



SHEEP SHEET

by Dr. Lyle G. McNeal, NSP Founder &
Sheep & Wool Specialist;
2019 Copyright©
♻️ printed on recycled paper

Lamb starvation is the number one killer of lambs in the United States. It may be caused by any of the following conditions:

- Inadequate colostrum
- Dam rejection
- Mastitis
- Teats - too large or close to the ground
- Inadequate milk production
- Joint injury or illness
- Sore mouth
- Dystocia or difficult birthing

Starvation typically occurs during the first three (3) days of a lamb's life. A lamb will be found standing with its head down, ears drooping back, or it may become too weak to stand. The stomach would be empty upon palpation. Shivering, shaking and hypothermia may follow but this hypothermic lamb is typically over 12 hours of age.

However, I want to focus on the valuable importance of colostrum first and foremost is preparing a lamb for a healthy neonatal life and survival beyond six (6) months. I'm not saying that those other problems that can lead to a lamb's starvation are not important, as each and every one certainly can have an impact on each year's percent lamb crop weaned.

However, colostrum is more important for lambs than humans, because we are passively immunized in the womb, while farm animal mammals are not. Colostrum usually accumulates in the ewe's udder during the final few days of pregnancy. It is also produced during the first 24 hours after birth, but is diluted progressively as milk production increases.

It has been estimated that up to 20% of newborn lambs die before weaning. Most of these deaths occur in the first three days of life. Approximately 80% of these deaths happen because lambs do not suck enough colostrum and milk quickly after birth. The challenge is therefore to identify breeding-lines and management that promote lamb vigor to reduce losses and labor inputs at lambing time.

Colostrum; that “Critical First Meal”

Sheepdex L-13

MERITS AND VALUES OF COLOSTRUM:

The first milk a female mammal produces after her young are born is “colostrum.” Colostrum is the newborn's “Critical First Meal!” Three (3) important functions of colostrum for the newborn or neonate are:

1. Unique **high energy nutritional** value.
2. Unique **antibodies** from the dam to provide disease protection, via **passive immunity**, and
3. **Laxative properties** to expedite intestinal motility and passage of the **first feces (muconium)**.

Colostrum is the first feed for the newborn lamb and the paramount to its survival. It is a highly nutritious energy source which helps the lamb to maintain body temperature and survive; it also contains antibodies from its dam, which are vital to help protect the newborn lamb against disease(s) up to 6-8 weeks after its birth. The feeding of sufficient good quality colostrum immediately after birth will reduce losses from both hypothermia and common ovine diseases. The ewe provides protection as antibodies that are concentrated in colostrum as immunoglobulins (IgGs). These antibodies assist the new lamb to fend off intestinal, respiratory, and other diseases. High energy levels are contained within colostrum and assist the new lambs to keep warm while dense levels of immune factors along with Vitamin A and E can stimulate a very healthy start up of the lambs digestive and respiratory systems.

The protection against the environmental and animal to animal diseases depends on the dam's colostrum being fed immediately following birth. It's strongly recommended that lambs receive approximately 10 percent of their body weight in colostrum before 18 hours post-partum. Thus, a 10 pound lamb should be fed 1 pound (or 16 ounces) of colostrum within its first 24 hours of life. Minimally half this amount should be fed to the lamb within the first 4 to 8 hours post-partum. Colostrum and colostrum replacements/supplements should be fed at about 105 degrees F (40 degrees C).

It's been also found that when feeding the first colostrum, within "30 minutes is optimum while 18 hours is a must". Timing is crucial because the passive immunity antibodies that are rich in colostrum can only permeate the intestinal wall and enter into the circulating bloodstream during that time frame. The intestinal wall begins to cease allowing passive transfer of the antibodies (IgGs) hours following birth, so immediate feeding of colostrum is strongly recommended.

Careful feeding of the in-lamb ewe is critical to stimulate the production of quality colostrum and ensures that lambs get the best start in life.

Remember the "3Q rule": "Quickly, Quantity, Quality"

1. Quickly

- Feed colostrum as soon as possible after birth, preferably within the first six hours. This is when the gut wall is most permeable, allowing for the large antibody molecules to be absorbed directly into the bloodstream.
- Provide small frequent feeds during the first 24 hours.

2. Quantity

How much colostrum should you feed newborn lambs? It's recommended:

- 50ml/kg live weight per feed
- A minimum 210ml/kg live weight within the first 24 hours

For lambs reared outdoors, increase the colostrum allowance by 15% to 20%.

3. Quality

The quality of colostrum will determine the level of antibodies present in the colostrum.

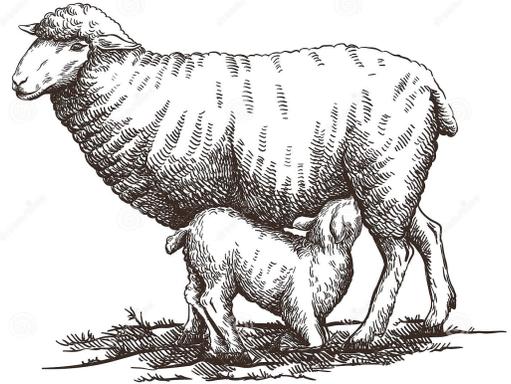
The quality is affected by:

- Ewe condition: body condition score 3 at breeding and vaccinate against infectious abortion and clostridial disease.
- Ewe parity: the number of previous lambings.
- Ewe health: healthy, well-nourished ewes are able to develop a healthy placenta which reaches its optimum size around day 90 of pregnancy when the placenta releases hormones which stimulate the lactating cells in the udder and colostrum starts developing three to five weeks before lambing.

While mothers colostrum is preferable, if ewe colostrum is unavailable, in short supply or of poor

quality; then colostrum must be fed quickly from another source. Options include fresh or frozen colostrum from another ewe, bovine colostrum or a high quality natural alternative.

But as shepherds and shepherdesses, we must always remember that the first suckling of the lamb's dam teat and her colostrum is the "Fuel of its Life!"



For more information write Dr. Lyle G. McNeal, Founder; The Navajo Sheep Project, Inc. PO Box 4454, Logan, UT 84323-4454. The Navajo Sheep Project is an IRS registered IRS 501 (c) 3; non-profit organization.