



Animal Nutrition *At Its Best*®

NUTRITIONAL MANAGEMENT OF LAMBS ON FEED

Good feeding and management are the keys to a successful lamb feeding operation regardless of how large or small. Whether feeding lambs from birth to market or purchased feeder lambs, the profit potential of any lamb feeding enterprise depends upon feeding and management.

The purpose of this program is to detail the important aspects of feeding and managing lambs.

When reading the following, relate the material to your operation.

Creep Feeding Your Lambs

Creep feeding of lambs is generally associated with early weaning; however, it may also be appropriate during periods of poor grazing. When creep feeding, the main objective is to spur lamb growth rate above what can be achieved on a milk diet. Creep feed should be very palatable to promote high intakes for the best performance. Some feedstuffs are more palatable than others.

Young lambs need energy. Creep rations containing 80% to 90% grain result in higher intakes of energy and are normally higher in digestibility than are rations containing large amounts of roughage.

The grain of choice should be rolled or ground coarsely, because fines are very unpalatable to lambs. As lambs mature, their preference for whole grains increases, so particle size of the ration should continue to become coarser.

Lambs will begin to nibble at grain and hay when they are about a week old; provide access to creep feeders within seven to ten days after birth. High quality, leafy alfalfa can be fed alongside the creep; however, lambs will generally consume more than enough hay eating from the ewes' bunk. Although lambs will eat only small amounts for the first three to four weeks, that early creep feeding will establish both rumen function and the habit of eating. Creep feeding is extremely important

for early weaning. It is important to mix creep feeds in small amounts in the beginning and to feed small amounts often to maintain maximum freshness and palatability.

Lamb Creeps:

1. Set up during first week.
2. Locate in same area as brood flock.
3. Provide fresh, clean water.
4. Keep well lighted.
5. Keep dry and well bedded.
6. Keep feeders clean.
7. Feed small amounts of fresh feed often.

Weaning Lambs

Traditionally, most lambs in the United States have been weaned between the ages of four to seven months. However, due to the need for increased efficiency in most sheep operations, lambs are being weaned at earlier ages. Lambs can be weaned as early as 30 days of age, provided they are consuming a well-prepared creep ration. Weaning at 60 to 90 days is most appropriate on most operations.

Whether you wean at 30, 60 or 90 days, a lamb is under some stress for approximately seven to ten days. The older a lamb is at weaning, the less stress there is if creep feed intake is high enough to meet the nutritional requirements of the lamb. Since consumption of creep feed at 30 to 60 days of age may only be .5 to 1.2 lbs daily, a creep ration that is high in energy and protein (20-22%) is required during this stress period. In about seven to ten days, the lamb's daily feed intake should double to 2.0-2.5 lbs. At these levels of intake, protein content of the ration can be reduced (see page 3).

The advantages of early weaning are:

1. Ewes' milk production drops very rapidly after eight weeks.
2. Early weaned lambs are more efficient in converting feed to body gain than older lambs.

(continued)

3. More ewes can be carried on the same number of acres.
4. Reduced internal parasite problems in lambs.
5. Reduced predator problems.
6. More efficient to feed the lamb than to feed the ewe to produce milk to feed the lamb.

Feeding Weaned Lambs

Lambs should be grouped based on size. Smaller, younger lambs have higher requirements for energy, protein, minerals and vitamins. Rations balanced for the average lamb in a group with a wide variation in size puts smaller lambs at a disadvantage nutritionally. In addition, smaller lambs cannot compete with larger lambs at the feed bunk. This is magnified if bunk space is limited. When lambs are not properly grouped by size for feeding, the weight spread between lambs tends to widen, resulting in less uniform lambs.

By keeping lambs more uniformly grouped, proper diets can be formulated to meet the lamb's requirements. Competition for feedstuffs can be reduced by providing adequate feeder space.

Receiving Program For Feeder Lambs

Feeding lambs, as in feeding all other species of livestock, has a degree of risk. Good lamb feeders minimize risk as much as possible through feeding and management practices designed to lower costs of gain. The receiving program a feeder uses can have a great impact on risk. The management and attention given during the first 21 days in the feedlot will not only have an effect on death loss, but on average daily gain, feed conversion and cost per pound of gain for the entire feeding period. Starting feeder lambs on palatable, high-quality diets that are balanced to meet the lambs' energy, protein, mineral and vitamin requirements help promote feed intake and reduce sickness. Combined with fresh, clean water, proper disease immunization and internal and external parasite control, a quality starter feeding program can get lambs off to a good start.

Energy Level For Lamb Feeding

High roughage diets are preferred when starting lambs on feed. Fewer digestive problems result from feeding high roughage rations so lambs stay on feed better. However, with high roughage rations, daily gain is generally reduced, increasing the number of days required to reach choice grade. Lower feed conversions, coupled with the increased interest and yardage costs associated with the

longer feeding period, results in increased cost of gain.

High-energy rations will generally have a lower cost per unit of energy, making these diets very attractive for lamb feeding. High-energy diets will generally improve feed conversions and average daily gain and reduce time in the feedlot, assuming protein, mineral and vitamin requirements of the lambs are met.

Good feed processing, management practices, bunk management and disease prevention are musts when using high-energy diets.

Market According To Body Condition

Death loss, shrink, transportation, marketing costs, type of ration fed, interest and yardage costs can all affect the profitability of feeding lambs. So can feeding to excessively heavy weights. Slaughter weights will, for the most part, depend upon genetics. Large-framed lambs have the potential to reach heavier weights more efficiently than smaller-framed lambs. This does not mean small-framed lambs are less profitable, but that all lambs should be marketed according to body condition rather than weight.

It takes more feed to put on fat than lean meat. As lambs mature, structural growth slows and fat accumulation increases, with a resulting decrease in rate of gain. Since feed intake does not decrease in proportion to weight gain, feed required per pound of body weight gain increases, which increases cost of production and can decrease profitability.

Adequate Fresh Water Is Essential

Water is very essential to successful lamb production. Producers must plan for an adequate supply of clean, fresh water when designing their lamb feeding operations. Lambs will not consume adequate amounts of stagnant, poor-quality water or water that has an objectionable odor. If lambs are forced to drink poor-quality water, performance may be greatly reduced.

Water temperature will have a large effect on water intake during periods of extreme heat or cold. Water located in the shade will be accepted more readily on extremely hot days. Water heaters should be used during winter months to provide lambs with ice-free water. Energy requirements are increased if cold water is consumed during cold weather. The temperature of the water in the animal must be raised to body temperature, and this requires energy.

Water consumption should be 2-4 times dry matter consumption. This ratio will increase with increasing protein and salt content of diet.

Daily Nutrient Requirements of Lambs
(100% Dry Matter Basis)
National Research Council, 1985

Body Weight Lbs	Weight Gain/ Day Lbs	Dry Matter		TDN		Crude Protein		Calcium		Phosphorus	
		Lbs	% Body Weight	Lbs	%	Lbs	%	Grams	%	Grams	%
Lambs Finishing — 4 to 7 Months Old											
66	0.65	2.9	4.3	2.1	72	0.42	14.7	6.6	0.51	3.2	0.24
88	0.60	3.5	4.0	2.7	76	0.41	11.6	6.6	0.42	3.3	0.21
110	0.45	3.5	3.2	2.7	77	0.35	10.0	5.6	0.35	3.0	0.19
Early Weaned Lambs — Moderate Growth Potential											
22	0.44	1.1	5.0	0.9	80	0.38	26.2	4.0	0.82	1.9	0.38
44	0.55	2.2	5.0	1.8	78	0.37	16.9	5.4	0.54	2.5	0.24
66	0.66	2.9	4.3	2.2	78	0.42	15.1	6.7	0.51	3.2	0.24
88	0.76	3.3	3.8	2.6	78	0.44	14.5	7.7	0.55	3.9	0.28
110	0.66	3.3	3.0	2.6	78	0.40	14.5	7.0	0.55	3.8	0.28
Early Weaned Lambs — Rapid Growth Potential											
22	0.55	1.3	6.0	1.1	80	0.35	26.2	4.9	0.82	2.2	0.38
44	0.66	2.6	6.0	2.0	78	0.45	16.9	6.5	0.54	2.9	0.24
66	0.72	3.1	4.7	2.4	78	0.48	15.1	7.2	0.51	3.4	0.24
88	0.88	3.3	3.8	2.5	78	0.51	14.5	8.6	0.55	4.3	0.28
110	0.94	3.7	3.4	2.8	78	0.53	14.5	9.4	0.55	4.8	0.28
132	0.77	3.7	2.8	2.8	78	0.53	14.5	8.2	0.55	4.5	0.28

Important Notes

- To convert "dry matter" to as-fed basis, divide pounds of dry matter by percent of dry matter in the feed.
- The calcium-phosphorus ratio in the total dry matter ration should not be narrower than 2 parts calcium : 1 part phosphorus.
- Mix white salt in the complete dry matter ration at the rate of 0.5%.
- Provide loose white salt free choice at all times.
- It is important to test roughages for protein before balancing a ration for protein.
- To formulate the amount of Ovotone to be included in a limit fed air-dry (90% dry matter) grain mix for lambs:

Daily air-dry grain mix consumption ÷ total daily air dry consumption = % air-dry grain mix.

Pounds of Ovotone recommended per ton of complete air-dry ration ÷ % air-dry grain mix = the amount of Ovotone needed per ton of air-dry grain mix.

Example:

66 lb early weaned lambs being fed 1 lb air-dry grain mix plus free-choice hay.

1 lb grain mix ÷ 3.44 lbs total daily consumption = 29% air-dry grain mix.

50+ lbs Ovotone No. 78B Medicated per ton of complete air-dry ration ÷ 29% = 172 lbs Ovotone No. 78B Medicated needed per ton of grain mix.

Planning Data For Feeder Lambs

		<u>30-110 lbs</u>
Building Floor Space (ft ²)/hd	Solid	8-10
	Slotted	4-5
Lot Space (ft ²)/hd	Dirt	20-30
	Paved	10
Feeder Space ² (in./hd)	Limit-Fed	9''-12''
	Self-Fed	1''-2''
Water (head/bowl or nipple) ³ (head/ft) (gal/hd-day) ⁴		50-75
	Tank	25-40
		1.5
Manure/day	(lb)	4
	(ft ³)	0.065
		plus bedding & spilled water

²Feeder space/animal depends on: animal size, shorn versus unshorn, breed, number of times fed/day and feed quality.

³Use heated or circulating type in cold buildings.

⁴Water requirements vary considerably with time of year and ration. Use clean water and keep waterer clean. Maintain water above 35°F in winter and below 75° in summer.

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Sheep Housing and Equipment Handbook, MWPS-3
3rd Edition, 1982
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