

## The Meat Industry

What are the 3 common methods of meat preservation?



### Smoking, Curing and Drying

These three techniques are all designed to in some way remove water from food, in order to stave off the growth of bacteria and slow down the degradation process.

What is the key role of meat preservation in the food industry?

Meat preservation **helps to control spoilage by inhibiting the growth of microorganisms, slowing enzymatic activity, and preventing the oxidation of fatty acids that promote rancidity.** There are many factors affecting the length of time meat products can be stored while maintaining product safety and quality.

What are the 10 methods of meat preservation?

Preservation of meat is done by various preserving techniques such as **chilling/refrigeration, freezing, curing, smoking, thermal processing, canning, dehydration, irradiation, chemicals and pressure processing**

How does meat preservation work?

Salt (sodium chloride) is the primary ingredient used in meat curing. Removal of water and addition of salt to meat creates a solute-rich environment where osmotic pressure draws water out of microorganisms, slowing down their growth. Doing this requires a concentration of salt of nearly 20%.

What is the difference between meat processing and meat preservation?

**Food processing mostly involves both packaging and preservation, while food preservation is concerned with the control and elimination of the agents of food spoilage.** Additionally, food processing is performed to turn food into something that is more palatable and convenient to eat.

What is preserving meat called?

**Curing** is the addition to meats of some combination of salt, sugar, nitrite and/or nitrate for the purposes of preservation, flavor and color. Some publications distinguish the use of salt alone as salting, corning or salt curing and reserve the word curing for the use of salt with nitrates/nitrites.

What is the longest way to preserve meat?

### **How to Cure Meat for Long Term Storage**

1. Use Fresh (unfrozen Meat).
2. Saturate with Sea Salt (No Caking Agents)
3. Refrigerate (below 5°C or 41°F)
4. Wash Meat with Water.
5. Protect and Hang in Sun or dry in Fridge.
6. After 1 to 2 weeks Cured Meat is Preserved.
7. Storage in Cool Area.
8. Soak in water for 12-24 hours, before Use.

What are the disadvantages of meat preservation?

The process requires constant attention and equipment that can be costly. It is difficult to keep the food moist due to low moisture contents in the smoker, and it is also difficult not to contaminate meat flavor.

How do you preserve meat better?

### **How to store meat**

1. Store meat in the coldest part of the refrigerator.
2. For a longer time: Preferably in vacuum.
3. For a shorter time: Preferably kept 'aired' under a piece of cloth.
4. Heating and chilling should be carried out as quickly as possible.
5. Trust your nose more than the given 'use by' date.

What are the 7 basic preparation methods of meat?

Methods of cooking meat include dry heat (roasting, broiling, pan-broiling, pan-frying, stir-frying and outdoor grilling) or moist heat (braising and cooking in liquid).

How long can you preserve meat?

According to the FDA , you can keep **cuts, like roasts, frozen for anywhere from 4 to 12 months and steaks for 6 to 12 months**. Ground beef should be frozen for no more than three to four months. Once cooked, you can also safely freeze those beefy leftovers.

Which bacteria is found in meat?

Raw meat may contain **Salmonella, E. coli, Yersinia**, and other bacteria.

How do you preserve meat without refrigeration?

### **Dry curing meat**

Apply the cure (curing salt) directly on the meat. After applying, place the meat into a plastic food storage bag and tightly seal. From there, put your meat in a cool place (between 36-40 degrees Fahrenheit). Let the curing process take place.

Can raw meat be preserved?

**Yes, raw beef can be preserved with a salt cure** that prevents the growth of harmful bacteria. Cured & Cold smoking can extend the preserving of the beef.

What temperature should meat be stored?

Refrigerator temperature of **40° F or below** helps slow growth of these harmful microbes. Always refrigerate or freeze meat, poultry, eggs, and other perishables as soon as you get them home from the store.

What are the 3 main causes of meat spoilage?

**Microbial growth, oxidation and enzymatic autolysis** are the three basic mechanisms responsible for the spoilage of meat.

What viruses are in meat?

### **Meat Consumption and Viruses: The Animal-Human Connection**

- Flu viruses. Strains of both swine flu (H1N1) and bird flu (H5N1 and H7N9) can cause respiratory infections in humans. ...
- Hepatitis. Shellfish and pork have been cited as potential carriers of hepatitis A and hepatitis E, respectively. ...
- Cancer.