

Animal Slaughtering

Slaughtering is the term used to describe the killing or butchering of domestic livestock.

Different steps involved in slaughtering are following:

1. Reception of animal
2. Stunning
3. Slaughtering
4. Bleeding
5. Suspension on hide limbs
6. Hide removal
7. Splitting and evisceration
8. Head removal
9. Chilling and ageing
10. Meat cuts

1. Reception of animal

Trailers, trucks or any mean of transport used for transportation of animal should be clean. Reception area, equipment etc should be clean.

2. Stunning

Stunning is making animals unconscious before slaughtering.

There are three different methods of stunning as follow:

Mechanical Stunning: In this captive bolt pistol is used. It is shooting by gum on forehead of animal using black cartridge or compressed air. This break the skull of animal, destroy brain of animal making them unconscious leading to death.

Gaseous Stunning: In this method CO₂ is used at the concentration of 60-70%. Animal is moved through a room having mixture of CO₂ and air to make the animal unconscious.

Electrical Stunning: Electrical stunning is done by using electric shock to the animal.

It is of further three types as:

- **Low voltage electrical stunning:** In this type of electrical stunning an electric shock of 75 Volts is given to animal for 7 seconds. This makes animal unconscious for 30-40 seconds.

- **High Voltage electrical stunning:** In this type of electrical stunning an electric shock of 300-400 volts is given to animal for 1-2 seconds making animal unconscious leading to death.
- **Water bath electrical stunning:** It is only used for poultry.

3. Slaughtering

Farm animals are stunned and killed by cutting the blood vessels in the neck. Halal and Shechita (Jews) method involves cutting the blood vessels without stunning the animals.

According to Muslims, name of Allah must be provoked on animal. A cut is made to blood vessels (carotid arteries, jugular veins), trachea (wind pipe) and esophagus (food pipe). But CNS (brain and spinal cord) should remain intact.

4. Bleeding

Objective of bleeding is to kill animal with minimum damage and to remove quickly as much blood as possible to prevent microbial growth.

5. Suspension

The animal is suspended on hind limbs to remove hide.

6. Hide removal

After suspension, hide is removed.

7. Splitting and evisceration

A cut is made and viscera are removed from body.

8. Head removal

Head is removed manually or mechanically.

9. Chilling and ageing

Chilling is keeping the meat/carcass at low temperature to prevent growth of meat spoilage microorganisms.

Ageing is keeping the meat/carcass at refrigerator temperature for 2-4 weeks to improve tenderness.

10. Meat cuts

Cuts of meat are prepared, packed and sealed and marketed.

