Managing Winter Feeding

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Animal and Food Sciences
Body Condition Goals at Calving

Mature cows  5
2-year-olds  6
Body Condition Goals at Calving

• Wean earlier

Milk production increases nutrient requirements and reduces nutrients available for maternal tissue gain
When cows need to gain condition

- Wean earlier

Milk production increases nutrient requirements and reduces nutrients available for maternal tissue gain.

Feed is more efficiently used when fed directly to weaned calves and dry cows.
When cows need to gain condition

• Begin small-package supplementation program sooner

When protein is marginal to deficient, small amounts of protein supplement increase animal performance substantially.

Nutrients needed for pregnancy increase as calving date approaches. More nutrients available for maternal tissue gain during mid-gestation vs late-gestation.
Winter Feeding Considerations

• Pregnancy diagnose and sell opens
• Retain fewer (or no) replacement heifers?
• A restricted breeding season insures uniform stage of production for cows
  Long calving seasons lead to simultaneous underfeeding and overfeeding
Young vs Mature Cows

- Manage separately
- Young heifers are not as aggressive and do not eat as rapidly as mature cows

<table>
<thead>
<tr>
<th>Item</th>
<th>2 and 3</th>
<th>4 and 5</th>
<th>7 and 8</th>
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</thead>
<tbody>
<tr>
<td><strong>Gestation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed intake, lbs/day</td>
<td>28</td>
<td>35</td>
<td>36.6</td>
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<tr>
<td>Rate, grams/minute</td>
<td>92</td>
<td>145</td>
<td>135</td>
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<tr>
<td><strong>Lactation</strong></td>
<td></td>
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<tr>
<td>Feed intake, lbs/day</td>
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<td>51.5</td>
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<tr>
<td>Rate, grams/minute</td>
<td>126</td>
<td>164</td>
<td>165</td>
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</tbody>
</table>

Source: Parsons et al., 2021
Determine Supplemental Needs

Nutrients from forage
- Nutrient requirements

Nutrient excess or deficiency
Supplement Decisions

- Address protein balance first
- Evaluate energy balance
- Cost
- Conveniences
Cowculator is designed to evaluate and formulate diets for beef cattle. Classes of cattle include cows, bred heifers, growing and finishing cattle, and bulls. Cowculator does not perform least-cost formulation.

- **Orange** cells are intended for user inputs.
- The feedlist is intended as a starting point and can be completely customized.
- To get started, click on the "Cattle" button or tab to enter details about the type of cattle and management that applies to your situation.
- Feed intake, protein, energy and mineral requirements are dependent on an accurate estimate of mature weight and body condition score for cows and harvest weight for growing cattle (representing weight at about 0.6 inches of backfat)

DEVELOPED AT OKLAHOMA STATE UNIVERSITY
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