

Basic Nutrition Balance

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Contrary to popular belief, there is no such thing as a “magic” ration that will make your goat a champion. To implement a good feeding program, study the goat and use all available information to make judgments on when feed changes should be made. Since most goats do not deposit external fat as rapidly as other species of livestock, a self-feeding program can be effective. However, some goats will become too fat during the feeding period and should be hand fed twice daily to control the amount of feed consumed.

All livestock require five basic nutrients: water, protein, fats and carbohydrates (or energy), minerals and vitamins.

Water

Clean, fresh water is a daily necessity because water composes more than 70 percent of lean tissue and all body fluids must be replenished regularly. Never deprive your goat of water because water regulates the amount of feed a goat will consume. However, reduced water intake at certain periods during the program can reduce feed intake and reduce the size of the rumen for improved appearance.

Protein

The primary constituent of the animal body is protein. Dietary protein serves to maintain or replace protein in body tissues, provides for carriers of other nutrients and is a major component of various products such as meat, milk and fiber. Protein requirements for goats vary according to their size, age and maturity. Young, fast-growing goats need higher protein diets to allow them to grow and develop their muscle potential. Rations that contain 16 to 18 percent protein are useful during many phases of the feeding program. Remember that goats have a daily requirement for protein. If more protein is fed than is required, the excess is used for energy. Using protein as an energy source is very expensive. When total feed intake is greatly reduced, protein supplementation may be necessary in order to provide the adequate daily requirements for your goat.

Carbohydrates and fats

The most common limiting nutrients in goat rations are energy-producing carbohydrates and fats. Inadequate energy intake will result in slow growth and weight loss. An adequate supply of energy is necessary for efficient nutrient utilization. Grains and protein supplements are high in energy. However, in goat rations, too much energy intake can be just as detrimental as not enough.

Minerals

The minerals of major concern in goat rations are salt (sodium and chlorine), calcium and phosphorus. Salt can be fed free-choice. However, many rations contain 1/2 to 1 percent salt.

Calcium and phosphorus are necessary for proper growth and development, and should be fed at a ratio of two parts of calcium to one part phosphorus. Rations that contain high levels of phosphorus in relation to calcium may cause urinary calculi. The addition of ammonium chloride at the rate of 10 to 15 pounds per ton of feed will help prevent urinary calculi. Roughages are generally high in calcium and low in phosphorus. Grains are generally low in calcium and intermediate in phosphorus. Most protein supplements are high in phosphorus and intermediate in calcium. A mineral supplement with a 25 to 30 percent protein content can be of benefit in a feeding program when used to top dress the ration. However, this will not work with a pelleted ration. Supplements must be used in the proper amounts because excesses will deplete the muscle mass of the goat.

Vitamins

Vitamins are essential for proper body function and are required by goats in very small amounts. Only vitamin A is ever likely to be deficient. If goats are fed alfalfa hay or dehydrated alfalfa pellets in the ration, then vitamin A deficiency should not be a problem. It is a good practice to occasionally inoculate goats with a B complex vitamin. This promotes their health and helps them eat well.