

## **Basics of Feeding Goats**

hen it comes to feeding goats there seems to be a great number of opinions. There are many different ways to feed goats depending on what you are raising them for, and under what conditions you are raising them. Some goats are bred for fibre, some for milk and some for meat, but most eventually go for meat no matter what they were originally bred for.

This fact sheet is geared for meat goat production, so primarily deals with feeding goats for meat. The problem with this blanket statement is that milk and meat production overlap, since the primary feed for pre-weaned kids is in fact milk. Feeding for milk production is a major consideration even for meat producers. It is for this reason that nutritional needs for dairy goats, written by dairy goat producers, should be an important source of information for all those interested in meat production.

Goats have four stomachs. Listed in the order in which food passes through them are the rumen, the reticulum, the omasum and the abomasum. The two most important are the abomasum (milk stomach) and the rumen. It is the abomasum that carries most of the load of pro-

viding nutrients for the kid in the first month. From this point on, it is the rumen that will carry most of the load of providing nutrients for the goat. The rumen is basically a fermentation vat, where all that a goat eats is fermented by bacteria making it more available for the goat to actually digest and absorb.

## **Feeding Goats**

For feeding goats, you cannot just say that the average goat needs "X" pounds of hay and "Y" pounds of grain per day, because so much depends on the size and status of the goat (age, pregnant, milking, breeding, dry, feeding for show stock, males, females, etc). Other factors are weather, pastures, feed quality, management systems, etc.

That said, here is a rough estimate of what a mature dry doe needs for good nutrition:

- 2-2.5 kg (4.4-5 lb) of dry matter per day, fed in a combination of hay and grain
- · free choice salt and trace minerals
- · fresh clean water

It has been found that for good health, a goat requires a minimum of 6.5% protein in its diet. Anything less than this will cause problems for a growing goat. Goats need to consume approximately 4% of their body weight in dry matter daily.

During pregnancy and lactation, does should receive a slowly increasing ration of grain, starting at 0.5 kg per day and increasing to 1 kg per day. Heavy milk producers will require even more for maximum milk production (up to 2 kg per day).

Feeding mature bucks varies depending on the time of year. In the spring and summer when the bucks are not being used for breeding, they can be turned out on pas-

Does
carrying
multiple
fetuses
require a
much
higher
level of
energy
than does
carrying
singles.



ture with a feeder containing grass hay. As with all goats, free choice minerals, salt and fresh water must be available. In the fall during breeding season, the bucks may be started on a grain ration and some alfalfa may be added to their hay. When a buck is being used on a regular basis for breeding, he can need up to 1.5 kg of grain daily.

These are very general guidelines, as there are so many factors that must be considered when feeding goats. There are many excellent books and publications available that can give more details on feeding goats. In addition, consult with your veterinarian, feed specialist, and small ruminant extension officer.

## **Feeding Kids**

In order to provide kids with nutritious milk, the doe must be provided with the nutrients needed to produce high quality milk. This includes salt, minerals, grain, hay (roughage), and clean water (warm, if possible, in the winter).

As the kids move through their first month, milk will be the food of choice for them. It is important, however, to provide for growth of the rumen. The rumen will develop rapidly if the kids are encouraged to eat hay and a grain ration (preferably with a coccidiostat) within a few days after birth. Kids should be offered free-choice hay from the start. Most young kids will start to nibble on hay and grain within the first week of life. A good source of feed supplement is soy meal (soy meal is very high in protein, 35-40%, so be sure to add it gradually to the kids' ration).

In dairy goat situations, most kids are raised separate from the mothers, making free-choice feeding relatively easy. In meat goat herds, kids are usually raised nursing full-time on their dams. If kids are raised on their mothers, they will imitate their dams, eating hay and grain at feeding times. The problem

here is keeping free-choice food available at all times to just the kids! The answer is a creep feeder. This is basically an area that only kids can access, containing hay and grain.

## **Goats and Rangeland**

As the chevon industry expands and more of our production comes from extensive production systems (i.e., range-fed animals), more producers are finding how well goats thrive on things such as alfalfa aftermath, grain stubble, aspen and poplar regrowth, and weeds such as leafy spurge. Goats are by nature browsers and tend to forego grass when woody brush is available.

In an extensive feeding program, some form of shelter from the wind and rain is still a requirement as are water and minerals. Due to the nature of woody growth, the requirement for mineral supplements may be less than in an intensive management system.

Extensive feeding programs have had little study in Canada. As more producers raise goats in this manner, a greater understanding of how the two systems compare (extensive and intensive) will be arrived at. Most of the major goat-producing areas of the world (Texas, South Africa, etc) depend largely on extensive production systems.

Though goats can eat more types of vegetation than most livestock without harm, and they learn quickly what not to eat, they can make mistakes. Because goats tend to take a bite here and there and then move on, they usually don't eat enough of anything poisonous to cause ill effect.

Producers should avoid sudden changes in the diets of their goats. Goats should never be let out onto new pasture on an empty stomach. With a full stomach, their consumption of "new" vegetation will be lower, giving their systems more time to adjust to the change in diet.

