



Appendix C — Glossary

Antibiotics

Chemical substances produced naturally or synthetically that inhibit the growth of, or destroy, bacteria.

Bacteria

Single-cell microorganisms with no clearly defined nucleus (prokaryote) although they have an irregularly shaped region called a nucleoid. Bacteria are capable of self-replication and usually reproduce when one cell splits in two.

Beneficial microorganisms

Helpful bacteria and fungi that are either added to or naturally occur in foods. These microorganisms are used to create unique flavors and textures in food.

Chlorine

The chemical element CL that is a greenish-yellow gaseous element. Chlorine compounds are used in disinfectants and sanitizers.

Compost

Organic residues or their mixture, such as peat, manure, discarded plant material or soil, placed in a pit or enclosure, moistened, and allowed to decompose.

Contamination

When physical, chemical, or biological hazards are introduced in or on foods.

Cross contamination

Contaminating one food item with microbial pathogens from another food item. A common type of cross contamination occurs when fruits and vegetables become contaminated with bacteria such as *Salmonella* from raw chicken or *E.coli* from raw hamburger.

Drip irrigation

Watering plants so that only soil in the plant's immediate vicinity is moistened. Water is supplied from a thin plastic tube at a low flow rate. This technique is sometimes called trickle irrigation. It is the most efficient use of water and also reduces plant and human pathogens because the entire plant is not wetted, thereby denying moisture to the organisms.

Enzyme

A complex protein molecule that stimulates or speeds up a specific chemical reaction without itself being used up.

Fecal coliform bacteria

Organisms associated with the intestines of warm-blooded animals that are used commonly to indicate the presence of fecal material and the potential presence of organisms capable of causing disease in humans.

Flume

An inclined, trough-like structure for the conduction of water and floating objects, such as tomatoes and apples.

Food additive

A substance added intentionally to food, generally in small quantities, to improve its appearance, flavor, texture, nutritive value, or shelf life.

Food spoilage

The condition in which food becomes undesirable. Spoilage affects the aroma, texture and/or appearance of food.

Foodborne illness

An illness or disease transmitted to people through food products that result from ingesting foods that contain pathogens (including bacteria, viruses and parasites) and/or their toxins and toxic chemicals.

Food safety

The general term used for the practices and safe guards that are used to protect our food from physical, chemical, and biological hazards that may cause illness or injury.

Fungi

A kingdom of organisms that includes mushrooms, molds, and yeasts.

Two types of fungi commonly associated with food are:

- **Yeasts:** unicellular fungi that usually go through cell division by budding. Although they are unicellular (single cell) organisms, yeasts commonly grow together in groups to break down sugar and starches. Yeasts require moist or wet environments to grow.
- **Molds:** multi-cellular, filamentous fungi that grew very quickly by asexual reproduction. Molds need little water, but do need the right temperature and level of oxygen to grow. They prefer room or higher temperatures.

Good Agricultural Practices (GAPs)

Actions or procedures used to reduce microbial food safety hazards in growing, harvesting, sorting, packing, and storing fresh fruits and vegetables.

Hazards

Physical, chemical, or biological agents that are reasonably likely to cause illness or injury in the absence of control.

Examples:

- **Physical** – foreign objects: metal, glass, hard plastic, pebbles, pits, shells, etc.
- **Chemical** – toxic chemicals, natural toxins, food allergens, etc.
- **Biological** – microorganisms such as bacteria, viruses, parasites, and certain fungi (molds).

Hygiene

Conditions and practices such as hand washing and daily bathing that promote and maintain health.

Infection

Caused by eating food contaminated with living pathogenic microorganisms. The infection is caused from the colonization of the host's intestines by the pathogenic organisms.

Intoxication

Caused by eating food containing toxins produced by bacteria and molds. When these bacteria grow in foods, they produce a toxin. The organism does not need to be present or alive in the food (but it could be) when it is consumed because what makes a person ill is the toxin in the food, not the organism.

Lot

A group of food produced during a specific period of time or in a particular field indicated by a specific code.

Microbial spoilage

Microorganisms grow and reproduce, causing unwanted changes to the color, odor, taste, and texture of the food.

Microorganism

An organism so small that it cannot be seen without the aid of a microscope. Another word for microorganism is microbe.

Parasites

Organisms that live on or in another organism often at the expense of the host organism.

Pathogen

Any microorganism that is infectious or toxic and causes illness or disease. Pathogens include bacteria, viruses, parasites, and some fungi.

Potable

Refers to water that is safe for humans to drink.

Sanitize

Treatment to kill microorganisms. Includes rinsing, soaking, spraying, or wiping the surface with a sanitizing solution.

Standard Operating Procedures (SOPs)

Procedures that describe how routine operations such as receiving, storage, labeling, and shipping are to be conducted. SOPs may be established to ensure that products and packaging materials are handled and processed appropriately to ensure their safety and wholesomeness.

Sanitation Standard Operating Procedures (SSOPs)

The common name given to the sanitation procedures in food production plants that are required by the Food Safety and Inspection Service of the USDA. It is considered one of the prerequisite programs of HACCP.

Toxin

A poisonous substance produced by bacteria or molds.

Toxin-mediated infection

Caused by eating food that contains bacteria that produce toxin(s) in the human intestines. The bacteria and their toxins cause illness. You must eat food containing the living microorganism, which, once consumed, produces the toxin while it is in the body.

Traceback

The ability to identify the origin of any food product and all subsequent handling events as food moves through the food system.

Vacuum cooling

A cooling system for fresh leafy vegetables, such as lettuce. The product is put into a vacuum chamber and the atmospheric pressure is lowered. As water evaporates, the heat of vaporization quickly removes heat from the product.

Viruses

Pieces of nucleic acid (DNA or RNA) surrounded by a protein membrane. A virus cannot reproduce on its own. It must infect the cell of another living organism before it can replicate.