University of Mosul Lecture No.: 1

**College of Veterinary Medicine** 

Date: first term/ 2024-2025 Unit of Scientific Affairs

Website: https://uomosul.edu.iq/veterinarymedicine/

Lecture title: Meat Hygiene: Terms in Meat Hygiene Lecturer Affiliation: Professor, Dr. Muntaha Ghazi Hasan

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## **Summary:**

Meat is a necessary food provide protein for consumer, characterized by its easily digestion. Cattle, sheep, goat, buffalo, camel, and poultry are the most sources of meat in our country. Chemically, meat consist of water to about 70% and protein 20% as well as fat and inorganic compounds.

## **Meat Hygiene:**

all measures necessary to guarantee the safety of meat and meat products at all stages of the food chain. The future for meat and meat products will depend mainly on Consumer demand and prices. It has a public health role through prevention of disease transmission; it deals to provide a valuable meat and meat products for consumption to reduce public health risk.

### Meat:

skeletal muscle from the animal carcasses that are fit for human consumption.

## Hygiene:

a set of practices performed for the preservation of health

## Handlers:

any person who handles meat, equipment, utensils or surfaces used in meat production and preparation of meat products.

# **Abattoir (Slaughterhouse):**

building established for slaughtering and dressing animal in order to get the products for human consumption.

#### Retail:

markets sell meat for consumers.

### Fresh meat:

meat that has not undergone any preserving process other than chilling, freezing or quick-freezing, including meat that is vacuum-wrapped or wrapped in a controlled atmosphere.

- a) Beef meat from cattle
- b) Veal meat from calves
- c) Lamb meat from young sheep
- d) Mutton meat from sheep older than two years

### Carcass:

The dressed, slaughtered animal containing two "sides".

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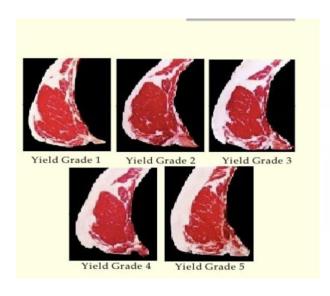


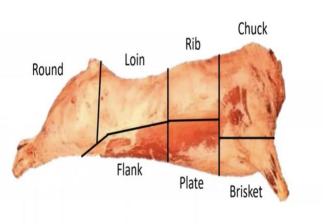




# Carcass weight and grading:

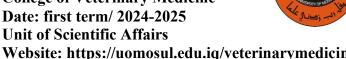
one way of pricing live farm animals, the final value of the animal is determined after slaughter based on carcass weight and grade





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## **Exsanguination (bleeding)**

where blood is removed from the animal after slaughtering.

# **Blood splashing**

The appearance of minute hemorrhages in the muscle, fat and connective tissue due to a transient rise in blood pressure at the time of slaughter.

# Mechanically separated meat (MSM):

the product obtained by removing meat from flesh bearing bones after boning or from poultry carcases, using mechanical means resulting in the loss or modification of the muscle fibre structure.

## Offal:

fresh meat other than that of the carcass, including viscera and blood.

#### Viscera:

the organs of the thoracic, abdominal and pelvic cavities, as well as the trachea and oesophagus and, in birds, the crop.

#### Pluck:

the internal organs comprising the larynx, trachea, lungs, heart and liver constitute the pluck.

## **Inspection:**

the examination of establishments, animals and their slaughtering process including finished product testing and destination of production inputs and outputs, in order to verify that all these items conform to legal requirements.

## **Ante-Mortem Inspection**

Inspection of an animal at lairage before slaughtering to decide animals' healthiness.

# **Post-Mortem Inspection**

Inspection of the internal organs and carcass after the animal has been slaughtered to determine wholesomeness.

### Myoglobin

A red iron-containing protein found in muscle that is similar to hemoglobin in the blood. Its function is to receive oxygen from hemoglobin and deliver it to the electron transport system. The iron present in myoglobin is in the ferric state.

## **Marbling**

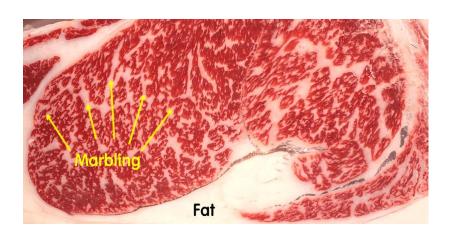
Intramuscular fat of the muscle; used in determining yield grade

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### **Evisceration**

Removal of the internal organs from the animal at the time of slaughter.

## **Edible by-products**

Portions of the animal other than the carcass that are suitable for human consumption.

## **Rigor-mortis**

The hardening or stiffening of muscle in animals shortly after slaughtering, it is occurring due to the formation of permanent bonds between actin and myosin after the depletion of the ATP in muscles. For beef it takes 6-12 hours and for lamb or mutton it takes 6-10 hours.

# **Aging**

It is the process by which the meat is became tender and flavor naturally ,Aging is required for marked increase in juiciness and tenderness of meat , It's important for beef and buffalo meat.

## **Fleshing**

The thickness of the muscling covering over the back, breast, drumstick, and thigh of a chicken carcass. Considered in poultry grading.

## Keeping quality:

general resistance of fat or food products to any undesirable changes during normal storage and usage period.thus good keeping quality of fat means resistance to oxidative rancidity, hydrolysis and development of off- flavors and odors.