

## Are You Feeding Your Ewes For Lamb Production?

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Many sheep producers have already started lambing while others still anxiously await the first lamb to arrive. Regardless of when the lambs arrive or how you manage your sheep, supplying ewes with adequate nutrition throughout the year can greatly impact lamb survival and growth rates. Good nutrition not only helps to ensure vigorous lambs at birth, but also promotes high quality colostrum and leads to adequate amounts of colostrum and milk.

We know from research studies that good nutrition plays an important role for ewes to produce healthy and vigorous lambs. According to the United States Lamb Resource Center's fact sheet "Increasing Your Lamb Crop Series: Reduce Lamb Loss" as much as 80% of lamb mortalities occur in the first two weeks after birth. This can often be associated with starvation and hypothermia. Adequate nutrition helps to reduce issues from starvation and hypothermia by promoting appropriate lamb birth weights and adequate fat reserves at birth. Both aspects contribute to healthy and vigorous lambs that quickly stand and nurse on their own. Lambs with good vigor generally are born with fat reserves, known as brown fat, that helps to provide them with energy during the first several hours after birth. This gives lambs the energy to quickly get up and nurse as well as to help keep them warm until they nurse. Lambs with poor vigor often lack these fat reserves and are more likely to suffer from hypothermia, which can lead to starvation.

To prevent hypothermia and starvation, lambs should receive adequate amounts of colostrum as soon as possible after birth. Colostrum, the nutrient rich first milk, contains antibodies that help a lamb's immune system to function properly as well as protect lambs from diseases. It is extremely important that lambs consume colostrum within 12 hours after birth. After this timeframe, the ability of the lamb's digestive system to absorb these antibodies decreases greatly. Shepherds can assess if lambs have received adequate amounts of colostrum using a few different techniques. A lamb's belly should feel like a full balloon when the lamb is picked up with your hand under its chest. Lambs that cry or constantly nurse exhibit signs they are not receiving enough to eat. A good rule of thumb is that a lamb should receive about 10% of their weight in colostrum within 24 hours after birth. Or in other words, a 10 lb. lamb should consume at least one pound (16 ounces) of colostrum within 24 hours after birth. Even though you can't measure colostrum intake in nursing lambs, you can assess other characteristics. Well fed lambs will appear alert, stretch when they first stand up and should be quiet.

In order for a ewe to produce both adequate amounts and quality of colostrum for her lambs she needs to consume adequate nutrients in her diet. Once a ewe reaches late gestation (pregnancy) her nutritional needs greatly increase. According to the National Research Council's "Nutrient Requirements for Small Ruminants", a 200 lb. ewe carrying a single lamb requires 1.65 lbs. of TDN (energy) during maintenance. This increases to 2.51 lbs. during late gestation

and then to 2.69 lbs. during lactation. If that ewe is carrying twins, her late gestation TDN requirement jumps to 3.13 lbs. and then 3.39 lbs. for lactation. Protein requirements for that 200 lb. ewe also increase from 0.24 lb. at maintenance to 0.41 lb. in late gestation with a single lamb and 0.53 lb. in late gestation if carrying twins. The requirement in early lactation increases to 0.59 lb. protein for a ewe nursing a single lamb and 0.78 lb. protein for a ewe nursing twins. While the actual numbers may not have much meaning unless you are balancing a ration, the importance is that nutrient density in a diet must increase as well as the amount of feed consumed.

One of the keys with providing adequate nutrition is to realize that ewes who don't receive adequate nutrients often produce lower quality and quantity colostrum. Remember that statement above about most lamb mortalities occurring shortly after birth? Well, the moral of that story is that underfed ewes often don't produce enough colostrum to feed their lambs while ewes that receive adequate nutrition often produce as much or more than their lambs need. In addition, ewes that consume adequate nutrients produce colostrum with higher immunoglobulin (antibody) concentrations.

Another important consideration for feeding ewes throughout gestation is that they should achieve a body condition score of 3 to slightly better than 3. This gives them adequate fat reserves to draw upon during lactation. Most ewes lose weight while nursing lambs, so a little extra body condition can help support those high producing ewes who are nursing twins or triplets. However, high quality protein as well as adequate levels of protein and energy must be provided in the ration to additionally support high milk production.

Overall, nutrition is an extremely important component for flock production. Nutrition not only promotes twinning, but also enables ewes to produce healthy and vigorous lambs at birth. Ewes receiving good nutrition should be able to produce a high quality and quantity of colostrum should lead to high milk production. Paying close attention to nutritional needs of the sheep flock should result in high lamb survivability, fast growth rates and high-quality lambs to sell at weaning.

For more information on balancing rations to meet the nutritional needs of your sheep flock, contact your local livestock extension educator.



**A good nutrition program can lead to a high quantity of colostrum as well as milk production, this in turn helps improve lamb vigor and survivability.**