

---

## RULES OF THUMB FOR WINTER FEEDING

*James B. Neel*  
*Professor*  
*Animal Science*

“Rules of thumb” can be helpful in planning winter feeding programs for cow-calf herds. Following are a few that might be useful.

**How much hay does a cow need each day?** Mature beef cows with an average body condition score (BCS of 5) should eat about 25-30 pounds of average quality, dry hay or its equivalent per day to get her required energy needs. However, if hay is limited and substituted, cows can get by with 0.5% to 1.0% of their body weight in hay.

If the hay supply is limited and there is the need to substitute grain for hay, approximately 5 lbs. of corn can replace 9 lbs. of hay. An easy guide to remember is 1 lb. of corn can replace 2 lbs. of hay.

If substituting corn for hay, cows should be fed at least 1 pound of hay per 100 pounds of body weight. The balance of the energy can come from corn or other grain.

If feeding average to low quality hay, be sure that adequate protein is available and should come from a plant protein such as cottonseed meal or soybean meal. Inadequate protein will cause the cattle to consume less feed than desired. Digestibility of lower quality hay will be reduced if protein is inadequate.

Young cattle, replacement heifers and stockers need a ration that contains at least 12 percent crude protein.

**Water consumption is critical during the winter.** Mature cows need 10 to 15 gallons of water per day, bred heifers, 7 to 8 gallons per day. The bottom line is that all classes of cattle need about 1 gallon of water per hundred pounds of body weight.

**Additional alternatives for “stretching” limited hay supplies include:**

- Pasture (range) cubes offer advantage of being both easy for the producer to feed and the cattle to consume on pasture.

- Innovations in molasses based tubs/blocks in recent years have resulted in products that are higher in energy, protein and other nutrients. These products are relatively expensive but are also convenient to use.
- Commercial feed blends are feed options. Discuss feed availabilities with your feed dealer. Recent innovation in the feed by-products industry have resulted in blends that are more “complementary” to forages, with more efficient overall production.
- Commodity feeds are often difficult for small producers to justify, but many offer larger producers an opportunity to economically supplement forages.

For additional information on winter feeding of beef cattle, contact the Agricultural Extension Service, University of Tennessee office in any of Tennessee’s 95 counties.