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# Feeding Newborn Lambs

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Starvation is the number one cause of lamb death in most sheep operations and occurs most frequently the first few days after birth. The first few hours after birth are the most critical. If the lamb nurses normally, it gains the essential nutrition and antibodies contained in the ewe's colostrum (first milk). If not, the lamb weakens rapidly and dies during the next few days. Feeding problems and starvation are most likely to occur when the lamb has been subjected to stresses such as a prolonged or difficult birth, chilling, or a mother with little or no milk.

## Recognizing healthy and unhealthy lambs

A normal, healthy lamb is bright-eyed and alert almost from birth. As it nurses, it wriggles its tail and sucks vigorously. When its napping is disturbed, a healthy lamb will immediately start looking for its mother with the clear intention of getting another meal.

Often, lambs are weak at birth. Weakness may be caused by a prolonged birth, exposure to extremely cold weather, abortion diseases in the flock, or a prolonged period of going without suckling. These lambs are often too weak to stand, or they stand with their heads lowered and ears drooping. They are gaunt because they have not nursed, and their extremities and the insides of their mouths often feel cool to the touch. If these lambs are to be saved, they must be fed immediately.

Lambs that are born healthy but fail to get enough milk appear unthrifty after several days. They stand by themselves, do not join in the play

of the other lambs, and look gaunt and hunched with lowered heads and drooping ears. Their wool coats appear dull and knobby. They may even be too weak to stand. They shiver, shake, or lack coordination in moving their heads and legs. As they weaken and become increasingly debilitated, they become susceptible to disease organisms. Thus, they may exhibit signs of pneumonia or scours.

## Early feeding

### The first hours after birth

Every lamb must get colostrum within 2 or 3 hours of birth. If it does not, its blood sugar level rapidly declines. Blood sugar levels may drop 50 percent within 15 to 30 minutes of birth, particularly when environmental temperatures are low. The resultant hypoglycemia could lead to shock and eventual death. Thus, the time from birth to nursing is more critical than many sheep producers realize. The sooner the lamb suckles, the better.

### Colostrum and colostrum substitutes

The type of milk the lamb gets in its first feeding is critical. The newborn lamb needs colostrum. Colostrum — the first milk normally provided by the mother ewe — is a laxative, highly concentrated, nutritious food that provides readily usable energy, protein, minerals, and vitamins. Most importantly, colostrum provides a concentrated source of immunoglobulins, the proteins that protect all animals against disease.

If the newborn lamb is deprived of the mother ewe's colostrum for any reason, colostrum from

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other sources should be substituted. The most practical approach is to collect and administer fresh colostrum from another recently lambed ewe in the flock. However, fresh or frozen colostrum from sheep, goats, and cows can also be used. For the first few feedings, the lamb needs to receive at least 2 ounces (60 cc) per feeding.

Variability in the concentration of immunoglobulins among batches of cow colostrum from different sources has been noted. Variability in colostrum quality may also exist among flocks of sheep and individual ewes.

Colostrum can be collected, frozen, stored, and thawed for later use. Freezing the proper amounts for single feedings in ice cube trays or plastic baggies makes thawing and feeding much simpler.

Dried colostrum and colostrum substitutes are beginning to come on the market. Many of them contain no immunoglobulins and therefore fail to protect against disease. A few show promise. Check with your veterinarian about these products.

Colostrx, a bovine whey protein supplement, can be helpful and practical to use if no other colostrum is available. It is a source of immunoglobulins and improves the survival and daily gain of calves and lambs.

## Feeding equipment and techniques

Time and patience are required to suckle a weak, unthrifty lamb, especially if it is too weak to stand. Colostrum can be placed directly into the stomach with a baby lamb probe or stomach tube. A lamb probe is a stainless steel ball probe attached to a 50 cc pistol-grip syringe or 2-ounce dose gun (Fig. 1). The probe is designed to stay out of the trachea (windpipe) and to keep fluid out of the lungs.

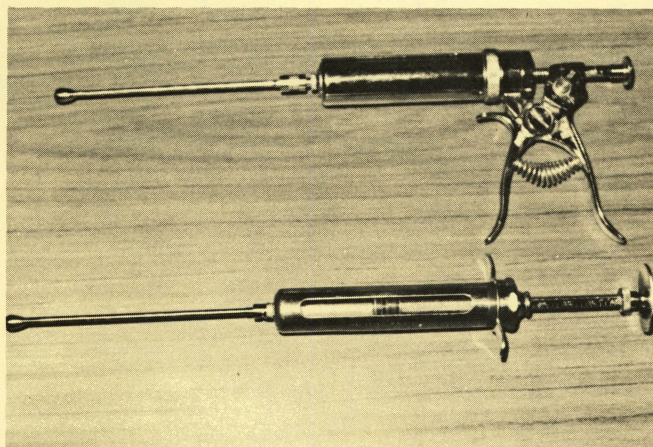


Fig. 1. Baby lamb probes.



Fig. 2. When using the baby lamb probe, place the lamb on its right side with head and neck extended. Place one hand around its neck so you can feel the instrument enter the esophagus.

To use the probe, place the lamb on its right side with its head and neck extended. As you insert the probe, place one hand around the lamb's neck so you can feel the instrument enter the esophagus. Never force it. Give the lamb opportunity to swallow, easing the entry (Fig. 2).

Also possible is to make a stomach tube by placing a 16- to 18-gauge catheter or commercially available feeding tube on the hub of a 60 cc disposable plastic syringe with the barrel removed. Place the end of the catheter in the lamb's mouth and push it gently down its throat with one hand while placing your other hand around the back of the lamb's neck and feeling with your fingers for the placement of the tube (just as with the probe). The size of the tube generally prevents it from entering the trachea. Pour the colostrum or milk into the open barrel of the syringe and hold it up, allowing the fluid to flow in by gravity.

## Feeding frequency and amount

Feed 2 ounces the first feeding and 4 to 6 ounces at 6-hour intervals if additional feedings are necessary. Frequently, a weak lamb will respond to one feeding of colostrum and be up nursing the ewe within a few hours. A lamb weak for reasons other than a difficult birth or chilling may require more feedings plus medication.

## Other feeding problems

### Inadequate nutrition

Occasionally, lambs that are 2 to 4 weeks old, particularly twins, require more nutrition than the mother is giving. One or both may exhibit typical starvation symptoms. They have occasionally been

seen eating straw, dirt, wool, twine, or other objects. This foreign material is not digested and may block the intestinal tract, causing bloat and eventual death. Lamb milk replacer containing mineral oil given through a stomach tube or probe will provide the needed nutrients and may also help to release the intestinal blockage. Milk replacers are formulated to duplicate the nutrient content of natural ewe milk and are being used successfully in sheep operations.

### **Lack of milk**

When a lamb is gaunt, hunched, or doing poorly, its condition usually is related to lack of milk. It may have to be taken from its mother and fed on a bottle.

However, a young lamb may suffer malnutrition simply because older lambs are stealing its mother's milk. If so, you may need to return the younger lamb and its mother to a jug or smaller pen for a few days to give the lamb opportunity to gain strength. Supplemental feeding with lamb milk replacer may also be necessary. Older lambs are difficult to get on a bottle and may have to be fed by stomach tube several times before they take to the bottle.

### **Low milk production**

The amount of milk ewes produce varies with ewe genetics, level of nutrition, and udder disease. Peak milk yields may occur during the first week in poorly fed ewes, but in ewes fed adequate diets they occur more normally at 4 weeks after lambing. Often an improved ration will increase milk yields over the total lactation. In one study ewes fed adequate rations over a 12-week lactation period produced an estimated 10 to 15 percent more milk than ewes fed less well.

### **Sick lambs**

Lambs may be sick from causes other than lack of food. Sick lambs frequently stop nursing and are often overlooked until they become dehydrated. Commercially prepared electrolyte supplements such as Biolyte, Calf Quencher, Life Guard, and others with or without medication may be administered with a lamb probe or stomach tube,

1 cup at a time every 3 to 4 hours. During the treatment period, supplement a stressed lamb's diet with a commercial lamb milk replacer, 1 to 2 cups twice a day depending on the lamb's size and appetite.

Depending upon the length of the illness, the lamb may not return to suckling the ewe. If the lamb refuses to suckle the ewe, start the lamb on an orphan artificial rearing program.

## **Artificial rearing**

Considerably more lambs are produced by highly prolific ewes than are weaned. Several studies conducted under different management practices show some benefits to artificially raising orphan lambs instead of grafting them.

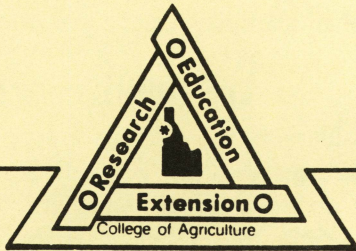
Give orphans supplemental feedings of colostrum for several feedings then place them on a commercial lamb milk replacer with at least 30 percent fat, 22 percent protein, and less than 0.5 percent crude fiber.

Orphan lambs die more often from irregular and improper feeding than from underfeeding. Therefore, it is vitally important to follow the manufacturer's recommendations for both mixing and feeding the milk replacer. Although whole cow's milk is adequate for feeding lambs, calf milk replacers are not.

Enterotoxemia is the most common disease of orphan lambs; therefore, at the time they are placed on the artificial rearing regime give them either 10 cc of enterotoxemia antiserum subcutaneously (under the skin) or *Clostridia perfringens* C and D toxoid. (The amount will vary according to brand. Follow the directions on the bottle.)

**Trade names** — To simplify information, trade names have been used. No endorsement of named product is intended nor is criticism implied of similar products not mentioned.

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