

## Weaning calves

### Why wean

- Calves need to put on at least 0.7 kg/hd/day from birth until they are 250 kilograms or greater. If they aren't doing that, then wean. Research from Beef CRC found that gains of less than 0.6 kg/hd/day under 250 kilograms can result in the animal being permanently set back.
- If the cow body condition score is falling or at risk of falling below 2.5, you don't want to be compromising next year's calving.
- To save feed and water. A cow with a calf at foot needs more feed (up to 40% for the same weight gains) and will drink up to 50 litres more water per day, than an equivalent pair run separately.

### Weaner rations

The younger/lighter the calf at weaning the more nutritionally dense (essentially, better quality) the feed will need to be as the calf's requirements for energy and protein are higher—but they can't physically fit a lot in!

Calves under 100 kilograms need the most looking after and their feed needs to be 12mj/kg DM and at least 16%, ideally 18–20%, Crude Protein (CP). Alternatively use milk replacer.

Weaner rations should contain as much energy as economically possible (ideally 10–12mj/kg DM) and for calves over 200 kilograms 12–14% CP.

The use of urea (or other non-protein nitrogen (NPN) sources) for calves under 150 kilograms is not recommended—you must use a source of true protein to meet their requirements as their rumen isn't developed enough to support the use of NPN. Meals such as cottonseed meal, copra meal or soy bean meal (if available) can be excellent ways to boost protein levels in weaner rations.

Large inclusions of molasses, again, aren't recommended for really young stock due to that undeveloped rumen; however, given the palatability of the sugar it can be a useful inclusion in weaner rations. They will still need to have access to other forms of energy (grain, hay, pasture and so on) plus a protein source.

Whole cottonseed isn't recommended for young stock either due to the high oil content (causing digestive upset), gossypol risk and compaction; however, it can be included at restricted levels for stock over 150 kilograms.

Hay (or pasture if not yard weaning) needs to be either of sufficient quality to meet energy/protein requirements, or if it isn't (e.g., straw that is being used purely as a fibre source) then it needs to be feed in conjunction with a ration.

Grain is a common energy source. Nutritionally it generally goes, first—wheat, second—barley, then oats, and then sorghum; however, this also gives wheat the biggest risk in regard to acidosis so it is a matter of balancing the management of these. If large levels of grain are going to be included then a commercial buffer is recommended in addition to lime. The commercially available weaner pellets/rations are usually labour saving and an option if on farm mixing isn't available; however, they usually come at a higher per tonne cost.

Hygiene in the weaning environment is critical. The inclusion of Rumensin (sodium monensin) or Bovatec (sodium lasalocid) is helpful in weaner rations as it will help prevent coccidiosis; however, some end-markets don't permit its usage so please be aware of that. This can also apply to grain, urea and so on, if you are trying to access some of the pasture fed markets later down the line.

### **A note on feed quality**

The hay on the left is an example of how much poor-quality feed a 100 kilogram weaner would need to consume to gain 0.5 kilograms per day.

The hay on the right is how much a 100 kilogram weaner can **actually** eat.

## **Can they eat enough if the hay quality is poor?**

What a 100kg weaner  
needs to eat to gain  
0.5kg/day

What a 100kg  
weaner can  
actually eat



*Source – FutureBeef*

For more information and advice call North West Local Land Services Livestock Officer, Sally Balmain on 02 5776 7009 or email [sally.balmain@lls.nsw.gov.au](mailto:sally.balmain@lls.nsw.gov.au)