



Feeding Dairy Cows

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Efficiency and economy are key factors to successful dairying. Both are included in the feeding program.

High Production is Vital

Arizona dairymen are finding that maximum production per cow at low cost is essential. Many items such as labor, equipment, land, taxes, interest and feed enter into the cost of production. Of these, the dairyman is able to do most about feed in the reduction of cost and in the improvement of efficient production.

Roughages are the cheapest source of feed nutrients. Large amounts of hay,

silage, green chop (soiling), and pasture are the principal roughages used. The better the quality, the more the dairy cows will eat—and the less grain will be required.

High-quality hay is always important. Too many dairymen overlook the quality factor in feeding. They may fail to recognize the fact that dairy cows will not eat as much—nor clean up—poor-quality hay. Therefore, the cows do not get all the nutrients needed for maximum production.

On alfalfa hay and a full grain ration, cows will eat 2½ pounds of good-quality hay per 100 pounds body weight per day. When alfalfa hay is fed with silage and a full grain ration, they will need 1 pound of good-quality hay and 3 pounds of silage for each 100 pounds of body weight per day.

The green chop feeding program and silage work together very well. The green feed equipment is ideal for making silage. When surplus green feed develops, it is best to harvest it for silage if it will not make good hay. The silage will take the place of green chop or pasture in the ration.

Feeding green feed alone is not desirable. For best results feed 1 pound hay and 6 pounds of green feed per 100 pounds body weight per day.

One pound of hay is equivalent in digestible nutrients to 3 pounds of silage or 4 pounds of green chop. The roughage requirements of a dairy cow are equal to 2½ pounds of good quality hay per 100 pounds body weight per day. Using these figures as guides, a dairyman can balance his roughage feeding program based on

A well balanced feeding program provides the necessary nutrients for high production per cow.



the amount of each of the roughage feeds available as well as the price per ton of each.

Balance the Ration

Efficient and economical production cannot be obtained without feeding a grain ration balanced to the kind and quality of roughage. This is especially true with cows having the inheritance for high production.

When the roughage is alfalfa hay, pasture, green chop, and silage from green chop feeds, the amount of protein required in the grain mixture is 10 to 14 percent. When the roughage consists of low-quality alfalfa or mixed hay with corn or hegari silage, the protein required in the grain mixture is 14 to 18 percent. When the roughage contains no alfalfa hay but consists entirely of corn or hegari silage, fodder or grain hay, 18 to 21 percent protein in the grain mixture is required. The protein level of the grain mixture is based entirely on the kind, quality, and amount of roughage feed.

Feed the grain mixture in proportion to the amount of milk yield. For Jersey or Guernsey cows, feed 1 pound of grain for each 3 to 4 pounds of milk per day. For Holsteins or Ayrshires, feed 1 pound of grain for each 4 to 6 pounds of milk per day. The amounts will depend on the condition of the cow, stage of lactation, and the amount and quality of roughage fed. Another method is to feed 1 pound of grain per 5 pounds of butterfat produced per month.

Feed Grain on Production Basis

By feeding grain according to production instead of equal feeding to all cows, a saving of 10 to 20 percent can be made. At the same time you can increase the over-all production from 10 to 20 percent.

Good management calls for regular feeding. Changes must be made gradually. A radical change in the amount or kind of feed, if made suddenly, will cause a drop in production and efficiency.

A well balanced feeding program provides the necessary nutrients for high production per cow. As an example, a 1200-pound cow producing 40 pounds of 3.5 percent milk will need a ration of 15 pounds of good-quality alfalfa hay, 36 pounds of hegari or corn silage and 8 pounds of 16 percent protein grain mixture per day.

For additional information on feeding dairy cattle, see your County Agricultural Agent.