



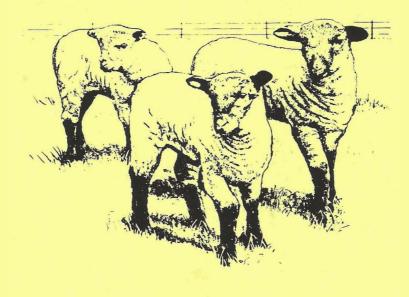
NUTRITION NEWS AND INFORMATION UPDATE

November, 1998

FEEDLOT

FATTENING

LAMBS



Brian Tarr Ruminant Nutritionist

FEEDLOT FATTENING LAMBS

Brian Tarr, Ruminant Nutritionist Shur-Gain Division, Maple Leaf Foods

Feeding lambs for maximum gain and feed efficiency can be a challenge. A good feeding program is an essential component of the success. However, there are some general considerations when feeding lambs that help ensure success.

- Lambs need a comfortable environment, well ventilated to remove the stale air, but free of draughts. Protect lambs from the cold by providing shelter.
- Lambs require 0.6 0.75 square meters (6 8 square feet) floor space. Lambs on dirt require 1.5 to 2.5 square meters per lamb (15 to 30 square feet). Lambs require less space in well drained pens or slated floor pens but up to 5 times as much on dirt. Floor space required depends on the temperature, (sunlight) and moisture. Pens must be stocked at a level that keeps them dry but dust free.
- Lambs must have at least 10 cm (4 inches) feed trough space per lamb. The feed trough must be thoroughly cleaned once per day to avoid stale or mouldy feed buildup. Forcing lambs to clean the feed trough will result in slower, variable growth.
- Lambs must have at least 1 cm (about 0.5 inch) water trough space per lamb. There should be at least two water points per group of 15 to 20 lambs. The water must be clean and fresh at all times.
- Feed lambs in groups no larger than 30 50 animals.
- Group lambs by size/weight. Uniform groups help reduce the effects of social dominance.
- Lambs hyperventilate to help cool themselves. Provide shade in hot weather to help relieve the effects of heat and keep dry matter intakes up.

Feedlot lambs are susceptible to several disease conditions related to the feeding and management of the animals. These include acidosis, coccidiosis, urinary calculi and enterotoxemia (pulpy kidney). There are a number of key feeding and management factors that help reduce the risk of these developing.

Acidosis

Acidosis of the rumen leads to indigestion and poor appetite and can predispose animals to founder and liver abscess.

- Adapt lambs to grain rations gradually. It takes about 10 14 days to fully adapt lambs to a grain ration. Lambs already on a creep ration are easier to adapt. Some of the grain ration can be added to the creep to facilitate the change in grain ration with minimal disruption. Older lambs coming off pasture, for example, can be fed increasing levels of grain as pasture and/or hay is reduced. Avoid slug feeding grain to lambs. Once lambs are on grain make sure they do not run out of feed.
- If necessary, buffers can be added to the ration. The most usual are sodium bicarbonate and magnesium oxide.
- An ionophore included in the ration under veterinary prescription may minimize acidosis risk. Ionophores (Rumensin, Bovatec or Posistac) also improve feed efficiency.

Coccidiosis

Coccidiosis is caused by an intestinal parasite of young weaned lambs.

- Keep pens dry. Where possible, allow sunlight in for part of the day to help dry out the pens. Watch for leaks around the water troughs. Remove or cover wet areas.
- Avoid fecal contamination of the water and feed. Clean the feed and water troughs out daily.
- Keep the animals clean. Animals can become infected by licking contaminated fleece.
- Feeding a coccidiostat such as Rumensin, Bovatec or Posistac under veterinary prescription can help prevent coccidiosis. Consult your veterinarian for the appropriate treatment if you suspect coccidiosis.

Urinary calculi (kidney stones)

Urinary calculi is the formation of crystals in the urethra of male lambs. This makes urinating more difficult. The crystals will eventually block the urethra completely.

- Feed moderate levels of phosphorus at 0.3 0.4%, and calcium 0.8 1.0% in the total ration.
- Feed a ration with calcium to phosphorus ratio of 2.2:1 to 2.5:1.
- Feed moderately higher levels of salt to encourage higher water intake. Make sure that there is adequate fresh clean water available.
- Feed a urine acidifier to help prevent crystal formation and accumulation in the urinary tract. Shur-Gain creep and feedlot rations are specifically designed to help prevent urinary calculi in male lambs.
- Lambs suffering urinary calculi need immediate attention; consult your veterinarian.

Enterotoxemia (Pulpy kidney)

This is the result of toxin production in the intestine, absorption of the toxin which causes kidney damage and eventually death.

- Adapt lambs gradually to the grain ration. Increase the grain by 70 100 g/head/day till lambs are on full feed. Make sure there is sufficient bunk space so that all lambs get their grain.
- Vaccinate against pulpy kidney using a clostridial vaccine (examples are Coopavax 8 or Tasvax 7 or Tasvax 8). Follow label directions carefully. Consult your veterinarian for advice on appropriate vaccination protocol.
- Excellent bunk management is essential to ensure that lambs stay on feed throughout the feeding period and have a consistent grain intake.

Some other considerations when feeding lambs are:

- Deworm lambs if required (Examples are Tramisol injectable or Tramisol oblets). Follow the label directions carefully. Consult your veterinarian for further advise on deworming lambs.
- Vaccinate as necessary consult your veterinarian for advice on appropriate / required vaccinations for your area.
- Provide adequate clean fresh water ensure that the water does not freeze in the winter or become tepid in the summer.
- Learn to recognize abnormal behaviour and investigate the problem immediately.

Excellent feeding and bunk management help keep lambs on feed and promote improved growth and improve feed efficiency. Lambs are selective feeders and it is important to watch that all the feed is being consumed consistently between feedings. Selective feeding can lead to digestive problems.

Feeding whole grains along with a pelleted supplement generally results in superior performance. Lambs fed whole corn, mixed grains and/or barley had higher rumen pH, longer rumination time and carcasses with firmer outside fat than lambs fed the same grains but fed pelleted or ground. Some of the whole grain is chewed when it is first consumed, the rest is regurgitated and chewed later. This process results in more saliva being produced and better buffering of the rumen. Whole shelled dry corn and barley are the grain of choice in whole grain feeding programs. Feeding whole grains is believed to reduce the need for hay.

Shur-Gain products designed specifically for sheep producers.

Shur-Gain 36% Sheep Supplement (200) (3.3% ECP) Shur-Gain 18% Lamb Creep Pellet (0% ECP) Shur-Gain 16% Lamb Creep Pellet (0.66% ECP) Shur-Gain 16% Lamb Creep Feed (0.66% ECP) Textured Shur-Gain Premium Sheep Mineral The Shur-Gain lamb feeding rations are based on average nutrient values for feedstuffs and are designed to meet the nutritional requirements of the growing and finishing lambs. Shur-Gain products contain high levels of bypass protein to promote protein deposition in the carcass of rapidly growing lambs. The rations are high energy, promoting rapid growth. All Shur-Gain lamb feeds are supplemented with optimum levels of minerals, trace mineral and vitamins to help promote growth and health.

Shur-Gain feeding program

Creep feed the Shur-Gain 18% Lamb Creep Pellet to lambs from birth through to weaning. Feed this creep to lambs under stress such as groups where there are twins and triplets or in accelerated lambing programs with early weaning.

Creep feed the Shur-Gain 16% Lamb Creep Pellet or Textured ration to lambs from birth through to weaning. Feed the creep in an area where only the lambs have access to the feed. Clean out the feeder daily and always ensure that the creep ration is fresh to encourage intakes.

Shur-Gain lamb feedlot rations can be fed following the creep ration. Mix some (about 50%) of the feedlot starter ration in with the creep and feed this for 7 - 10 days to ease the transition to the new ration. Once lambs are adapted to the feedlot grain ration, continue to feed both the appropriate ration and hay free choice.

Heavy lamb breeds.

Start lambs on a 16% crude protein grain ration with limited hay (generally assumed to be about 200 - 500 g/lamb/day). Feed the lambs from 15 - 25 kg (30 - 55 lbs). Grow lambs on a 15% crude protein grain ration with limited hay (generally assumed to be 100 - 200 g/lamb/day). Grow lambs 25 - 35 kg (55 - 80 lbs). Finish lambs on a 14% crude protein grain ration with minimal hay (generally assumed to be about 100 g/lamb/day). Feed lambs from 35 kg (80 lbs) through to finish.

Light lamb breeds

Start lambs on a 16% crude protein grain ration with limited hay (generally assumed to be about 200 - 500 g/lamb/day). Feed the lambs from 12 - 20 kg (25 - 45 lbs). Grow lambs on a 15% crude protein grain ration with limited hay (generally assumed to be 100 - 200 g/lamb/day). Grow lambs 20 - 30 kg (45 - 65 lbs). Finish lambs on a 14% crude protein grain ration with minimal hay (generally assumed to be about 100 g/lamb/day). Feed lambs from 30 kg (65 lbs) through to finish.

Producers may decide to start lambs at slightly heavier weights. Lighter breeds may be fed the 16% lamb starter ration for longer than indicated here and then follow with the 15% lamb grower through to finish.

The SHUR-GAIN 36% Sheep Supplement (200) (3.3% ECP) can be mixed to make up a number of onfarm rations for feeding lambs.

	16% Lamb Creep/Starter	15% Lamb Grower	14% Lamb Finisher
Shur-Gain 36% Sheep Supp (200)	200	175	150
Barley	500	450	400
Corn	300	375	450
TOTAL	1000 kg	1000 kg	1000 kg

	16% Lamb Creep/Starter	15% Lamb Grower	14% Lamb Finisher
Shur-Gain 36% Sheep Supp (200)	200	200	200
Barley	325	240	140
Corn	400	500	600
Molasses	50	50	60
Soybean meal	25	10	-
TOTAL	1000 kg	1000 kg	1000 kg
	15% Lamb Grower	14% Lamb Grower/Finisher	
Shur-Gain 36% Sheep Supp (200)	200	175	150
Barley	350	275	200
Corn	400	500	600
Molasses	50	50	50
TOTAL	1000 kg	1000 kg	1000 kg 🤞

Shur-Gain Premium Sheep Mineral can be fed to lambs as a top dress or mixed in the ration. Feed lambs up to 15g per head per day. Always provide free choice salt to lambs. Ensure that there is adequate fresh clean water available at all times.

Shur-Gain sheep feeding products

	18% Lamb Creep Pellet	16% La Creep I		6% Sheep Supp 200	Premium Sheep Mineral
Crude Protein (%)	18	16	98 - 18 <u>5</u> 8		
ECP (%)	0	0.	66	3.3	
ADF (%) (max)	10	10		10	
Calcium (%)	0.8	0.	9	4.5	14
Phosphorus (%)	0.4	0.4	4	0.7	12
Sodium (%)	0.2	0.25	1.25		6
Manganese (mg/kg)	50	50		250	2,700
Zinc (mg/kg)	90	90		450	4,500
lodine (mg/kg)	0.4	0.4	4	2.0	200
Cobalt (mg/kg)	0.1	0.	F 20	0.5	46
Vitamin A (IU/kg)	10,000	10,000	50),000	600,000
Vitamin D (IU/kg)	1,000	1,000	604. 5	5,000	75,000
Vitamin E (IU/kg)	40	20		100	1,000
Added Selenium (mg/kg) 0.3	0	3 PO C	1.5	36

* P or TR refers to pellet or textured ration. None of these feeds contain added copper. ** The ECP is from ammonium sulphate, not urea.