Agricultural Extension Service 🌘 U. S. Department of Agriculture

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DAIRY HUSBANDRY NO. 1
RALPH W. WAYNE

Winter Feeding Dairy Cows

Your winter feeding program is determined largely by the type, supply, and quality of your hay. To get the best feeding method for your herd:

- 1. Check the type, supply, and quality of your hay as shown below.
- 2. Refer to table 1 for the grain mixture to feed your herd and to table 2 for the rate of grain feeding.

In the following tables, very high quality hay is alfalfa cut before 1/10 in bloom and put up without rain damage, medium quality hay is alfalfa cut 1/10 to 1/2 in bloom put up without serious rain damage or cut before 1/10 bloom with some rain damage, and low quality hay is late cut hay or earlier cut hay badly damaged by weather. These tables are to be used only as a starting guide. The dairyman will need to make adjustments according to the response of the cows.

FEEDING ALFALFA HAY

1. Abundant supply of alfalfa hay--feed 20 lbs. hay, 30 lbs. corn silage per cow daily.

Very High Quality Grain Mixture A Feeding Rate 1 Medium Quality Grain Mixture A Feeding Rate 3 Low Quality
Grain Mixture B
Feeding Rate 3

2. Average supply of alfalfa hay--feed 15 lbs. hay, 45 lbs. corn silage per cow daily.

Very High Quality
Grain Mixture A

Feeding Rate 3

Medium Quality
Grain Mixture B
Feeding Rate 3

Low Quality
Grain Mixture C
Reeding Rate 3

3. Low supply of alfalfa hay--feed 6-10 lbs. hay daily and all the corn silage cows will eat.

Very High Quality
Grain Mixture B
Feeding Rate 3

Medium Quality
Grain Mixture C
Feeding Rate 3

Low Quality
Grain Mixture D
Feeding Rate 4

FEEDING MIXED HAY (Alfalfa with brome, bluegrass, or quackgrass; clover mixed with grasses)

1. Abundant supply of mixed hay--feed 20 lbs. hay, 30 lbs. corn silage per cow daily.

Very High Quality
Grain Mixture B
Feeding Rate 2

Medium Quality
Grain Mixture C
Feeding Rate 3

Low Quality
Grain Mixture D
Feeding Rate 4

2. Average supply mixed hay--feed 15 lbs. hay, 45 lbs. corn silage per cow daily.

Very High Quality
Grain Mixture C
Feeding Rate 3

Medium Quality
Grain Mixture D
Feeding Rate 3

Low Quality
Grain Mixture D
Feeding Rate 4

3. Low supply mixed hay--feed 6-10 lbs. hay daily and all the corn silage cows will eat.

Very High Quality Grain Mixture D Feeding Rate 2 Medium Quality
Grain Mixture D
Feeding Rate 4

Low Quality
Grain Mixture E
Feeding Rate 4

FEEDING GRASS HAY (Wildhay, bluegrass, quackgrass, brome, sudan with or without corn silage).

These are all low in protein. Feed the cows all the roughage they will eat of whatever is on hand. Grain Mixture E
Feeding Rate 4

Table 1. Grain mixtures

Mixture	Parts home grown grain (corn, oats, barley)	Parts high protein concentrate	Average percentage crude protein in mixture*
A	Al1	None	10
В	6	1	14
С	5	1	15
D	4	1	16
\mathbf{E}	3	1	18

* High protein concentrate is soybean oil meal, linseed oil meal, or high protein (36-40 percent) commercial dairy concentrate. Use the one that provides the cheapest pound of protein.

Table 2. Feeding rates of grain mixture

- 1 lb. grain to each 2 1/2 lbs. milk over 25 lbs. milk for low-testing breeds, 20 for high-testing breeds.
- 2. 1 lb. grain to each 2 lbs. milk over 25 lbs. milk for low-testing breeds, 20 for high-testing breeds.
- 3. 1 lb. grain to each 2 lbs. milk over 20 lbs. milk for low-testing breeds, 15 for high-testing breeds.
- 4. I lb. grain to each 2 lbs. milk over 15 lbs. milk for low-testing breeds, 12 for high-testing breeds.

SUMMARY--HERD FEEDING PROGRAM

- 1. Small Calves--Give calves a good start, feed them colostrum milk. Then feed a limited amount of milk or milk replacer plus good quality concentrate or starter. Feed all high quality hay the calves will eat. Clean the mangers every day. Keep the pens dry and the calves out of drafts and dampness. Antibiotics will help if calves are troubled with scours.
- 2. Growing Calves -- For growing calves 4 months to 1 year old, feed 2-4 lbs. of grain a day the same as the cows get. Feed all the high quality hay they will eat.
- 3. Yearlings--Feed yearlings all the good roughage they will eat. Feed a grain mixture only if the roughage is poor or the heifers are thin. Feed them so they will be in good condition, but not fat, when calving at about 24 months.
- 4. Cows--Feed milking cows generously--all the good roughage they will eat plus grain according to their production. High producing cows won't get fat. A cow not worth feeding well is not worth keeping as a dairy cow.
- 5. Water--This is your cheapest feed. See that the cows get all they want all the time.
- 6. Minerals--Feed trace mineralized salt and steamed bonemeal free choice. This is true especially when roughage is low quality.

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