



## Do Your Sheep Receive Optimal Nutrition?

Sheep that receive optimal nutrition are more likely to perform at higher levels than sheep that receive less than optimal nutrition.

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**Optimal nutrition promotes lamb survival and can help lead to optimal performance and profitability.**

However, for most production oriented flocks optimizing nutrition can also translate into optimum efficiency and profitability. Optimum nutrition is one of the best practices recommended by the American Lamb Industry Roadmap Project as a means to improve production efficiency in sheep flocks.

A closer look at optimizing nutrition might start with body condition

scoring the flock. Ewes should have a body condition score of 3 or slightly less on a 5 point scale as they enter the breeding season. This allows flushing to have a higher impact on ovulation rates and can lead to more twins born during lambing season. Many Dorset producers have likely weaned lambs born during the winter and turned ewes out with rams in April or May to breed for fall born lambs.

These ewes likely are below the body condition score of 3 if they did a good job producing milk for their winter born lambs. Turning them out on spring grass is a great way to increase their nutritional plane and thus encourage higher ovulation rates. Fall breeding programs can also take advantage of lush pasture growth or  $\frac{1}{2}$

**lb. of grain per head per day to increase energy in the ration and promote higher ovulation rates.**

**Throughout gestation pasture, or other forages, should provide enough protein and energy to support nutritional requirements for maintenance of ewe body condition. It really isn't until the last third of gestation that nutritional requirements begin to increase. A quick look at the 1985 National Research Council nutritional requirements for sheep shows that the energy requirement (TDN or total digestible nutrients) for a ewe that weighs 80 kg (176 lb.) increases from .72 kg (1.58 lb.) during maintenance to 1.3 kg (2.86 lb.) during the last four weeks of gestation. This will jump again to 1.95 kg (4.29 lb.) during the first six to eight weeks nursing twins. Bear in mind that the crude protein requirements also increase from 122 g (.27 lb.) to 223 g (.49 lb.) to 435 g (.96 lb.) during that same timeframe.**

**Sheep that don't receive adequate nutrition, especially during the last third of gestation, are more likely to produce smaller and less vigorous lambs. Lamb size and vigor becomes very important when lambing during cold temperatures. It can be critical for lambs to get up and nurse as quickly as possible in order to promote lamb survival. From a shepherd standpoint, healthy and vigorous lambs typically result in a lot less labor during lambing season. Every shepherd prefers to see lambs up and nursing when he or she gets to the barn!**



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**Nutrition can also affect colostrum quality and quantity. There are a large number of interactions that occur at birth and contribute to lamb survival including weather conditions, energy reserves, competition with siblings and mothering ability. Lamb survival rates increase greatly if the lambs receive adequate colostrum intake within 48 hours after birth. During the first 48 hours lambs are able to absorb important antibodies that protect their health status until their immune system begins to function on a higher level. Adequate colostrum intake is also important for thermoregulation, or the ability of the lamb to keep itself warm. Good nutrition for the ewe prior to lambing can increase both the quality and quantity of colostrum and can also help to promote milk production.**

**One aspect of nutrition that is essential for optimum performance is water. Sheep should have access to an adequate supply of clean and fresh water at all times.**

Water consumption can affect feed consumption and so plays a major part in nutrition. According to the Sheep Production Handbook, "water consumption is about twice the weight of the air dry feed intake." So, for every four pounds of dry feed that a sheep consumes, that sheep would also need to drink about a gallon of water. Keep in mind that water requirements increase during hot weather.

Mineral programs play another essential role in optimum nutrition. While minerals appear to be an expensive part of nutrition, those minerals pay for themselves very quickly. Not only does a good mineral program promote healthy sheep, but it can also play a factor in reproduction and growth rates. Always feed a good quality mineral mix formulated for sheep.

Follow good nutrition practices to keep sheep healthy and highly productive. This is just one step that can improve production and profitability in a sheep flock. Check out "[Best Practices to Increase Your Lamb Crop](#)" produced by the [United States Lamb Resource Center](#) for other practices that can improve production.