

Winter Feeding of Sheep and Goats: General Rules of Thumb for Gestating and Lactating Females

By: Chelsey Ahrens, Ph.D., Specialty Livestock/Youth Education Specialist, Arkansas Extension

Knowing the nutritional requirements of females during the various stages of production allows producers to ensure females are performing at optimal levels. Since females are typically in late gestation and/or lactating during the winter months, when their nutritional needs are the highest, it is even more important to ensure the females are obtaining the proper roughages and/or grains in their diets. Below are some general rules of thumb to consider for your females during the various stages of production.

Some things to keep in mind are sheep and goats should consume 2-4% of their body weight on a dry matter (DM) basis to meet their nutritional requirements. Several things should be taken into consideration when figuring the nutritional requirements of females: age, stage of production, body condition score (BCS), and number of offspring. In order to fully understand how much roughage and grain should feed, it is important to know the nutritional composition of the roughage in order to know how much grain to feed.

Early to Mid-Gestation (First 15 weeks)

The main goal during this phase of production is to maintain the body condition of mature females and increase the body condition of young females as they are still growing. Thus, it is best to separately feed the mature and young females.

- Free access to pasture; 2.5-4 lbs of hay/day
- Unless forage is of poor quality or females are thin, it is not necessary to supplement feed.
- Free choice minerals
- Fresh, clean water

Late Gestation (Last 6 weeks)

This is a critical time for females as 70% of the fetal growth occurs during this phase of production. Proper nutrition is also important during this time to help prevent pregnancy toxemia (ketosis) and milk fever (low blood calcium). Other factors that are affected by nutrition include offspring birth weights, offspring mortality rates, lower milk yields, and dystocia (birthing difficulties). Females should have a BCS of 3-3.5 on a 5 point scale. Once again, it is best to separate the mature and young females as they are competing for feeder space and the young females are still growing.

In general, feed 4-5 lbs of hay/female/day plus...

- 0.5-1 lb of grain/female/day
- Free choice minerals
- Fresh, clean water



Photo: Alex Dawson

Early Lactation (First 6-8 weeks)

The highest nutritional requirements occur during this stage of production for females, especially if they are nursing multiple offspring. If possible, separate females according to the number of offspring they have (singles vs. twins vs. triplets) and feed them accordingly. Again, ideally separate the mature and young females.

In general, feed 4-6 lbs of hay/female/day plus...

- 1 lb of grain/offspring being nursed
- Free choice minerals
- Fresh, clean water

Lactating Dairy Does

Feed free choice hay plus...

- 1 lb of grain for every 3 lbs of milk produced in mid-lactation
- 1 lb of grain for every 5 lbs of milk produced in late-lactation
- Free choice minerals
- Fresh, clean water

During the winter months, producers rely heavily on feeding hay as a roughage source in order to meet nutritional requirements of sheep or goats. The first question a producer must ask themselves is, "What is the nutritional composition of the hay I'm feeding?" This is important to understand in order to provide the proper supplementation, if needed, to your sheep or goats.



Photo: GrassFood.me

Contact your **County Extension Agent** to find out more about hay testing and understanding your hay analysis.

When feeding vitamins and minerals, a loose, free choice premix is preferred to blocks. The ratio of calcium to phosphorus should be 2:1 and vitamins A, D, and E should be available. If soil is selenium deficient, seek out a premix fortified with selenium to prevent white muscle disease in offspring. Also, during late gestation ensure females are obtaining the proper amounts of calcium. Remember when purchasing a premix if you are a sheep producer, to purchase one that

is formulated for sheep in order to prevent copper toxicity.

Having a relationship with a veterinarian is also important during this time of production for females. They too can help ensure your flock or herd is achieving the optimal nutrition during the various stages of production, as well as, aid in helping to prevent abortions and other diseases by providing recommendations for coccidiostats and antibiotics that could be mixed with supplemental feed.

Resources

Balancing Rations for Sheep and Goats (FSA 9613). University of Arkansas at Pine Bluff Cooperative Extension Program.

Body Condition Scoring of Sheep (FSA9610). University of Arkansas at Pine Bluff Cooperative Extension Program.

Nutrition of Meat Goats (MP427). University of Arkansas Cooperative Extension Service.

National Research Council (2007). *Nutrient Requirements of Small Ruminants: Sheep, goats, cervids, and new world camelids*. Washington, D.C.: The National Academies Press.

Ruminant nutrition for graziers. ATTRA. National Center for Appropriate Technology

University of Maryland Extension Small Ruminant Page



Dr. Chelsey Ahrens is an assistant professor in the Animal Science Department with the University of Arkansas Division of Agriculture Cooperative Extension Service. She serves as the specialty livestock and youth education specialist and can be reached by phone at 501-671-2067 or email at cahrens@uaex.edu.

