

Feeding Goats

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Adequate nutrition is the key to a successful goat operation. The nutrients needed by goats are energy, protein, minerals, vitamins and water. These requirements vary with the animal's age, weight, growth and lactation. It is important to know the weight of your animal(s) in order to determine how much, they should be fed. It is also important as the daily dry matter intake should range from 1.5 – 2 percent of the animal's body weight (dry matter intake is the weight of the feed eaten minus water in the feed). Dominant animals may control the feeders if there is not enough feeding space for all the animals, therefore it is necessary to provide adequate feeding space. For the meat goat business to be economically viable, forage must provide most of the nutrients for goats. However, if grain must be used in feed, make sure that the quality is good. Grains not dried properly or stored under damp or wet conditions in high temperatures can lead to mold growth. Goats may eat less if the grains or oil seeds are moldy, so it is essential to buy good quality grains. When feeding grains, start with ¼ pound per animal per day. This amount can be increased gradually. Be careful not to feed more than 1.5 pound at one feeding as it may lead to digestive upset. Hay and grain offered to goats should be consumed in about 20 minutes. If the animals are taking longer than 20 minutes to consume the feed provided, then they are probably being overfed.

Protein constitutes the building blocks for cells. If the level of protein in the goat's diet is inadequate, then fetal development can be affected. Furthermore, it could lead reduced growth and milk production. Grains and oilseed are additional sources of protein and energy and may be required during breeding and lactation period especially when the forage quality is poor. Legumes such as cowpea, white clover and red clover contain about 25% crude protein. Other sources of protein are soybean meal, cotton seed meal and peanut meal. Mineral supplementation of the goat's diet is important in Florida because forage and shrubs do not have enough minerals to meet the nutrient requirements of goats. Minerals can be classified as macro-

minerals and micro- minerals. Macro-minerals include calcium, phosphorus, sodium, chlorine, magnesium, potassium and sulfur. Micro-minerals include iron, zinc, copper, manganese, iodine, selenium, and cobalt. A commercial goat mineral supplement is recommended for any goat operation, and it is important that the calcium to phosphorus ratio is 2:1 in the diet. The maintenance of this ratio in the diet helps to prevent urinary calculi. Furthermore, it is recommended that only one mineral supplement be offered to your herd. Feeding two or more sources of minerals at the farm can lead to over-supply of minerals which may result in mineral toxicity. Sheep have a lower requirement for copper compared to goats. It is not advisable to feed a sheep mineral supplement to goats and vice-versa. Furthermore, horses have a lower requirement for iodine than goats, so do not feed horse minerals to goats.

Ruminants produce almost all the vitamins they need with adequate sunlight with the exception of Vitamin A. It is likely to be deficient during times the pasture is poor and mainly when hay is fed. Vitamin A and D are normally added to vitamin and mineral premixes for goats. An adequate supply of water which is fresh and clean is essential for goats.

The lack of water can reduce feed intake. Daily consumption of water ranges from one quart to one and half gallon per head per day. Periodically scrub and sanitize watering bowls in order to keep them free from contamination, microbes, parasites and algae.

Since feeds and forages constitute about 60 to 70 percent of the cost of production for meat goats, it is essential to keep an eye on costs to stay within a reasonable budget. The question that always arises is how much grain and hay to feed? In the July edition of this newsletter, there will be an article on balancing simple rations for meat goats using Pearson's Square.