding Tomorrow addresses the future needs of the profession and science of food community.



Institute of Food Technologists **Student Association** 



The Foundation of the Institute of Food Technologists

# Want to Learn More?

*Visit ift.org/learnmore to explore exciting opportunities in the science of food profession.*