FOODBORNE ILLNESS GLOSSARY

Approved means approved by your local health department or other responsible agency.
Bacteria are microscopic- very small animals. Most are harmless to people; however, some are pathogenic, that is, they cause disease, including some that are common in kitchens: *Staphylococcus , E. coli, Salmonella.*
Clean means "free of visible dirt or soil." Soap or detergents must be used to assure that utensils and work areas are clean.
Colony is a large number of bacteria.
Contamination is the addition of dirt or *pathogens* to food or food contact surfaces; it makes *hazards* of things that were clean and safe.
Cross-contamination is the passing of germs from one item to another. It can occur by *direct contact* (of raw with cooked food), or *indirect transfer* (from cutting boards, utensils or hands).
Danger Zone is the temperatures between 41.F and 135.F where bacteria can grow rapidly, making food a *hazard.*
Dilution is the weakening of liquids, usually by adding water. Cleaning chemicals are diluted from concentrates to useable strengths.
Dormant means "asleep." Most bacteria stop growth and activity at temperatures below 41°F they return to activity when they warm up.
E. coli is a bacterium normally found in the intestines of humans and many animals, including beef. Some varieties will cause illness. *E. coli* 0157: H7 is a particularly dangerous strain; it can cause *HUS*- kidney failure - particularly in children and older people.
Fecal matter is excrement- "poop."
FIFO means "First In, First Out": food should be used in the order of delivery to be sure that no product spoils or grows dangerous germs.
Food contact surfaces are things that food actually touches: tabletops, sinks, cutting boards, bins, etc. The sides of cabinets or other places that food will not rest are not considered "Food-contact surfaces."
Food temperature is the internal temperature of food, as measured with a *thermometer.* Internal temperature cannot be determined by seeing steam, timing, touching, poking or guessing!
Fungus (plural: **Fungi)** is a kind of plant. Molds and yeast are fungi. Some are edible (many mushrooms, for instance), but most molds should not be eaten!
Germ is a word used by many people to refer to disease-causing microorganisms, including bacteria, fungi, parasites and viruses.
Hazardous food is food that can allow rapid growth of germs. High protein foods with high water content and low acidity are most hazardous.
HUS stands for "Hemolytic Uremia Syndrome" and is the result of *E. coli* 0157H: 7 infections. It causes the liver to bleed, and sometimes to fail. HUS may cause death!
Ice wands are a simple way of helping to cool food. Sterile plastic containers are frozen, and then placed into pots of soup or sauce to help cool them without *dilution.*
Insulate means to "cover or protect to maintain heat." Sometimes we want to do this (when delivering catered food, for instance), but mostly we want to cool food rapidly and avoid insulating foods. Plastic pans insulate; putting hot food in the freezer will cause an insulating layer of ice around the still warm center.
Microorganisms are plants and animals so small they must be seen with a microscope. 100,000 or more may not even fill a teaspoon. Also: **Microbes, microbial**
Out of temperature means that food has either not been refrigerated or kept hot - that it is in *Danger Zone of* 41°F to 135°F

Parasite is a microscopic animal (often a worm) that lives inside the human body. These can cause serious diseases. Proper cooking easily kills almost all of them. Raw foods, particularly fish and shellfish, and sometimes water, are the main ways parasites enter our bodies.
Pathogen is something that makes people sick; Disease causing bacteria, a germ.
Salmonella is a family of bacteria. Many types of *salmonella make* people sick- about 2 million every year in the US. Some die! It is particularly common on chicken, and on many vegetables and fruits, including melons.
Sanitary means free of *germs.* Germs cannot be seen, so to make sure that utensils and work areas are sanitary, they must first be clean, and then treated with a sanitizer, such as chlorine bleach, quaternary ammonia ("quat"), or another *approved chemical*. Heat can also sanitize food (cooking or boiling).
Shallow pan means to put large amounts of hot food into smaller pans to cool. These pans should hold food no more than 2" deep; hotel pans (used in steam tables) are ideal. Metal pans are better than plastic because they do not *insulate* the food, and food cools faster.
Spoilage bacteria are bacteria that are present in food that cause it to rot. They will not usually make someone sick, but they make the food look and smell bad. Since they grow faster than most pathogens, they help serve as a warning: milk spoils, for instance, before any pathogens naturally present grow enough to make you sick.
Spores are formed by some pathogens. These are microscopic dormant "eggs" that are very hardy; they usually will survive cooking and many other sterilization techniques. When the food containing spores returns to a condition safe for the microbe, it will start to "hatch" and grow. Spores are particularly a problem with rice may be held warm for long periods of time.
Sterilization means making facilities *sanitary* by heat, chemical or other methods.
Thermocouple is a high-tech thermometer that uses electricity to measure temperature. They are more accurate and reliable, but more expensive. Microwave ovens and other professional equipment have thermocouple probes built in. Many managers and Quality Assurance staff use thermocouples.
Thermometers measure heat. There are several kinds, used for measuring different things and different ranges of temperature:

- Food or meat thermometers measure the temp inside solid or liquid food, usually from 0°F to 250°F The tip of the thermometer should be inserted into the food 2-3". Thermometers should be calibrated regularly, using ice water (32°F).

Other kinds of thermometers are used in kitchens, but are not suitable for telling internal temps in food. They measure the temps <u>around</u> food. They include:

- Freezer *I* refrigerator thermometers (-20°F to about 60°F).
- Oven thermometers (150°F to 500°F)
- Fryer or candy thermometers (150°F to 450°F)

Toxoplasmosis is a disease that is found in caused by a parasite that is found in many kinds of meat. It causes severe illness, especially in pregnant women, but is easily killed through cooking.
Trichinosis is a disease caused by a worm-like parasite. It used to be a problem in pork, but is now rare in this country. Pork imported from other countries is very strictly inspected, so trichinosis is no longer a problem in the US. Pork can be cooked to medium (155°F), not the 180°F that older cookbooks may specify.
Viruses are microscopic pathogens that are very hard to destroy and can cause serious illness. They need a host and do not grow in food, but <u>only</u> in a human. Proper washing of your hands, and of produce, is the best defense.