Technical Bulletin

HYDE™
Industrial Blade Solutions

Glossary of Food Processing Terminology

Absorbent Packing - Material within a package which absorbs liquids from product; pad in meat trays is made from paper and has a plastic liner.

Advanced Meat Recovery (AMR) - AMR is a process that uses machinery to separate edible meat from bones by scraping, shaving, or pressing the meat from the bone. AMR machinery is not permitted to break, grind, crush, or pulverize bones to separate meat, and bones must emerge intact and in natural physical conformation. Meat produced using this method is comparable in appearance, texture, and composition to meat trimmings and similar meat products derived by hand trimming of bones.

Adulterated Food – Generally, impure, unsafe, or unwholesome; products found to be adulterated cannot enter into commerce for human food use.

Amenable – Refers to animals that are subject to the Federal Meat Inspection Act or the Poultry Products Inspection Act's mandatory inspection requirements.

Animal Disposition Reporting System (ADRS) - The Animal Disposition Reporting System contains slaughter totals and disposition summaries for federally inspected livestock and poultry slaughter establishments. If a carcass is condemned, the reason for condemnation, also referred to as the disposition, is recorded in the ADRS database.

Animal Food - Any article intended for use as food for dogs, cats, or other animals derived wholly, or in part, from the carcass or parts or products of the carcass of any livestock (excluding processed dry animal food or livestock or poultry feeds manufactured from processed livestock byproducts).

Animal Food Manufacturer - Any person engaged in the business of manufacturing or processing animal food.

Antemortem Inspection - Refers to the examination that USDA meat and poultry inspectors are required to conduct of all live animals prior to slaughter.

Antioxidant - Substance added to food to prevent the oxygen present in the air from causing undesirable changes in flavor and/or color.

Artificial Coloring - A coloring containing any dye or pigment manufactured by a process of synthesis or other similar artifice, or a coloring which was manufactured by extracting naturally produced dyes or pigments from a plant or other material.

Artificial Flavoring - Artificial flavors are restricted to an ingredient which was manufactured by a process of synthesis or similar process. The principal components of artificial flavors usually are esters, ketones, and aldehyde groups.

Aseptic Packaging - Technique for creating a shelf-stable container by placing a commercially sterile product into a commercially sterile container in a commercially sterile environment. The sealed container is designed to maintain product sterility until the seal is broken.

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Glossary of Food Processing Terminology (con't)

Baste - To moisten meat or other food while cooking. Melted butter or other fat, meat drippings, or liquid such as stock is spooned or brushed on food as it cooks to moisten it.

Basted or Self Basted - Bone-in poultry products that are injected or marinated with a solution containing butter or other edible fat, broth, stock or water plus spices, flavor enhancers and other approved substances must be labeled as basted or self basted. The maximum added weight of approximately 3% solution before processing is included in the net weight on the label.

Beef Suet - Hard fat from kidneys and loin, mainly used for tallow.

Brine - A strong solution of water and salt. Brine may also contain a sweetener such as sugar, molasses, honey, or corn syrup, for flavor and to improve browning.

Brine Curing - Brine curing (or wet curing) is the most popular way of producing hams. It is a wet cure whereby fresh meat is injected with a curing solution before cooking. Smoke flavoring (liquid smoke) may also be injected with brine solution. Cooking may occur during this process.

Can - To pack a product in a can or a wide-mouth glass container for processing, shipping or storage.

Captive Bolt - An instrument used to stun cattle prior to slaughter. The bolt is driven into the animal's brain, rendering it unconscious.

Carcass - All parts of any slaughtered livestock.

Casing - A membranous case for processed meat.

Certified – The term implies that the USDA's Food Safety and Inspection Service has officially evaluated a meat product for class, grade, or other quality characteristics.

Chemical Preservative - Any chemical that, when added to a meat or meat food product, tends to prevent or retard deterioration thereof, but does not include common salt, sugars, vinegars, spices, or oils extracted from spices or substances added to meat and meat food products by exposure to wood smoke.

Chub - An acceptable name to denote a short, usually plump meat food product, unsliced in casing.

Controlled Atmosphere Packaging (CAP) - Packaging method in which selected atmospheric concentrations of gases are maintained throughout storage in order to extend product shelf life. Gas may either be evacuated or introduced to achieve the desired atmosphere. Normally used for fruits and vegetables, not meat products.

Corned Beef - Corning is a form of curing one of the several less-tender cuts of beef like the brisket, rump or round. The name originated before refrigeration, when meat was dry-cured in coarse "corns" of salt. Pellets of salt, some the size of kernels of corn, were rubbed into the beef to keep it from spoiling and to preserve it. Today, brining has replaced the dry salt cure, but the name "corned beef" is still used, rather than "brined" or "pickled" beef.

Glossary of Food Processing Terminology (con't)

Cross-contamination - The transfer of harmful substances or disease-causing microorganisms to food by hands, food-contact surfaces, sponges, cloth towels and utensils that touch raw food, are not cleaned, and then touch ready-to-eat foods. Cross contamination can also occur when raw food touches or drips onto cooked or ready-to-eat foods.

Cure - A chemical agent placed in or on meat or poultry for use in preservation, flavor, or color.

Curing - Curing is the addition of salt, sodium nitrate (or saltpeter), nitrites and sometimes sugars, seasonings, phosphates and ascorbates to pork for preservation, color development and flavor enhancement.

Cutting Up - Any division of any carcass or part thereof, except that the trimming of carcasses or parts thereof to remove surface contaminants is not considered as cutting up.

Dead Livestock - The body (cadaver) of livestock which has died otherwise than by slaughter.

Downer (or downed animals) - Commonly used term for an animal that is unable to rise and walk.

Dry Aged - Fresh meat is held (without vacuum packing) for various periods of time (typically 10 days to 6 weeks) under controlled temperatures (34°F to 38°F), humidity, and airflow to avoid spoilage and ensure flavor enhancement, tenderness, and palatability.

Dry Curing - Dry curing is the process used to make country hams and prosciutto. Fresh meat is rubbed with a dry cure mixture of salt and other ingredients. Dry curing produces a salty product. Since dry curing draws out moisture, it reduces ham weight by at least 18%, resulting in a more concentrated ham flavor.

Edible - Intended for use as human food.

Egg Products - Eggs that are removed from their shells for processing. The processing of egg products includes breaking eggs, filtering, mixing, stabilizing, blending, pasteurizing, cooling, freezing or drying, and packaging. Egg products include whole eggs, whites, yolks and various blends with or without non-egg ingredients that are processed and pasteurized and may be available in liquid, frozen, and dried forms.

Emulsification – The process by which two or more immiscible (unblendable) liquids are prepared. Examples of emulsions include butter, margarine, milk and viniagrettes.

Emulsifier - A substance added to products, such as meat spreads, to prevent separation of product components to ensure consistency. Examples of these types of additives include lecithin, and mono- and diglycerides.

Evisceration - The removal of the viscera (internal organs, especially those in the abdominal cavity), also disembowlment.

Experimental Animal - Any animal used in any research investigation involving the feeding or other administration of, or subjection to, an experimental biological product, drug, or chemical or any nonexperimental biological product, drug, or chemical used in a manner for which it was not intended.

Glossary of Food Processing Terminology (con't)

Fabricated Steak - Fabricated beef steaks, veal steaks, beef and veal steaks, or veal and beef steaks, and similar products, shall be prepared by comminuting and forming the product from fresh and/or frozen meat, with or without added fat, of the species indicated on the label. Such products shall not contain more than 30 percent fat and shall not contain added water, binders or extenders.

Farm-to-Table Continuum - A multi-step journey that food travels before it is consumed.

Flash Pasteurization - A pasteurization process which involves a high temperature, short-time treatment in which pourable products, such as juices, are heated for three to 15 seconds to a temperature that destroys harmful micro-organisms.

Food Additive - Any substance or mixture of substances other than the basic foodstuff present in a food as a result of any phase of production, processing, packaging, storage, transport or handling. USDA allows food additives in meat, poultry and egg products only after they have received Food and Drug Administration safety approval.

Food and Drug Administration (FDA) - A public health agency in the U. S., charged with protecting consumers by enforcing public health laws. A major FDA mission is to protect the safety and wholesomeness of food - it tests samples, it sets food labeling standards, and it sees that medicated feeds and other drugs given to animals raised for food are not threatening to the consumer's health.

Food Safety and Inspection Service (FSIS) - The Food Safety and Inspection Service (FSIS) is the public health agency in the U.S. Department of Agriculture responsible for ensuring that the nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and correctly labeled and packaged.

Food Thermometer - A special device that measures the internal temperature of cooked foods, such as meat, poultry, and any combination dishes to ensure that a safe food temperature is reached.

Free Range or Free Roaming - Livestock or poultry has been allowed access to the outside.

Fully Cooked - Fully cooked product needs no further cooking. The product is fully cooked in the plant, and it can be reheated or eaten directly from the package. Also known as ready-to-eat.

Further Processing - Smoking, cooking, canning, curing, refining, or rendering in an official establishment of product previously prepared in official establishments.

Gelatin - Thickener from collagen which is derived from the skin, tendons, ligaments, or bones of livestock. It may be used in canned hams or jellied meat products, as well as non-food products such as photography and medicine.

Giblets - Giblets are the heart, liver, and gizzard of a poultry carcass. Although often packaged with them, the neck of the bird is not a giblet. Giblets are not packaged with the original bird; however, they are inspected by FSIS inspectors.

Gizzard - The gizzard is the mechanical "stomach" of a bird. It is located just after the true or glandular stomach in the gastrointestinal system. Since poultry have no teeth and swallow feed whole, this muscular organ, sometimes called "hen's teeth," mechanically grinds and mixes the bird's feed.

Glossary of Food Processing Terminology (con't)

Grade, Grading - The inspection and grading of meat and poultry are two separate programs within the U.S. Department of Agriculture. Inspection for wholesomeness is mandatory and is paid for out of tax dollars. Grading for quality is voluntary, and the service is requested and paid for by meat and poultry producers/processors.

Halal and Zabiah Halal - Products prepared by federally inspected meat packing plants identified with references to *"Halal"* or *"Zabiah Halal"* must be handled according to Islamic law and under Islamic authority.

Headcheese - A jellied product consisting predominantly of pork byproducts and seasoning ingredients. It must contain some product from the head.

Honey-Cured - Honey-cured may be shown on the labeling of a cured product if honey is the only sweetening ingredient or is at least half the sweetening ingredients used, and if the honey is used in an amount sufficient to flavor and/or affect the appearance of the finished product.

Humectant - A substance added to foods to help retain moisture and soft texture. An example is glycerine, which may be used in dried meat snacks.

Hydrolyzed (Source) Protein - Flavor enhancers that can be used in meat and poultry products. They are made from protein obtained from a plant source such as soy or wheat, or from an animal source, such as milk.

Incidental Additives - As defined in the Food and Drug Administration regulations, incidental additives are substances present in foods at insignificant levels that do not serve a technical or functional effect in that food.

Inedible - Adulterated, uninspected, or not intended for use as human food.

Inhumane Slaughter - Slaughter of livestock that is not in accordance with the Humane Methods of Slaughter Act of 1978 and FSIS regulations promulgated to enforce the Act, characterized by inadequate methods to prevent pain and suffering of animals presented for slaughter.

Internal Temperature - The temperature of the internal portion of a food product.

Irradiation - The process where foods, such as poultry, red meat, spices, and fruits and vegetables, are subjected to small amounts of radiant energy including gamma rays, electron beams, and x-rays in amounts approved by the Food and Drug Administration. USDA's Food Safety and Inspection Service oversees the irradiation of meat and poultry.

Kosher - *Kosher* may be used only on the labels of meat and poultry products prepared under Rabbinical supervision.

Lard - Lard is the fat rendered from clean and sound edible tissues from swine.

Macerate – To soften or break into pieces with liquid.

Marinate - To steep food in a marinade.

Glossary of Food Processing Terminology (con't)

Marinade - A savory acidic sauce in which a food is soaked to enrich its flavor or to tenderize it. Marinade consists of a cooking oil, an acid (vinegar, lemon juice, wine), and spices. As the food stands in the mixture, the acid and the oil impart the savory flavors of the spices to the food. The acid also has a tenderizing action.

MDM - Mechanically deboned meat.

Meat - The flesh of animals used as food including the dressed flesh of cattle, swine, sheep, or goats and other edible animals, except fish, poultry, and wild game animals.

Meat Base - A granular, paste-like product which is shelf-stable primarily because of its high salt content (30-40%). Beef or pork based is 15% beef or pork, or 10.5% cooked beef or pork. Ham based is 18% ham.

Meat Broker - Any person engaged in the business of buying or selling carcasses, parts of carcasses, meat or meat food products of livestock on commission, or otherwise negotiating purchases or sales of such articles other than for his/her own account or as an employee of another person.

Meat Byproduct - Any part capable of use as human food, other than meat, which has been derived from one or more cattle, sheep, swine, or goats.

Mechanically Separated Meat or Poultry - Mechanically separated meat or poultry is a paste-like and batter-like product produced by forcing the bones and attached edible tissue through a sieve or similar device to separate the bone from the edible meat or poultry tissue. This product is intended for use in the formulation of other products. During this process, it is possible for bones to be crushed or pulverized, resulting in a limited amount of bone particles. Because it may contain some bone particles, any product that has been produced using the mechanical separation process must be labeled appropriately as "mechanically separated".

Migration - Transfer of a component of a packaging material into the product contained, or loss of a component of the product into the packaging material.

Modified Atmosphere Packaging (MAP) - Packaging method in which a combination of gases such as oxygen, carbon dioxide and nitrogen is introduced into the package at the time of closure. The purpose is to extend shelf life of the product packaged.

Modified Food Starch - Starch that has been chemically altered to improve its thickening properties. Before the starch is modified, it is separated from the protein through isolation techniques; therefore, the source of the starch used is not required on the label.

Natural - A product containing no artificial ingredient or added color that is only minimally processed (a process which does not fundamentally alter the raw product) may be labeled natural. The label must explain the use of the term natural (such as no added colorings or artificial ingredients; minimally processed.)

Netting (plastic) - Continuous extruded net of flexible plastic material, most commonly polyethylene, which can be made into bags, sleeves or wraps (example: net over a frozen turkey package).

Glossary of Food Processing Terminology (con't)

No Roll - The term "No Roll" is permitted on marking devices and labels for single ingredient red meats (carcasses, primal and retail cuts) provided the term is not accompanied with an official grade name (e.g., "No Roll Choice").

Nutrition Labeling - Identification of the nutritional components of a food product, required on most foods regulated by the FDA.

Official Mark - The official inspection legend or any other symbol prescribed by FSIS regulations to identify the status of any article or animal under the Federal Meat Inspection Act.

Organic - The term organic frequently is used to distinguish "natural" products or processes from man-made "synthetic" ones. Thus natural fertilizers include manures or rock phosphate, as opposed to fertilizers synthesized from chemical feedstocks. Likewise, in organic farming pests are controlled by cultivation techniques and the use of pesticides derived from natural sources (e.g., rotenone and pyrethrins, both from plants) and the use of natural fertilizers (e.g., manure and compost).

Organic Farming - An approach to farming based on biological methods that avoid the use of synthetic crop or livestock production inputs; also a broadly defined philosophical approach to farming that puts value on ecological harmony, resource efficiency, and non-intensive animal husbandry practices. Farmers who wish to have their operations certified as organic so that they can label their products as organically produced currently follow standards and submit to inspection by private or state certification organizations.

Organic Foods - Food products produced by organic farming practices and handled or processed under organic handling and manufacturing processes as defined by several private and state organic certifying agencies.

Partially Defatted (Beef or Pork) Fatty Tissue - These are byproducts produced from fatty trimmings containing less than 12% lean meat. These ingredients may be used in meat products in which byproducts are acceptable.

Pasteurization - The process of destroying microorganisms that could disease. This is usually done by applying heat to food. Three processes used to pasteurize foods are flash pasteurization, steam pasteurization, and irradiation pasteurization.

Performance Based Inspection System (PBIS) - A computer-based system used by USDA's Food Safety and Inspection Service. The system organizes inspection requirements, schedules inspection activities, and maintains records of findings for meat and poultry processing operations under federal inspection.

Perishable - Food that is subject to decay, spoilage, or bacteria unless it is properly refrigerated or frozen.

Pesticide - A substance used to kill, control, repel, or mitigate any pest. Insecticides, fungicides, rodenticides, herbicides, and germicides are all pesticides, and must be registered with the EPA.

PFF - Protein Fat Free.

Glossary of Food Processing Terminology (con't)

Plasticizer - Material added during the manufacturing process to increase flexibility; for example, the plasticizer ATBC (acetyl tributyl citrate), used in plastic wraps, is made from citric acid which is commonly present in citrus fruit.

Postmortem Inspection - As used in the meat and poultry inspection program, the phrase refers to the inspection that Food Safety and Inspection Service inspectors are required to conduct of all animal carcasses immediately after they are killed.

Prepared - Slaughtered, canned, salted, rendered, boned, cut up, or otherwise manufactured or processed.

Preservation - A variety of methods used at the processing stage and at home to keep food safe from harmful bacteria and extend the storage life of food.

Product - Any carcass, meat, meat by-product, or meat food product, capable of use as human food.

Processing – Refers to the set of methods and techniques used to transform raw ingredients into food or to transform food into other forms for consumption by humans or animals. Food processing typically takes harvested crops or butchered animal products and uses these to produce marketable food products.

Rancid/Rancidity - Oxidation/breakdown of fat that occurs naturally, causing undesirable smell and taste.

Ratites - A family of large flightless birds that include ostriches, emus, and rheas, which U.S. farmers are beginning to domesticate and raise for food.

Ready-to-Eat - Food that is in a form that is edible without washing, cooking, or additional preparation by the food establishment or consumer and that is reasonably expected to be consumed in that form.

Recall - Recalls are voluntary actions carried out by a food manufacturer or distributor in cooperation with Federal and State agencies. Products are recalled when found to be contaminated, adulterated, or misbranded. Recalls fall under three classifications depending upon the severity of the potential hazard.

Renderer - A business engaged in the separation of fats from animal tissue by heating.

Residue - Any substance, including metabolites, remaining in livestock at time of slaughter or in carcass tissues after slaughter as the result of treatment or exposure of the livestock to a pesticide, organic or inorganic compound, hormone, hormonelike substance, growth promoter, antibiotic, anthelmintic, tranquilizer, or other therapeutic or prophylactic agent.

Sectioned and Formed (or Chunked and Formed) - A boneless ham that is made from different cuts, tumbled or massaged and reassembled into a casing or mold and fully cooked. During this process it is usually thoroughly defatted.

Shrink Wrapping - Plastic film that shrinks when heated, producing a tight, neat fit; the most popular form of grocery store meat packaging is PVC wrapping with foam trays.

Glossary of Food Processing Terminology (con't)

Smoke Flavoring - After curing, some hams are smoked. Smoke flavoring is a process by which ham is hung in a smokehouse and allowed to absorb smoke from smoldering fires. This gives added flavor and color to meat and slows the development of rancidity.

Sodium Nitrite - Used alone or in conjunction with sodium nitrate as a color fixative in cured meat and poultry products (bologna, hot dogs, bacon).

Steam Pasteurization - A technology that uses heat to control or reduce harmful microorganisms in beef. This system passes freshly slaughtered beef carcasses that are already inspected, washed, and trimmed, through a chamber that exposes the beef to pressurized steam. The carcasses are then cooled with a cold water spray. This is a proven process for reducing pathogenic bacteria without the use of any chemicals.

Stock Recovery - A firm's removal or correction of product that has not been marketed or that has not left the direct control of the firm. For example, product is located on premises owned by, or under the control of, the firm, and no portion of the lot has been released for sale or use.

Sugar Cured - A term that may appear on ham labels if cane or beet sugar is at least half the sweetening ingredients used and if the sugar is used in an amount sufficient to flavor and/or affect the appearance of the finished product. Most hams contain sugar in the curing mixture.

Tallow - The white nearly tasteless solid rendered fat of cattle and sheep used chiefly in soap, candles, and lubricants.

USDA - U.S. Department of Agriculture - The department of the Federal government responsible for 1) ensuring a safe, affordable, nutritious and accessible food supply; 2) caring for agricultural, forests, and range lands; 3) supporting sound development of rural communities; 4) providing economic opportunities for farm and rural residents; 5) expanding global markets for agricultural and forest products and services; and 6) working to reduce hunger in America and throughout the world.

Vacuum Packaging - Rigid or flexible containers from which substantially all air has been removed before sealing. Carbon dioxide or nitrogen may be introduced into the container. This process prolongs shelf life, preserves the flavors and retards bacterial growth.

Viscus (Plural, viscera) - An internal organ of a human or animal.