

University of Tikrit
College of Veterinary Medicine
Dept. of Vet. Public Health/ Meat Hygiene Division
Meat Hygiene Course/ 5th. Year

Imperfect bleeding (ill bleeding)

- This condition is seen in the carcasses of animals which have been slaughtered when almost at the point of death.
- This may be due to a condition of a fevered nature or to weak heart action due to injury.
- The more common injuries are suffocation, choking, heart failure, blockage of the intestine, accidents and lightning stroke.
- Where imperfect bleeding is due to fever, the carcass and offal will show evidence of a systemic change.

LESIONS

- Imperfectly bled carcasses are dark in the musculature with the fat having a dirty pink colour.
- The intercostal veins stand out in the thorax as black lines running parallel with the ribs.
- The left ventricle of the heart contains a large amount of congealed blood, with the lungs being badly congested and 'bleeding' profusely if incised". The remainder of the organs also have a high blood content.

- The carcass lymph nodes are filled with blood, the prescapular node being the most affected.
- The lymph nodes are not normally enlarged unless the cause is a specific disease or fever.

Determination of efficiency of bleeding

A-Physical method

Name: 1- blotting paper test

Use: Determination of efficiency of bleeding

Procedure: meat piece + filter paper + leave 2 min.

Results: pink color red color red to deep



well bleeding



Judgment: fit

red color



moderate



rapid consumption

red to deep



ill bleeding



unfit

2- filter paper pressing test

Name: filter paper pressing test

Use: Determination of efficiency of bleeding

Procedure:

meat piece + filter paper put in compressorium and closed to squeeze fluid and oozing on filter paper

Result:

pink to faint pink

red to dark red



well bleeding

ill bleeding

Judgment: --

fit

unfit

3- Hemoglobin extraction test

Name: Hemoglobin extraction test

Use: Determination of efficiency of bleeding

Procedure: 10g minced meat + 10ml distilled water + leave 10 min.

Result:

pink to faint pink

red to dark red



well bleeding

ill bleeding



Judgment:-

fit

unfit

B- Chemical testes:

Name: Malachite green test

Use: Determination of efficiency of bleeding

Reagents: a- Malachite green

b- 3% H₂O₂

Procedure: In a beaker add:

- 1) 10 g minced meat
- 2) 15 ml DW
- 3) Allow to stand for 15 minutes
- 4) Filter through a coarse filter paper
- 5) Transfer 0.7ml of the extract into test tube
- 6) Add 1 drop of malachite green and mix (0.1g-Mg +25ml 30% acetic acid +75 ml DW)
- 7) Add 1 drop of H₂O₂

8) Shake the mixture until it foams slightly

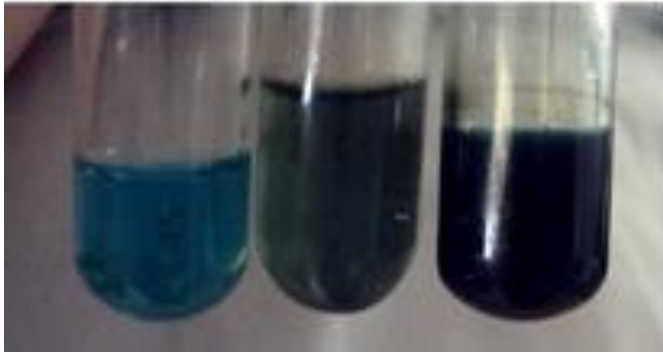
9) Leave for 20 minutes

Result:-----

blue-----

-green---

olive green



well

incomplete

ill bleeding

Judgment:

fit

border line

unfit