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University of Basra College of Veterinary Medicine Dept. of Public Health / Meat Hygiene Division Meat Hygiene Course / Fifth Year 2022- 2023

Practical Lecture: Group (A, B, C) 1st Semester

Post-Mortem Inspection

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Postmortem Inspection Beef

Routine postmortem examination of a carcass should be carried out as soon as possible after the completion of dressing in order to detect any abnormalities so that products only conditionally fit for human consumption are not passed as food. All organs and carcass portions should be kept together and correlated for inspection before they are removing from the slaughter floor.

Postmortem inspection should provide necessary information for the scientific evaluation of pathological lesions of meat. Professional and technical knowledge must be fully utilized by:

- 1. Viewing, incision, palpation and olfaction techniques.
- 2. Classifying the lesions into one of two major categories acute or chronic.
- 3. Condition is localized or generalized, and the extent of systemic changes in other organs or tissues.
- 4. Determine the significance of primary and systemic pathological lesions and their relevance to major organs and systems, particularly the liver, kidneys, heart, spleen and lymphatic system.
- 5. Coordinating all the components of ante mortem and postmortem findings to make a final diagnosis.
- 6. Submitting the samples to the laboratory for diagnostic support, if abattoir has holding and refrigeration facilities for carcasses under detention.

General Carcass Examine

Examine carcasses (including musculature, exposed bones, joints, tendon sheaths etc.) To determine any signs of disease or defect. Attention should be paid to bodily condition, efficiency of bleeding, color, condition of serous membranes (pleura and peritoneum), cleanliness and presence of any unusual odors:

Internal iliac

Intercostals

Axillary

Superficial

Xyphoid

Prestemal

Suprasternals

Lymph nodes

- 1. Superficial inguinal (male).
- 2. Palpate supra-mammary (female).
- 3. Palpate external and internal iliac.
- 4. Palpate prepectoral.
- 5. Palpate popliteal.
- 6. Palpate (only sheep/goats and game/antelope) renal. Prepetor
- 7. Palpate (cattle, horses, pigs) or incise if diseases are suspected. Prescapular &prefemoral palpate (only sheep and goats).

Carcass judgment

Localized conditions

Trimming or condemnation may involve:

- 1. Any portion of a carcass or a carcass that is abnormal or diseased.
- 2. Any portion of a carcass affected with a condition that may present a hazard to human health.
- 3. Any portion of a carcass or a carcass that may be repulsive to the consumer.

Generalized lesions usually require more severe judgment than localized lesions.

Maturity Quality Grading

- I. Bone development.
- II. Button formation (ossification).
- III. Whiter and flatter rib bones.
- IV. A (youngest) -----E (oldest).

Appearance Of Ribs	Maturity cont'd	
A- Narrow and oval	A	9 -30 months
B- Slightly wide and slightly flat	В	30-42 months
C- Slightly wide and moderately flat	C	42-72 months
D- Moderately wide and flat	D	72-96 months
E- Wide and flat	E	> 96 months

Characteristic Signs for The Animals Dead

- 1. The flesh is dark, there is capillary bleeding, the organs, particularly liver, lungs and kidneys, are dark and congested and when cut, blood runs out.
- 2. The intercostal veins are full of blood and are clearly visible.
- 3. The forelegs often tend to be 'tucked up'.
- 4. The carcass sets badly and decomposes rapidly.

Eight Primal Cuts of Beef:

Chuck

Rib

Short Loin

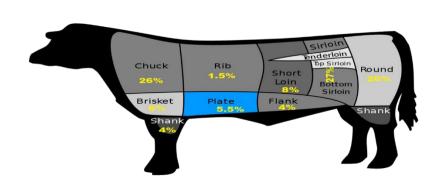
Sirloin

Round

Brisket/Shank

Short Plate

Flank



Types of Inspection and Tags:

1. Inspected and Passed

Good for consumption as a raw product.

2. Condemned

Whole carcass or parts are tanked.

3. Retained

Railed off for more inspection.

4. Passed for cooking

Re-inspect and if acceptable must be cooked prior to shipment.

5. Re-inspection

Any product at any time can be re-inspected.