

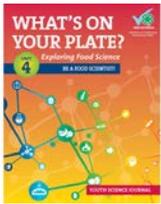
Exploring Food Science – What's On Your Plate?

Exploring Food Science Careers

A Day in the Life of a Food Scientist

Activity 4.1 Glossary

Food Science	Food science is the study of the physical, biological, and chemical makeup of food; and the concepts underlying food processing. (From the Institute of Food Technologists.)
Food Technology	Food technology is the application of food science to the selection, preservation, processing, packaging, distribution, and use of safe food. (From the Institute of Food Technologists.)
Food Security	Access to enough food for an active, healthy life.
Food Quality	An evaluation of a food based upon appearance, texture, flavor, and other factors pertinent to specific food categories.
Food Safety	Application of specific steps to keep foods free from harmful microorganisms that could cause foodborne illness. It starts with safe food production on the farm and extends to every step along the path to the consumers' table. This includes steps during handling, preparation, processing, packaging, and transportation of food.
Nutrition	The science of food; the nutrients and the substances therein; their action, interaction, and balance in relation to health and disease. (Taken from the Council on Food and Nutrition of the American Medical Association)
Farm to Table	Refers to the process of moving food from the point of production to the point of consumption.
International Food Technologists (IFT)	An international organization designed to create a forum where members from more than 100 countries can share ideas, learn, and grow professionally.
STEM	STEM stands for Science, Technology, Engineering and Math.
VoIP service	VoIP stands for "voice over Internet protocol" which is a technology that delivers voices and multimedia data via the Internet; people can speak to one another via an Internet connection.



Exploring Food Science – What's On Your Plate?

Make a New Beverage

Product Formulation, Taste Testing, and Labeling

Activity 4.2 Glossary

Evaluation	The process of determining the quality, likeability, and marketability of a product using a variety of different methods.
Flavor	Flavor is the result of a substance's taste, odor, and mouth-feel combined.
Fructose	A type of simple sugar, naturally found in foods, abundant in fruits and honey.
Sucrose	A compound naturally found in many plant, comprised of glucose and fructose combined together. Typically extracted from sugar cane and sugar beets and processed to become table sugar.
Product Formulation	The process of determining which ingredients and amount of ingredients for a new food product.
Sensory Characteristics of Food	There are five characteristics of food which include sight, odor, taste, touch, and sound. These often have a greater impact on food choice than nutrition.
Taste	One of the five senses which helps distinguish sweet, sour, bitter, salty, and savory (umami).
Umami	A savory taste that blends and enhances other flavors; all of the tongue's taste buds are able to recognize this taste.



Exploring Food Science – What's On Your Plate? The Art and Science of Sugar Crystallization and Caramelization -- Chemistry is Sweet! Activity 4.3 Glossary

Caramelization	The process of cooking sugar until it changes color and becomes a liquid, used for tan/brown coloring and flavoring food.
Corn syrup	A clear, thick, sticky, sweet liquid made by processing the start from corn.
Crystalline (kris-tl-een) candy	A candy comprised of crystals, soft and easy to chew.
Crystallization	A process in which crystals are formed.
Crystals	Three-dimensional, symmetric structures.
Fructose	A type of simple sugar, naturally found in foods, abundant in fruits
Glucose	A simple sugar found in plant and animal tissues. Plants produce glucose from photosynthesis. Glucose is essential for animals to produce energy for all cellular and body functions.
Non-crystalline (amorphous) candy	A smooth candy; its structure does not contain crystals. Typically a hard candy or chewy.
Saturated solution	A solution that contains the maximum amount of solute capable of being dissolved under certain conditions
Solute (sol-yoot)	A substance that is dissolved into another substance.
Solution	A mixture of two or more substances, in which at least one of them is a liquid.
Solvent	A substance that dissolves another substance.
Sucrose	A compound naturally found in many plant, comprised of glucose and fructose combined together. Typically extracted from sugar cane and sugar beets and processed to become table sugar.
Supersaturated	To increase the concentration of a solution to be more highly concentrated than is normally possible under certain conditions.

Reference: www.Dictionary.com