Winter Rations for Finishing Cattle

Feed is the major cost in winter finishing and maximising live weight gain at lowest cost demands efficient use of home grown feeds. To achieve high weight gains it is essential to provide high quality diets.

With winter approaching, cattle will now be being housed and a decision taken on the basal forage ration whether this be grass, maize, whole crop silages or straw.

Grass Silage

For the majority of beef finishers in the North and West of the country, grass silage will be the main winter forage.

The weather across the country and over the summer period has been extremely variable and consequently so is the quality of grass silage. A reliable analysis is essential before making a decision on whether supplementation is needed and if so the type and amount. Good quality silage available to appetite without supplementation is usually sufficient to finish heifers.

Protein intake from grass silage should be sufficient to meet requirements and rolled barley is often the most suitable and cost effective supplement.

Although grass silage is usually well balanced with minerals, straight feeds e.g. cereals and sugar beet are not, and it is therefore advisable to feed a suitable supplement at a rate recommended by the manufacturer. Supplements are available which contain an inclusion of a yeast additive. Where reasonably high levels of cereal are being fed e.g. more than 3kg, or where the silage analysis shows a potential high acid, such supplements can be very effective in preventing acidosis.

Purchasing a compound feed for finishing beef cattle is the most convenient way to supplement beef cattle diets. The available compounds will be balanced with energy, protein, fats, minerals and often contain a yeast additive. Starch levels are usually kept to a level which allows high levels of supplementation without a risk of acidosis. They are of course more expensive than purchasing high quality straights and can vary a lot in quality. The economics of finishing beef cattle on high intakes of bought in compounds needs careful evaluation.
Maize and whole crop silages

These are usually ideal forages for finishing cattle and are often suitable for feeding to achieve the required finish without additional concentrate supplementation. Laboratory testing, which should include a starch analysis, is essential to assess quality. This year in particular due to the variable weather and lack of sunshine in some maize growing areas, cob maturity has been restricted and starch levels are lower.

Compared with grass silage, maize and whole crop silages usually have much lower protein levels. Supplementation with a protein feed which provides a supply of rumen degradable protein is essential if these forages are to be efficiently digested. Rapeseed meal is ideal and often the best value for money source of true protein. However urea based supplements are also suitable and often the most cost effective. It is often better to source urea based supplements from a compoundinger as mixing urea on its own on farm is potentially dangerous as only small amounts are needed and must be thoroughly mixed through the feed.

Straw

Although straw is very low in energy, protein and minerals for finishing beef cattle, it is of course a good source of fibre. It forms an ideal basal ration but must be supplemented with concentrate feeds to provide all the nutrients required by the finishing animal. As such it is often utilized in total mixed rations where straight feeds can be mixed in to provide the complete diet. Very high rates of gain with high feed conversion rates are being achieved with a mixed ration based on straw, cereals, a digestible fibre source such as beet pulp, a protein source such as rape seed meal and a suitable mineral/vitamin mix.
Typical Concentrate Feeding Levels with Grass Silage to achieve 1kg/d (Steers) and 0.8kg/d (Heifers)

<table>
<thead>
<tr>
<th>Silage quality</th>
<th>Silage intake (kg/day)</th>
<th>Concentrate intake (kg/day) steers/heifers</th>
<th>Concentrate intake (kg/day) steers</th>
<th>Concentrate intake (kg/day) heifers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent (73D)</td>
<td>30</td>
<td>2.5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Good (69D)</td>
<td>25</td>
<td>4.5</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Poor (62D)</td>
<td>15</td>
<td>7.0</td>
<td>6.0</td>
<td></td>
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