

Small Ruminant Update



Quarterly Newsletter

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Deworming Pet Goats

Alicia Halbritter

Deworming is an important step in maintaining the health of production animals but also should be done for our livestock pets. Goats utilized as companions or simply as fun pets, has gained quite a bit of popularity in the last few years, which has opened a new market for our traditional producers to sell kids. However, there is little information on raising pet goats available. Pet goats can typically be treated similar to production animals, however there is less concern with meat and milk withdrawal times since the animal will not be utilized for food production.

The first step to deworming is determining if your animal needs it. Over-use of anthelmintics (medicinal dewormers) can be negative, as it promotes drug resistance and potential long-term problems for our animals.

There are two reliable ways we can determine if our pet goat is facing a heavy worm load: Fecal Egg Counts or FAMACHA scoring.

Fecal egg counts are the act of collecting fresh feces and examining it under a microscope in a liquid solution, this allows us to count parasite eggs and determine how many adults may be infecting your goat. Fecal egg counts can be done at home with the right equipment, or it may also be completed by your veterinarian or sometimes even your local extension agent.

FAMACHA scoring is the act of visually inspecting the membranes around the eye to determine how anemic the animal is. Our most problematic parasite in small ruminants is a blood sucking parasite, therefore increased anemia (whitening of these membranes) indicates a higher population of problematic parasites and therefore the need to be dewormed.

Make sure whichever method you choose, you have been trained to accurately identify the parasite load and correct deworming method, before acting. When in doubt, always contact your veterinarian or local extension agent!

There are three types of deworming methods for small ruminants: drench, injection, and pour-on.

A **drench** is an oral solution that is put into the mouth of the goat, an **injection** consists of injected deworming product either subcutaneously (under the skin) or intramuscular (into the muscle), and a **pour-on** is a liquid solution poured onto the back of the animal. There are also different active ingredients (drugs) that will control different types of parasites; therefore, it is important to work with your veterinarian to determine the best deworming product for your animal at that time.

Once you are comfortable identifying whether an animal should be dewormed, selecting a dewormer, and accurately administering the product, deworming can be done by yourself at a low cost.

You can learn more about deworming goats by clicking on the link below:

https://largeanimal.vethospitals.ufl.edu/files/2014/02/UFLA_H_Goat_Parasite_Control_Fact_Sheet.pdf



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Making Goat Cheese:

Practical and Innovative Ways to Use Leftover Whey

Izabella Toledo

When using goat milk to make cheese, you will end up with both curd and whey. Curd is mostly composed of casein proteins and milk fat, while whey is mostly water (90%), whey proteins and lactose. Both curd and whey also have various amounts of vitamins and minerals.

Depending on what kind of cheese you are making and by using different methods, you will learn that cheese is not entirely curd, some whey is retained for moisture in the finished product. Thus, different types of cheeses have varying amounts of whey, which also influences the nutritional value of the cheese, including the amount of total protein and lactose (sugar). Cottage cheese, for example, has large amounts of whey, while hard cheeses have very small amounts of whey. However, independently of the type of cheese you make, or the technique used, you will have leftover whey.

Don't pour your whey down the drain!

There are many possibilities to use your leftover whey after cheesemaking!

The first step is to determine which kind of residual whey you have!

“**Acidic whey**” is obtained when an acid such as vinegar or lemon juice is added to aid in the curdling process. Acidic whey has a tangy taste.

“**Sweet whey**” results from cheese that is curdled with starter cultures or rennet. Sweet whey has a milder taste than the acidic type and contain healthy bacterias that may help with digestion.

Regardless of if you have acidic or sweet whey leftover, they are both full of vitamins, minerals, and proteins.



Here are some creative and practical ideas of how to use your leftover whey:

- **Baking recipes:** substitute whey in any baking recipe (pancakes, biscuits, breads, waffles) that calls for water. When using milk, replace half of the milk with whey.
- **Whole grains:** add whey to water used to soak whole grains or legumes. Soak for at least 12 hours prior to cooking to reduce seed's phytic acid, making them more digestible.
- **Soups:** when making soup, replace water with whey. If you are using chicken broth, replace half the broth with whey.
- **Cooking pasta, potatoes, oatmeal, or rice:** use whey instead of water.
- **Smoothies and Milkshakes:** add fresh or frozen whey to smoothies or milkshakes to increase probiotics, protein, and other nutrients.
- **Fermenting food:** sweet whey speed up the fermenting processing and reduce the amount of salted needed.
- **Making traditional ricotta cheese:** sweet whey can be heated back up to around 195 degrees and ricotta cheese will start to precipitate. Strain through cheesecloth when it separates.
- **Garden:** whey may be used in the garden to improve the quality of the soil of acid-loving plants or to spray directly on leaves to fight powdery mildew.
- **Feeding animals:** mix whey with water for animals to drink and/or feed your animals by mixing whey with their dry food to moistener the food and increase the protein in their diet.

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Late Gestational Nutrition in the Ewe and Doe

Brittany N. Diehl

Nutritional Management

- During late pregnancy, it is important to feed diets that are high in digestibility and nutrient density.
- High quality hay and an energy dense supplement (e.g., corn)
- Research suggests that the nutrition of the dam at all stages of pregnancy influences the neonate's viability and productivity.



Importance Of Body Condition Score

- An affordable management tool for sheep and goat producers to utilize.
- Estimates body fatness with a score system ranging from 1.0 (very thin) to 5.0 (obese).
- Maintenance of pregnant ewes/does at a body condition score (BCS) of 2.5 to 3.5 throughout pregnancy is preferred to avoid nutritional and metabolic compromise.
- Nutritional disease risk increases exponentially when females have a BCS of ≤ 2.0 or ≥ 4.0 and are carrying more than one fetus.

Most Common Nutritional Disease Risk

- Most cases occur 1 to 3 weeks prior to parturition.
- Pregnancy Toxemia
- Also called ketosis and/or twin lamb/kid disease.
- Ewes/does pregnant with multiple fetuses are at greater risk and occurs in late gestation.
- Occurs as a result of low blood sugar (glucose) due to excess energy needed by the fetuses. This causes excess breakdown of body fat.
- Glucose is important for proper brain function. A deficiency will result in nervous dysfunction and ultimately coma and death.

- Clinical signs typically include:
 - Anorexia
 - Lethargy and depression
 - Increased bouts of lying down
 - Blindness
 - Muscle twitching/tremors
 - Teeth grinding
 - Coma and death

- Hypocalcemia
- Also called parturient paresis and/or milk fever.
- Older ewes/does are at greater risk and occurs in late gestation.

- Clinical signs typically include:
 - Flaccid paralysis
 - Stiff and uncoordinated gait
 - Rigid sternal recumbency

It is important to maintain a relationship with your local veterinarian. If any of these diseases are suspected within your herd/flock, consult your veterinarian as soon as possible.



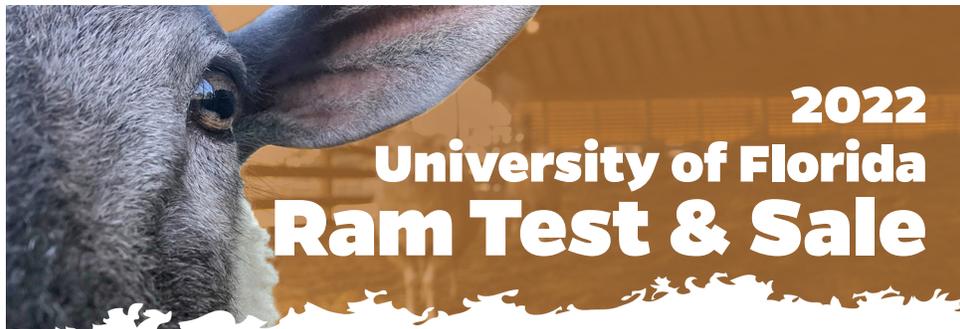
phosphorus, and trace minerals.

Prevention Is Key!

- 70-80% of the growth of the fetus occurs during the last six weeks of pregnancy. Total metabolic rate of the ewe/doe increases by at least 50% during late pregnancy.
- Incidence of disease can be minimized by proper management and nutrition throughout gestation.
- Ewes and does should be fed to gain 35 to 40 pounds during gestation.
- Calcium and phosphorus requirement are higher in older ewes/does.
- All ewes should have access to free-choice mineral supplement containing calcium,

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UPCOMING EVENT



We invite you to participate in the **2022 University of Florida Ram Test and Sale**. We are very excited to continue this unique program and to work with sheep producers to quantify the desirable qualities of their rams. We hope that this program will provide value to your operation.

This program is designed to standardize environmental conditions in order to evaluate individual ram performance, provide a source of high-quality performance tested rams to producers, offer educational opportunities for the improvement of the industry, and facilitate networking among producers.

Important dates:

- May 1 Pre-registration deadline
- May 14 Rams arrive at UF Sheep Unit
- May 26 84-day gain test begins
- Aug 18 84-day gain test ends
- Sept 17 UF Ram Test Sale & Educational Program

Eligible rams must be born between 12/1/21 - 2/15/22 and weaned by 4/15/22.

We encourage you to consider consigning your rams to the **2022 UF Ram Test and Sale**. Please contact us for further information or to consign animals to this program. Rams must be pre-registered by May 1, 2022 in order to be enrolled in the program.

For full program details and registration visit our website.

<https://animal.ifas.ufl.edu/smallruminant/ramtest/>

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For the latest on small ruminants and to have access to previous newsletters, please visit the UF Small Ruminant Website: <https://animal.ifas.ufl.edu/smallruminant/>

