RIB FRACTURES

KEY MESSAGES

1. It is estimated that rib fractures cost industry $3 million annually from both producer and processor losses.

2. Rib fractures are the result of loss of bone density (osteoporosis), often caused by nutritional and vitamin D deficiencies.

What are rib fractures?

Rib fractures present at the abattoir as bone thickening or calluses in older fractures, or bruising in more recent fractures on the inside of the rib cage. Fractures occur more easily when the bones are abnormally weak and may occur without excessive force during handling.

Condition on-farm

Rib fractures cause production losses through weight loss, reduced growth rates and ill thrift. Breathing difficulties and a reluctance to move may also be observed in animals with broken ribs.

Condition picture in abattoir

If rib fractures are present, trimming of affected ribs from the carcass is required. This results in reduced carcass weights, which affects profitability.

Causes

The causes of reduced bone density are complex and can be compounding. Nutritional deficiencies in calcium, phosphorus and copper; vitamin D deficiency; overall malnutrition; and excessive intestinal parasitism can be the cause. Deficiencies may be primary – i.e. the dietary intake is not sufficient to meet the animals demands, as seen with calcium deficiencies in young sheep grazing rapidly growing, lush green feed. Alternatively deficiencies may be secondary – i.e. the deficiency results from an imbalance in macro-elements, as is seen with sheep grazing winter oats crops or high grain based diets. In this case the phosphorus content of the cereal is much higher than the calcium, which impairs calcium absorption.
**Treatment**

The treatment of rib fractures varies depending on the cause. Consultation with your veterinarian is recommended to diagnose the underlying cause. For nutritional imbalances or deficiencies, a trace mineral or oral/injectable supplement may be used. For lush pasture, the addition of hay to the ration can reduce nutritional imbalances. If recent rib fractures are observed, stock should be rested for several weeks to allow recovery.

**Prevention**

To prevent the occurrence of rib fractures within your flock:

- ensure feed rations are balanced and complete with required nutrients, particularly in relation to calcium
- consult your veterinarian or animal nutritionist to discuss mineral deficiencies on your property
- ensure handling facilities and equipment are hazard free, and follow low stress stock handling and transport practices.