

Meat hygiene | Part I | 5thyear 2019

Transportation of Animals

The energy required for muscle activity in the live animal is obtained from sugars (glycogen) in the muscle. In the healthy and well-rested animal, the glycogen content of the muscle is high. After the animal has been slaughtered, the glycogen in the muscle is converted into lactic acid, and the muscle and carcass becomes firm (rigor mortis). This lactic acid is necessary to produce meat, which is tasteful and tender, of good keeping quality and good colour. If the animal is stressed before and during slaughter, the glycogen is used up, and the lactic acid level that develops in the meat after slaughter is reduced. This will have serious adverse effects on meat quality.

Increased production through humane treatment of slaughter animals can be achieved, through:

- reduced carcass damage and lead to higher value due to less bruising and injury.
- decreased mortality.
- improved quality of meat by reducing animal stress.

Improving animal welfare is necessary <u>to reduce suffering</u>, and consumers, who are becoming more concerned with welfare of food animals. Better conditions of livestock operations will also improve safety of workers in the livestock and meat industry.

Animals may be moved from farm to abattoir on hoof or by lorry ,rail ,ship or other means. The moving of animals by any of these means will affect their physical condition and subject them to factors ,which may have a harmful effect on meat quality.

Its essential that livestock be slaughtered as , near as possible to the point of production in order to avoid long journey and hazards which may arise.

To ensure that the transport of animals shall be such as to reduce the risk of injury and unnecessary suffering during the journey; the following meaning applied:

- 1- Animals of significant difference in weight and different species.
- 2- Loading and off-loading must be carried out in such a way that animals are not caused injury or unnecessary suffering, animals should handle gently .Loading must be carried out using vehicle.
- 3- The vehicle should be well ventilated ,its essential that during transit animals .



- 4- No animals shall be carried on a vehicle unless it is accompanied by attendant responsible for the care of the animals.
- 5- In long journey, Adequate and suitable food and water must be offered to the animals at least every 12 hours during the journey.
- 6- Unfit animals are not permitted to travel.
- 7- Carcasses must not be carried in vehicles in which a live animal is being carried.
- 8- The interior of the vehicle washed & scrubbed with water . An approved disinfectant must be carried out as soon as after unloading .

Affection induced by transportation

- 1- Fractures ,bruising ,much of trauma ,stress and other injuries may be induced during transport.
- 2- Suffocation
- 3- Transport of animals may give rise to symptoms of fever
- 4- loss of weight –
- 5- Transport mortality deaths in all cases of livestock occur during transportation.
- 6- Laminitis from long standing.
- 7- Transit tetany (occur in cow and ewe specially in heavily pregnant animals).
- 8- Transit fever-shipping fever(pasteurellosis)

