

## **PRODUCTION OF SMOKED MEATS**

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The meat and meat market is one of the most important parts of the food industry. Its constant development makes it possible to provide its population with quality goods, as well as to receive significant revenues from exports abroad. One of the promising technologies for meat production is smoking.

Smoked meats is called ware, that are made from separate parts of carcasses of pork, beef and lamb, subjected only to pickling or first pickling, and then heat treatment. These products are completely ready to eat.

According to the method of heat treatment, meat products are divided into:

- Smoked
- Boiled
- Smoked and boiled
- Smoked and baked
- Baked
- Fried

The widest range of pork products is produced, which have the highest taste qualities.

The highest grade of pork products includes hams, rolls, loin, brisket, bacon, ham, neck, fillets, bacon, fried, carbonated, pastrami and others.

The first grade includes smoked shoulder blade.

To the second - cheekbone, pork head in skin, pork ribs.

The products of the third grade include a handle, a shank.

Beef produces a much narrower range of products: rolls, beef in the form of pressed, fillets baked.

Of lamb - smoked ham, smoked and boiled rolls, raw smoked brisket, lamb in the form. Smoking is called the treatment of salted meat products with smoke. Smoking has a preservative effect and gives the products a specific aroma. Smoke fume is a product of wood combustion, which contains bactericidal substances, as well as ammonia, carbon dioxide, carbon monoxide. The bactericidal effect of smoke is particularly pronounced in combination with pickling.

The mechanism of smoking is a gradual penetration of the components of the smoke from the surface of the product into its depth. Initially, some of the components are deposited on the surface of the product, and the higher the humidity of the product, the more substances remain on its surface. When the surface dries, the conditions of smoke penetration into the product deteriorate. Smoking substances penetrate into the product faster, the higher the concentration and humidity of the smoke and the higher its temperature. The concentration of the product, its thickness and the permeability of the surface layer are also important.

In addition to bactericidal action, smoke has antioxidant properties and thus helps to increase the stability of smoked products during storage.

Smoking changes the color of the meat by depositing on its surface and partially in the depths of small particles of smoke, painted brownish-red. The intensity of color depends on the density, temperature and humidity of the smoke, the degree of dispersion, speed and nature of the movement of smoke to the product.

Smoking also has a tanning effect on natural sausage casings. As a result of increasing their resistance to interaction with heat and moisture, the integrity of sausage loaves during heat treatment (cooking) is not violated.

The source of smoke is wood. The most complete smoking is obtained due to the combustion of firewood and wood chips, plane trees, beech, birch (without bark), when there is incomplete combustion of wood and the resulting smoke is sufficiently saturated with organic matter. To obtain such smoke, a layer of moistened shavings is poured on the firewood. This leads to the fact that the area and intensity of combustion is reduced, the smoke becomes more saturated with useful components.

There are two ways to smoke - hot and cold.

The hot method of smoking occurs at a temperature of 40-60 ° C from 6-12 hours to 1-2 days. Its advantage is the speed of the operation. Because the boiling time is short and the products lose very little moisture, they are not suitable for long-term storage.

Cold smoking is carried out at a temperature of 12-22 ° C for 2-3 days. The products are exposed to light smoke, moisture is removed from the products evenly, smoked products dry well and are stored for a long time.

Products are smoked in special chambers or in smokehouses. The chambers are built in the form of closed brick buildings or in the form of mines. Fuel is burned at the bottom of the mine or equipped with special smoke generators.

Smoking mode is set depending on the purpose and quality of the products. Before smoking, salted products are washed with water, salted - soaked in cold water for 2-5 hours. Then they are dried in a cool room. Smoked first with thicker smoke, then the density of smoke and temperature are gradually reduced. Well-smoked products are painted in yellow-brown color, smell nice and have a dry surface. Half-smoked sausages are smoked for 12-24 hours. at a temperature of 35-50 ° C; at 18-22 ° C -3-4 days; ham - from 3 hours to 2-3 days, depending on the target value. To improve the resistance of smoked hams to storage, they are dried for 10-20 days at 12-15 ° C and a relative humidity of 75%.

Meat smoking is one of the modern technologies that can provide great benefits for Ukraine in the world market. After all, Ukraine is famous for its delicious meat, which is sent abroad in sufficient quantities. Thereafter, smoked meat is sent to countries with hot climates, being able to remain of high quality.

## **References**

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