

Safe Handling of Sausages and Hot Dogs

SELECTING THE BEST SAUSAGE

There are so many varieties of sausages! How long can you store them—and where? Are they fully cooked or not? The following background information will answer these questions and others. Use the storage chart as a guideline for proper handling.

Types of Sausages: Sausages are either ready to eat or not. They can be made from red meat, poultry or a combination. Uncooked sausages include fresh (bulk, patties or links) and smoked sausages. Ready-to-eat sausages are dry, semi-dry and/or cooked. Dry sausages may be smoked, unsmoked or cooked. Semi-dry sausages are usually heated in the smokehouse to fully cook the product and partially dry it.

Sausage Labeling Information: Let the label be your guide to sausage selection, handling and — if applicable — cooking. It will list the safe handling and cooking instructions, the nutrient content and the ingredients. Safe handling instructions are mandatory for all raw or partially cooked meat and poultry products. The label must say “Keep Refrigerated” if the sausage is perishable. Product dating is optional but the manufacturer may have affixed a date.

All ingredients in the product must be listed in the ingredient statement in order of predominance from the one weighing the most listed first to the one weighing the least listed last.

For sausage products packaged under federal inspection, a Nutrition Facts panel is mandatory. If sausages are made and packaged in a local store, the nutrient information on the package is voluntary. The Nutrition Facts information on the label can help consumers compare products and make more informed, healthy food choices.

SAUSAGES DEFINED

Fresh Sausages: Fresh sausages are a coarse or finely ground meat food product prepared from one or more kinds of meat, or meat and meat by-products. They may contain water not exceeding 3 percent of the total ingredients in the product. They are usually seasoned, frequently cured and may contain binders and extenders. They must be kept refrigerated and be thoroughly cooked before eating.

- Fresh Pork Sausages – May not contain pork by-products and no more than 50 percent fat by weight.
- Fresh Beef Sausages – May not include beef by-products and no more than 30 percent fat by weight.
- Breakfast Sausages – May contain meat and meat by-products and no more than 50 percent fat by weight.
- Whole Hog Sausage – Meat from swine in such proportions as are normal to a single animal and no more than 50 percent fat by weight.
- Italian Sausage Products – Cured or uncured sausages containing at least 85 percent meat, or a combination of meat and fat, with the total fat content constituting not more than 35 percent of the finished product. They contain salt, pepper, fennel and/or anise and no more than 3 percent water. Optional ingredients permitted in Italian sausages are spices (including paprika) and flavorings, red or green peppers, onions, garlic and parsley, sugar, dextrose and corn syrup.

Cooked and/or Smoked Sausages: These products are made of one or more different kinds of chopped or ground meats that have been seasoned, cooked and/or smoked. Water can be no more than 10 percent by weight. Meat by-products may be used.

Included in this category are:

- Salami
- Liverwurst
- Hot Dogs
- Bologna
- Knockwurst
- Bratwurst
- Braunschweiger
- Blood Sausage
- Jellied Beef Loaf
- Thuringer-Style

Cooked salami (not dry) is made from fresh meats that are cured, stuffed into casings and cooked in a smokehouse at high temperature. It may be air-dried for a short time. It has a softer texture than dry and semi-dry sausages and must be refrigerated.

Meat Specialties: A ready-to-eat sausage product that is made from finely ground meats that are seasoned and usually cooked or baked rather than smoked. They are usually sliced and served cold.

Included in this category are:

- Chopped Ham Loaf
- Luncheon Meat
- Peppered Loaf
- Head Cheese
- Jellied Corned Beef
- Ham and Cheese Loaf
- Honey Loaf
- Old Fashioned Loaf
- Olive Loaf
- Pickle and Pimento Loaf
- Scrapple
- Souse
- Veal Loaf

Dry and Semi-Dry Sausages: Dry sausages may or may not be characterized by a bacterial fermentation. When fermented, the intentional encouragement of a lactic acid bacteria growth is useful as a meat preservative as well as producing the typical tangy flavor. The ingredients are mixed with spices and curing materials, stuffed into casings, and put through a carefully controlled, long, continuous air-drying process.

Dry sausages require more production time than other types of sausage that results in a concentrated form of meat. Medium-dry sausage is about 70 percent of its “green” weight when sold. Green weight is the weight of the raw article before addition of added substances or before cooking. Less-dry and fully-dried sausages range from 80 percent to 60 percent of original weight at completion.

Dry sausages include:

- Chorizo (Spanish, smoked, highly spiced)
- Frizzes (similar to pepperoni but not smoked)
- Pepperoni (not cooked, air-dried)
- Lola or Lolita and Lyons sausage (mildly seasoned pork with garlic)
- Genoa salami (Italian, usually made from pork but might have a small amount of beef; it is moistened with wine or grape juice and seasoned with garlic.)

Semi-dry sausages are usually heated in the smokehouse to fully cook the product and partially dry it. Semi-dry sausages are semi-soft sausages with good keeping qualities due to their lactic acid fermentation. “Summer Sausage” (another word for cervelat) is the general classification for mildly seasoned, smoked, semi-dry sausages like Mortadella and Lebanon bologna.

Who Should Avoid Eating Dry Sausages?

Because dry sausages are not cooked, the elderly, very young children, pregnant women and those with weakened immune systems might want to avoid eating them. The bacterium *E. coli* O157:H7 has been found to survive the process of dry fermenting, and in 1994, some children and adults became ill after eating dry cured salami containing the bacteria. This is believed to be the first time that this product has been associated with *E. coli* O157:H7. These illnesses have raised some questions about the effectiveness of processes for producing dry fermented sausage free of this deadly organism.

The USDA is looking at ways to identify and correct potential problems in dry sausage products, and is developing procedures for manufacturers to ensure their processing is adequate to destroy bacteria.

STORAGE OF SAUSAGE

All sausage – except dry sausage – is perishable and therefore should be brought directly home when purchased and refrigerated or frozen. The storage times listed in the table on the last page should be followed for maximum quality if the product has a “*sell-by*” date or no date. If the product has a “*use-by*” date, follow that date.

DATE ON PACKAGE OF PROCESSED MEATS

Although dating is a voluntary program and not mandated by the federal government, if a date is used it must state what the date means. Since none is a safety date, the product can be used after the date, provided it was stored safely. Follow the guidelines, in the table at the end of this fact sheet, for maximum quality in sausage products.

- “*Packaging*” date is the date of manufacturing, processing, or final packaging.
- “*Sell-by*” date is the last day a retail store may offer the food for sale. You should buy the product before the date expires, and then use according to the guidelines in the storage chart for maximum quality and safety.
- “*Best if used by*” date tells when the product should be used for best flavor and quality. It is not a purchase or safety date.
- “*Use-by*” date is the date after which peak quality of the product begins to decrease, but the product may still be used.
- “*Expiration*” date marks the end of the product’s useful life or the last day to be used.

SELECTING THE BEST HOT DOGS

Types of Hot Dogs: Whether you call it a frankfurter, hot dog, wiener or bologna, it’s a cooked sausage and a summertime favorite. They can be made from beef, pork, turkey or chicken – the label must specify which. All ingredients in the product must be listed in the ingredient statement in order of predominance from the one weighing the most listed first to the one weighing the least listed last. And there are federal standards for their content (Code of Federal Regulations, Volume 9 Section 319.180).

Smoking and curing ingredients contribute to flavor, color and preservation of the product. They come in all shapes and sizes – short, long, thin and

chubby. The most popular of all categories, the skinless varieties, have been stripped of their casings after cooking. Water or ice may be used to facilitate chopping or mixing or to dissolve curing ingredients. Sausages may contain no more than 10 percent water and 30 percent fat or a combination of 40 percent fat and added water. Up to 3.5 percent nonmeat binders and extenders such as nonfat dry milk, cereal, dried whole milk or 2 percent isolated soy protein may be used, but must be shown in the ingredient statement by its common name.

By-products, Variety Meats: Frankfurters, hot dogs, wieners or bologna “with by-products” or “with variety meats” are made according to the specifications for cooked smoked sausages except they consist of not less than 15 percent of one or more kinds of raw skeletal muscle meat with raw meat by-products. The by-products (heart, kidney or liver) must be accompanied by the name of the species from which it was derived and must be individually named in the ingredient statement.

Species: Beef franks or pork franks are cooked, smoked sausage products made according to the specifications above, but with meat from a single species and do not include by-products. Turkey franks or chicken franks contain turkey or chicken skin and fat in natural proportions of that found on a turkey or chicken carcass.

Mechanically Separated Meat or Poultry: Carcass parts from which most of the meat has been removed still have usable meat attached. These parts are pushed under high pressure through equipment with openings so fine that a small amount of powdered bone the size of a grain of sand may pass through along with the remaining muscle meat and other soft tissue. This is called “mechanically separated” meat, and if used in a product, the label must state it.

If a serving contains 20 mg or more of calcium from the finely powdered bone, the label must give the calcium content as a percentage of the US RDAs.

Mechanically deboned poultry: This does not have the same requirements as mechanically separated meat and is simply listed in the ingredients statement as “chicken” or “turkey.”

Handling of Hot Dogs: When you leave the grocery store with any kind of sausage, head straight home and refrigerate or freeze it immediately. If there is a date on the package, follow those guidelines for use. If there is no date, hot dogs can be safely stored unopened in the refrigerator for up to two weeks. Once opened, they are safe in the refrigerator for only one week. (See

table below.) For maximum quality, freeze hot dogs no longer than one to two months. Never leave hot dogs at room temperature for more than two hours, or in the hot summer months when the temperature rises to 90 °F or above, for more than one hour. Finally, even though hot dogs are fully cooked, if you choose to reheat them, make sure that they are steamy hot throughout.

SAUSAGE AND HOT DOG STORAGE CHART (FOR PRODUCTS WITH A "SELL-BY" DATE OR NO DATE)		
Type of Sausage	Refrigerator Storage-Unopened	Refrigerator Storage-After Opening
Fresh Sausage, uncooked	1 to 2 Days	1 to 2 Days
Fresh Sausage, after cooking by the consumer	(Not Applicable)	3 to 4 Days
Hard/Dry Sausage	Indefinitely in Refrigerator; 6 Weeks in Pantry	3 Weeks in Refrigerator, or Until It Turns Rancid
Hot Dogs and Other Cooked Sausage	2 Weeks but No Longer than 1 Week After the "Sell-by" Date	7 Days
Summer Sausage (Semi-dry)	3 Months	3 Weeks
Freeze the product if you cannot use it within the times recommended above for refrigerator storage. Once frozen, it does not matter if the date expires, because all foods kept frozen continuously are safe indefinitely. However, for best quality, use within 1 to 2 months.		

Sources:

1. FSIS/USDA Consumer Publication, *Focus on Sausages*. June 1995.
2. FSIS/USDA Consumer Publication, *Fact Sheet on Hot Dogs*. June 1994.

This information has been reviewed and adapted for use in South Carolina by P.H. Schmutz, HGIC Information Specialist, HGIC E.H. Hoyle, Professor Food Safety Specialist, Clemson University.

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