

Ketosis



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Ketosis



- ❧ Pregnancy toxemia, also known as ketosis, is a metabolic disease that occurs in late pregnancy.
- ❧ It is most prevalent in ewes carrying two or more lambs or in very fat ewes.
- ❧ Ketosis is caused by a disturbance in carbohydrate usage in the animal. As a ewe's pregnancy progresses, the energy demands of her body increase.
- ❧ At the same time, the capacity of her rumen shrinks since her growing lambs in the uterus take up more and more space inside leaving less space for the rumen.
- ❧ This combination can result in the ewe not receiving enough carbohydrates (energy) through her diet.

Ketosis



- ❧ As a result she will have to resort to breaking down her own body tissues (usually fat) in order to provide energy for her growing lambs, thus releasing ketones (a toxic byproduct of fat breakdown) into her bloodstream.
- ❧ When this occurs too rapidly, the ewe's body cannot detoxify the ketones fast enough and ketosis or pregnancy toxemia results.
- ❧ Ketosis can also occur when a ewe is too fat since fat also takes up room inside of the sheep resulting less space for the rumen to hold feed.

Symptoms



- ❧ Does and ewes suffering from pregnancy toxemia (ketosis) appear lethargic, sluggish and often fail to eat.
- ❧ The first symptom noticed in does and ewes is an unwillingness to eat. They become depressed, weak and have poor muscle control and balance later in pregnancy.
- ❧ Many times, when they lie down, they are unable to rise. Early in the disease, does or ewes will show a positive test for ketone bodies in the urine. The breath of does and ewes will have a sweet or foul smell.
- ❧ Ketone bodies are by-products of fat breakdown found in the blood and urine. Test kits are often available for ketone bodies and they are easy to use.



Transmission



- ❧ Pregnancy toxemia is not a transmittable disease from one doe or ewe to another, however, flocks or herds experiencing the disease may appear to be infectious because the plane of nutrition and management throughout pregnancy is similar.
- ❧ This shortage of energy in the diet may cause these symptoms in several does or ewes, especially those carrying twins or triplets.

Treatment



- ⌘ Treatment of ketosis is relatively simple – administer a readily usable form of energy (usually glucose) and get the ewe eating on her own again (usually with the help of anabolic steroids).
- ⌘ Once she is eating, add an energy supplement like a **Sweetlix 16% Roughage Converter poured molasses tub** or other suitable supplement to her ration to increase energy intake.
- ⌘ Cesarean section or induced abortion will usually lead to the ewe's recovery if the ketosis is caught early enough.

Treatment



- ❧ If the lambs are near term they may also be saved.
- ❧ Unfortunately, response to treatment is usually not very good; however, it is worth the effort of trying especially if the affected ewe is valuable.
- ❧ Once pregnancy toxemia is in advanced stages (ewe lying down unable to rise), no treatment is highly effective.