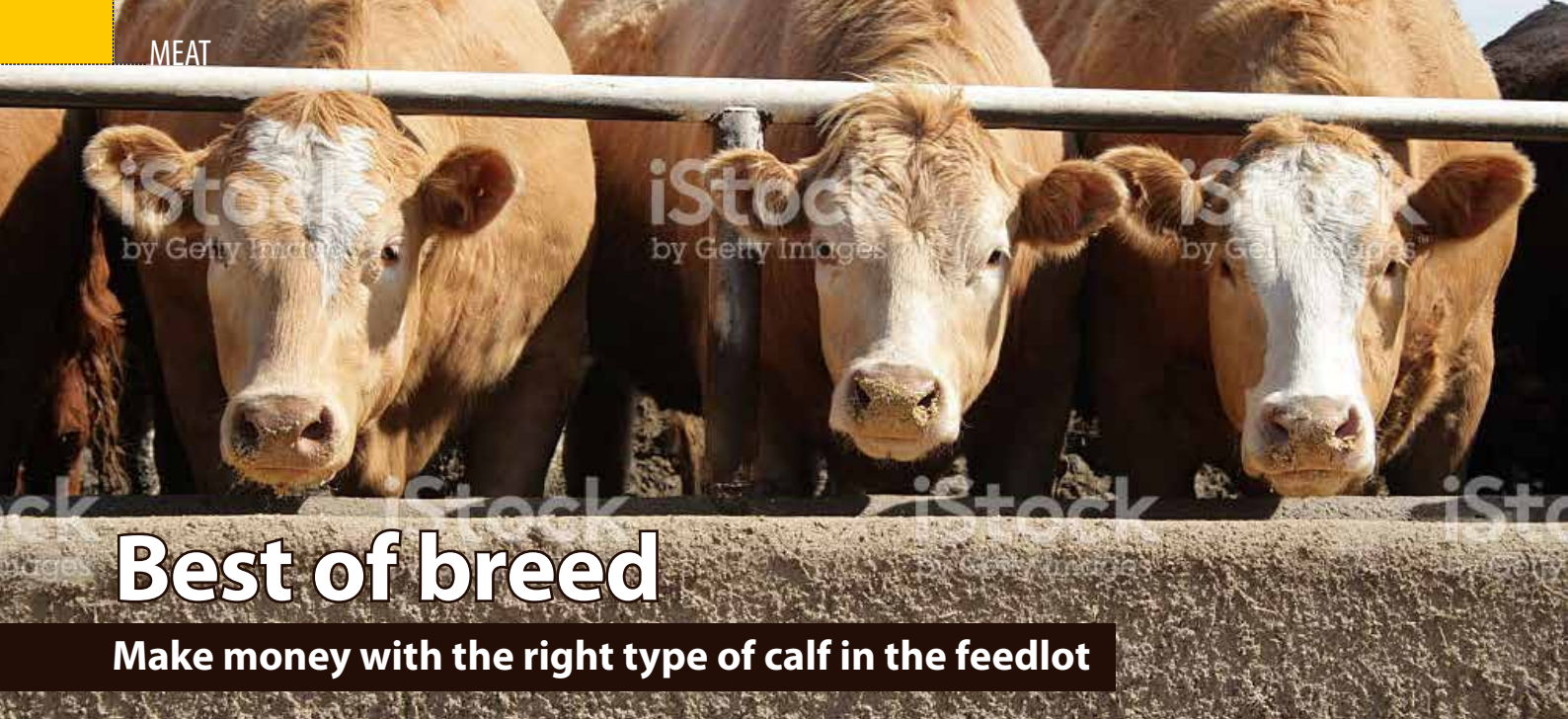




Best of breed

Make money with the right type of calf in the feedlot

Breed is not a term generally used in a feedlot, as the focus is rather on the right type of animal according to specific market needs and circumstances. In general, the market prefers medium-frame types as the carcass handles a lot easier and because of the size of the cuts sold to the consumer. However, if deboned cuts are used, the focus will fall on large-frame, late-maturing types. The reason for this is that the meat-to-bone ratio is better, lowering the processing costs. These late-maturing animals are also more profitable with a negative purchasing price and positive feeding margin. The mass at which animals are purchased is also important, as light calves less than 190 kg usually take a lot longer to adapt in the feedlot with regard to feeding and behaviour. Their ability to adapt can, however, be affected by frame type, age and condition. Mass also plays a role when determining the purchase price, as the heavier the animal, the greater the interest liability. As heavier animals usually need a shorter period to finish, the mass added decreases and with a negative feeding margin it is more profitable to purchase heavier animals with a positive price margin.

Gender plays a role at purchase, as heifers grow slower than bullocks and bullocks

grow slower than bulls. Heifers are always discriminated against and the percentage of heifers in a group is always reflected in the price. On average there are approximately 30% heifers in a feedlot. Castration is only performed on animals that will develop male characteristics. Horns are clipped to prevent unnecessary injuries and especially bruising during marketing. Condition plays a role at purchase as it determines the duration of the feeding period directly.

Calves can be divided into three groups, namely fat, medium and dry. The fatness of the calf determines the duration of his time in the feedlot. It is usually weaned calves that are sold to the feedlot, that have fat on them. Newly weaned calves are usually highly stressed and become sick easily as they have less resistance. Weaning time usually corresponds with the turn of the seasons and winter months which further exacerbates problems. If the calf has been weaned for two months already and is dry, the feedlot has an additional benefit with regards to compensatory growth.

There are certain points on the animal with which his condition score can be determined. The following are the most important:

- Appearance of fat at the base of the tail;
- Thickening in the crotch that refers to fat deposits; and
- Appearance of fat deposits in the brisket area.

With quality, the focus falls on muscle development potential: the better the quality, the better the performance and the greater the profit per animal. It is important to note that good condition can on the surface appear to be muscles.

The following are places on a calf where a buyer can look for muscle development:

- The appearance of the muscle on the bottom part of the upper leg, just above the knee. Very little fat appears here, even in fat animals.
- The front stance of the animal. The wider the stance, the bigger the muscles.
- The bone structure (thickness) of the animal.

General feedlot finishing information and tips

Processing:

The three R's are important at receipt:

- Rest 12-24 hours.
- Re-hydrate to combat the moisture loss during transport of animals.
- Rumen – to provide the rumen balanced nutrients to get the animal out of a negative energy status as soon as possible.

Animals must be subjected to a full processing program within 24 hours after arrival before being put into a feeding pen:

- Identify with an ear tag

- Treat against internal and external parasites with dosing in summer and vaccinate in winter.
- Vaccinate against general viruses and bacterial feedlot diseases, particularly respiratory disease in cattle.
- Virus inoculations: IBR, BVD, PI3, RSV
- Bacterial vaccination against Pasteurella, Clostridium –species
- Consult your veterinarian regarding specific products.
- Application of an ear implant, immunisation, inoculation and regular weighing is critical.
- Treat with antibiotics as prescribed by a veterinarian if necessary.
- De-horn cattle.
- Provide roughage/hay during processing
- Remove and give special attention to sick or morbid animals.

Complete processing quickly but calmly:

- Minimise dust and mud and avoid processing or activity during extreme high temperatures.
- Place the animals in groups according to weight and gender at the beginning of the feeding period. Do not change the group after the feeding period. New animals in the group disturb social pressure/structure and cause competition.
- NB: Contact your veterinarian before applying the above mentioned processing tips. This information is a guide only and procedures may change in different situations.

Feeding pen specifications:

- Feeding pens must ideally be place at an angle of 1-7 degrees to ensure adequate drainage and to prevent problems such as foot rot.
- Provide clean cool drinking water, ± 40 litre/head of cattle/day.
- Feed trough space of 10-15m²/head of cattle.
- Feed trough space of 20cm per head of cattle.
- Height on feeding side maximum 40cm for cattle.

- The feed trough must be 600mm in width for cattle.

Feed trough management:

- Feeding costs are high and therefore it is important to maintain good feed bunk management.
- Prevent feed from getting wet.
- Keep the feed bunk clean to prevent the development of mycotoxins.
- Fill at least twice a day with fresh feed. During the warm months, it is advisable to give 40% of the diet in the early morning and 60% of the diet in the afternoon. Animals eat little or no food during the hottest part of the day. Feed, especially when high in moisture, are negatively impacted when placed in the feed trough during the hottest part of the day. It is important that the animal eat the whole diet within 24 hours.
- Ensure that the feed trough always contain food to prevent the animals from overeating during feeding time and thus preventing bloat and diarrhoea.
- Dry material intake of cattle is 2.8-3.0% of the body weight after the adaptation period.

kg/220 kg head of cattle/day) plus ad lib hay/roughage or winter pasture.

- Day 3-4: Limit mixed concentrate intake to 1,4% of the body mass (3 kg/220 kg head of cattle/day) plus ad lib hay/roughage or winter pasture.
- Day 5-6: Limit mixed concentrate intake to 1,8% of the body mass (4 kg/220 kg head of cattle/day) plus ad lib hay/roughage or winter pasture.
- Day 7-10: Limit mixed concentrate intake to 2,3% of the body mass (5 kg/220 kg head of cattle/day) plus ad lib hay/roughage or winter pasture.

Cafeteria fattening mixes are extremely effective for backgrounding on winter grazing, or for preconditioning at 1-1,5% of the body mass on summer or winter grazing or in paddocks with long hay to prepare the rumen for the feedlot diet.

Correct adaptation of animals on a complete diet is very important:

- Day 1-5: Limit the complete diet to 1.8% of the body weight per animal per day plus long hay ad lib.
- Day 6-10: Complete diet plus long hay ad lib if animals are totally adapted and

CAFETERIA AND COMPLETE BEEF FAT 33+ DIETS FOR CATTLE

Mix instructions*		1	2	3	4	5
Molatek Beef Fat 33+	kg	160	160	160	160	160
Molatek Molasses meal	kg	****	80	80	80	****
Maize / Hominy chop	kg	840	760	660	600	120
Maize silage (35% DM)	kg	****	****	****	350	****
Maize cob meal	kg	****	****	****	****	720
Roughage	kg	Ad lib	Ad lib	100	50	****
Total	kg	1000	1000	1000	1240	1000

Feeding instructions for cafeteria adaptation phase:

Maize can be partly substituted with small grains (50% with barley or triticale, and 20% with wheat) and 50% with grain sorghum or in total with hominy chop.

Roughage or pasture must be available at all times *ad lib*:

- Day 1-2: Limit mixed concentrate intake to 1% of the body mass (2

shows no sign of acidosis. The complete diet is fed *ad lib* after day 10.

Dr Vlok Ferreira, National Technical Manager Ruminants, RCL FOODS vlok.ferreira@rclfoods.com

**Beef Fat 33+ Reg No. V17357 (Act 36 of 1947) Molasses meal Reg No. V7264 (Act 36 of 1947) N-FF0666*