

FAQs

1:What is stunning?

It is desirable to render an animal unconscious before it is slaughtered in order to eliminate pain, discomfort and stress from the procedure. Most developed and many developing countries have legislation that requires pre-slaughter stunning, with the exception of authorised ritual slaughter like kosher or halal. There are three main technologies used to effect stunning-percussion, electrical and gas.

2:Principles of slaughter hygiene

There are three basic criteria upon which hygienic measures in slaughterhouse organization and operations rest. These are the need to:

- a. Eliminate the risk of bacterial infection and food poisoning with meat as the vehicle of transmission;
- b. Prevent spoilage or putrefaction and thereby enhance the keeping quality and safety of meat;

Secure meat of good eating quality, appearance and aesthetic value through proper handling.

3:Types of slaughter premises

Slaughter premises normally seen in developing countries are of three kinds:

- a) Modern abattoirs,
- b) Old slaughterhouses and slaughter-slabs and
- c) Makeshift premises.

Eg, Modern abattoirs

Modern abattoirs represent the most progressive and the ideal in conventional abattoir design, equipping and services. Often built and controlled by central governments with foreign technical assistance and management, these abattoirs are operated on industrial lines with a wide range of services featuring cold storage, processing, by-product utilization and waste recycling activities.

4:What are the Equipment and tools for slaughtering?

1. A really good sharp knife with a blade length of about 6", and a butcher's saw.
2. A sharp skinning knife for removing the pelt.

3. A table or platform on which to lay the eviscerated carcass, or a hoist to lift the sheep by the hind legs to eye or chest level.
4. If available, you can use a cradle, which is a trough about 6 inches wide at the bottom with sloping sides 6 inches high to be used for skinning.
5. A dripping pan to catch the blood after sticking will keep the area below the carcass from becoming messy.
6. Using a chain-mail glove on your free hand will prevent accidental cuts.
7. Meat hooks,
8. Shotgun, etc.

5:Transport, handling and care of animals

Guidelines for trucking animals

Road transport featuring special trucks is probably the cheaper, commoner and more convenient means of conveying animals because it affords more direct links with production and marketing centre's than does rail or air.

Animal holding and care

1. Physically fit animals that are to be slaughtered within 24 hours must be conveyed direct to the lairage for rest.
2. Those waiting their turn are to be held in a kraal or pen.
3. During the resting period any excitement must be avoided.
4. Feed must be kept away from the animals at least during the last eight hours before slaughter.
5. Fresh clean water may be provided throughout the resting time.

6:Postmortem inspection?

Inspection is normally carried out by professional veterinarians but in some parts of the world trained public health inspectors are employed. Their duty is to examine the slaughter products for evidence of disease and abnormality and eliminate them from the public meat supply. Carcasses and edible offal that are considered fit for human use are stamped as "inspected" and/or "passed" prior to consignment to markets. Unfit materials or those found unwholesome are marked as "condemned" and destroyed.

7:Explain the different steps involved in evisceration.?

Eviscerating

With the external structures, skin, feet and head, removed the next step is to cut open the animal body to dislodge the contents and produce the carcass. To avoid contamination of the carcass through accidental cuts or punctures of the stomach and intestines, simple but well-directed steps are followed. For this, it is important that the carcass remains or is placed in the hanging position.

The first step in evisceration is to cut around the tied bung or rectum and free it completely from all attachments and drop it in the pelvic cavity. Using the saw or cleaver, the breastbone is cut or chopped along the midline up to its tip. Another cut is made from the cod or udder using the skinning knife down the midline into the breast cut. By practice, the pelvis is left uncut. The body cavity is entered into to sever the ureter connections to the kidneys while the intestines are loosened up further, then the stomach and intestinal mass are pushed slightly out of the midline opening. At this stage, the liver is held out and severed of its connecting tissues then pulled out together with the freed contents of the abdominal cavity and dropped into a paunch truck. The gall-bladder is cut from the liver, taking care not to spill its bitter contents onto the carcass and spoil the taste of the meat. The final stage in evisceration is the removal of the contents of the chest cavity. By cutting the thin muscle sheet or diaphragm separating this cavity from the belly, the pluck can be pulled out as a unit. The foreshanks are fastened together using a tendon or a thick rubber band to plump the shoulders. The carcass is then washed and railed to the inspection bay.

8:What are the Slaughtering practices and techniques used in general?

Forms of slaughter

Slaughter methods prevailing throughout the world are governed either by tradition, ritual or legislation depending upon the people and the country.

Ritualistic or religious slaughter often requires the animal to be in a state of consciousness at the time it is bled. This is characteristic of Jewish (kosher), Sikh (jhatka) and Orthodox Islamic (or halal) slaughters.

Where a complete state of unconsciousness is rendered prior to bleeding the process is known as humane slaughtering. Under such practice, the state of unconsciousness and accompanying painlessness is effected either by mechanical, electrical or chemical means in a process called stunning. Stunning also renders the animals motionless thus eliminating excitement and possible cruelty.

9:Describe different techniques of stunning.

- i. Electrical stunning
- ii. Carbon dioxide gas stunning

- i. Percussion stunning

This method produces a physical shock to the brain. The modern mechanical method of percussion stunning is by shooting, consisting of two forms:

- Use of a captive bolt pistol which delivers a force (concussion) into the head of the animal to make it unconscious;
- Use of a penetrating free-bullet gun or firearm. Compression stunners with or without penetrating heads, using air (not cartridges) are also employed in immobilizing livestock.

In older method knocking or striking hammer is wielded on the head is being done.

10:Traditional and ritualistic slaughter

These methods of slaughter differ from the humane practice and its associated techniques in the sense that by interpretation of the basic tenets governing them, the animals must be in a state of consciousness at the time they are bled. The bleeding must also be complete. This is mandatory in the best-known of ritualistic slaughters, the halal (islamic), the kosher (jewish) and the jhakta (sikh) methods.

In most traditional slaughters, however, there are no fast rules, at least in africa, hence some of the practices can be modified in the light of accepted conventions. It is quite probable that traditional slaughters represent the fundamental or orthodox practices which have prevailed in human societies throughout the ages and from which all others including the ritualistic and the humane of the present day have been derived.

11:Explain in detail about the selection of animals for slaughter.?

1. Selecting animals for slaughter

Old animals of all species are normally slaughtered for food in most parts of the developing countries.

Criteria for selection

A few guidelines are however worth observing in selecting livestock for slaughter. These deal with the health condition and the physical quality characteristics of the animals.

a. The health aspect

The obvious mark of a healthy animal is a quick, smart appearance underlying which are keen, well-disposed body reflexes. Animals that are not fat or bulky, yet unable to move or walk must be suspect of unsound condition. When resting, the animals must not be entirely motionless. Some movement or reaction must take place when disturbed. Also, animals in an advanced state of pregnancy must be spared from slaughtering, the reason being that their blood has large accumulations of harmful waste materials associated with the developing foetus which should not form part of food intended for human consumption. Ordinary signs of ill-health should not escape the attention of the individuals making selection. Abnormal conditions like a high breathing rate, high temperature and fever, a foamy or frothy mouth, diarrhoea and discharges of various sorts from the body are all evidence of a state of ill-health. Such animals must be separated from the rest of the stock and treated before being brought for slaughter.

The quality aspect

Maturity as a criterion for selection of livestock for slaughter in developing countries does not necessarily mean very old animals. A mature animal simply means a fully developed animal.

12:What is Skinning?

In removing the skin of sheep and goats initial cutting of the skin is done around the leg to expose and loosen the tendon of the hock for use as a means of hanging the carcass. This process is called legging. A second step called pelting involves the removal of the entire skin and preparation of the animal body for

evisceration. Tropical sheep and goats have hair not wool on their bodies, thus the term skinning is more appropriate for them. Skinning, like stunning, can be done either in the horizontal or hanging position, the former being more suited to small slaughterhouses and the latter for larger premises with bigger orders and with facilities or equipment for railing the individual carcasses one after another.

13: Principles of slaughter hygiene?

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14: Waste disposal?

Large slaughterhouse

The wastes from a large slaughterhouse are a heavy polluter of any recipient. The waste water from a meat plant should be allowed into a municipal drainage system without previous thorough treatment in a waste water treatment plant.

In the slaughter premises, the general principle regarding waste disposal is that initially, the solids and sweepings from operational waste must be removed from the liquid. Secondly, the operational liquid must be separated from the conventional drainage, namely that of toilets and bathrooms. The two lines should be kept apart within the premises well to the outside before being joined together.

15: What are the traditional and ritualistic slaughters?

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