

Winter feeding - Nutrition and Management advice

Winter finishing of cattle is the most expensive and presents the greatest challenge of all the systems of cattle production.



Ingredients

Before purchasing feed or formulating rations, it is important to assess the quantity and quality of any home-produced feeds. This will allow you estimate exactly how much feed and the type of supplement(s) you need for the winter period. It is worth getting silage analysed if you are unsure of its feeding value. If buying a ration from a compounder/merchant, it will simplify matters in relation to storage and feeding if one formulation can be used for most if not all stock. A simple 3 or 4-way mix containing an energy, protein and fibre source with minerals added will be suitable for farms feeding beef and store cattle. Aim for a ration with a high energy value (above 0.95 UFV) rather choosing based on protein content. In a finishing system, energy is the key nutrient with a protein content of 12.5 - 13% sufficient. Going above this protein level will hinder animals achieving adequate fat cover, especially in the case of some continental breeds.

The same principles apply to farmers who are home mixing rations. This system allows for a great choice of ingredients to be used but ideally farmers should be use ingredients that allow high inclusion rates (e.g. barley). Barley is normally the best choice energy source; others include wheat, maize and molasses. Protein sources include rapeseed, maize gluten, soyabean meal with maize distillers being very useful due its high energy content also. The main digestible fibre feeds available are citrus pulp, beet pulp and soya hulls, which is proving popular this year due to its value relative to the pulps.



If feeding a total mixed ration (TMR), molasses liquids will aid in palatability and intake, carry minerals uniformly, reduce ration sorting as well as providing additional nutrient density to the diet. Correct mineral supplementation is necessary with all diets and especially if feeding alternative forages (e.g. fodder beet), high cereal diets (Calcium deficiency) or other by-products.

Stores

The target weight gain for weanlings and store cattle going to pasture next spring is 0.7 kg/day. To achieve this on a grass-silage based diet, weanlings will require 2 kg of meal/day with stores requiring 2.5kg/day. As these animals are still in the growing phase, a protein content of 15% in the ration will be needed. Autumn calving suckler cows also need supplementation until they are back in-calf. On good quality silage this will require 1 kg per day and up to 2.5 kg if silage quality is poor.

Finishing

With large numbers of cattle now being finished on ad-lib concentrate diets, high levels of performance are necessary to achieve a return. Research work from Grange provides some guidelines to ensure high technical efficiencies for beef cattle.

- Use animals with a high rate of carcass gain relative to liveweight. These are the more high growth rate beef cattle that divert a higher proportion of feed intake towards carcass gain. Young continental bulls are best in this regard with traditional breed heifers (Angus & Hereford) at the other end as they fatten at a relatively low weight.
- Keep the intensive finishing period short (80-120 days for steers, 70-110 days for heifers and up to 230 days for bulls, depending on the energy level in the diet). Steers should be within 100kg to 120kg of final slaughter weight when going on intensive finishing ration.
- Rate of gain required – 1.3kg to 1.5kg/hd/day.
- Send cattle for slaughter when acceptably finished. There is a large cost to putting on surplus fat.

Management

Feeding management regarding high concentrate or ad-lib diets is key critical to performance. Regular feeding times, fresh supply of feed, adequate feed space, ensuring availability of long fibre (barley straw), clean water supply with adequate capacity, animal health (worms and lice) and no abrupt changes in the diet will help ensure high dry matter intakes. Other areas to focus on are correct group sizes, avoiding mixing animals once on finishing diets, adequate lying areas and proper ventilation.

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