



VITAMIN E

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Suckling lambs are generally more susceptible to Vitamin E deficiency than older lambs that have been weaned to dry feed. Vitamin E functions in the body as an antioxidant, helping to prevent peroxide formation in tissues resulting from the oxidation of unsaturated fats.

Lambs consuming milk from their mother receive over 50% of their dietary energy in the form of fat in the milk. This is a very high level of fat and thus there is need for high levels of Vitamin E to prevent peroxide formation in tissues. As the lambs' digestive tract develops and matures as a result of eating dry feed, two things occur that reduce the demand for Vitamin E.

1. First, the creep ration will contain far less fat, usually only 2-5% of the total ration.
2. Secondly, the microorganisms in the rumen and reticulum convert unsaturated fats to saturated fats prior to being absorbed.

As lambs increase their dry feed consumption and begin to gain weight rapidly, the fastest growing lambs are the most susceptible to showing signs of Vitamin E deficiency. Vitamin E deficiency symptoms are stiff muscled lambs or possible heart failure if excited. Poor gaining lambs seldom show symptoms of Vitamin E deficiency.

Not all Vitamin E deficiencies are a straightforward lack of Vitamin E. Selenium is an essential element required in the protein that transports Vitamin E in the lambs' blood stream. Therefore, any time selenium is deficient the lamb will show symptoms of Vitamin E deficiency. There are well known geographic locations in the United States where selenium is deficient in the soil and thus the crops raised there lack adequate selenium.

Prevention is best handled by supplementing the ewe the last six weeks prior to lambing and through the entire lactation period with both selenium and Vitamin E in the feed or salt. Selenium is approved as a feed additive up to .3 PPM. It can be added to the complete feed or salt. Vitamin E can be added as a

feed additive in either the feed or salt as well. It is common to include between 40,000- 120,000 I.U. per ton of feed. The fastest growing lambs require the upper range.

Lambs treated with an injectable Vitamin E reach peak blood levels in 1624 hours. Tissue levels are improved for up to 28 days following injection. I prefer the Vital E-300 made by ScheringPlough. Vital E is a natural form, not synthetic, and contains 300 I.U. per mi. Use of BO-SE is required in flocks where selenium is deficient.