

General principles for Good Management Practices



May 2020

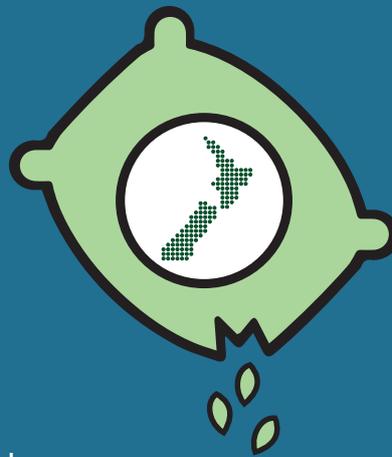
Feeding grain to sheep

Grain is a good feed option

Energy is the major nutrient required for the maintenance of sheep. Cereal grains are a good source of energy, so they provide a good option for feeding sheep when grass and other supplements are in short supply.

New Zealand grain can be traced to the farms where it was grown, providing increased quality control and reduced biosecurity risk in comparison to imported alternatives.

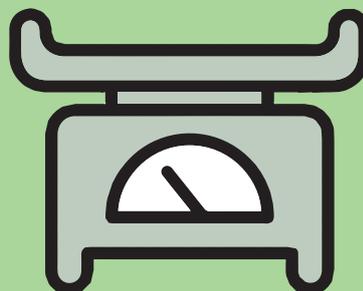
Grain poisoning, or acidosis, is a risk which needs to be managed carefully.



How much grain?

Feed grain as part of a mixed diet. Introduce it slowly, starting at about 50 g/head/day for 10 days. Gradually build up over the next 7-10 days. About 0.5 kg/head/day of barley provides half maintenance i.e. half the nutrition required to maintain body weight.

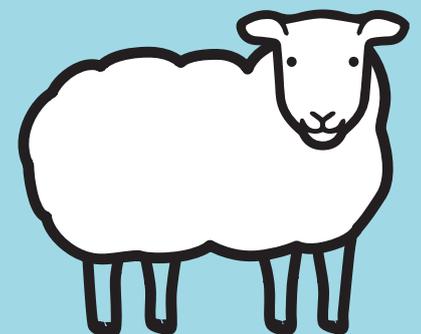
Feeding more grain than this is not recommended. Where total weekly grain rations are 2.5 kg or more for weaned lambs and 3.5 kg or more for adult sheep, some roughage should also be supplied.



Remember

- Cereal grains are a good source of energy.
- Introduce grain slowly, as part of a mixed diet, to reduce the risk of grain poisoning.
- Feed rough straw with grain to encourage chewing and stimulate saliva production to help neutralise rumen acid.
- The safest grain to feed is oats, followed by barley, maize grain and then wheat.
- Feed additives are available to reduce the risk of acidosis/poisoning.

Any change to animal diets should be done in consultation with a professional advisor.



Nutritional value of different grains

Grain type	% DM	¹ Relative ME value on DM basis	ME concentration (MJ ME/kg DM)	% Crude protein DM basis
Oats	86	1.1	12.0	13
Barley	85	1.2	13.1	12
Maize grain	86	1.3	13.9	10
Wheat	86	1.3	13.5	14

¹ Relative to leafy pasture with a value of 1.0 (ME concentration of 10.8 MJ ME/kg DM).

Training sheep to feed on grain

- Start by scattering a preferred fodder such as good quality vegetative baleage. Do not feed the sheep again until most of the hay/baleage is eaten. When the sheep are readily eating the hay/baleage, introduce a small quantity of grain.
- If possible, include in the mob some sheep that have been fed grain previously. Untrained sheep are best educated in small paddocks.
- Feed grain from a hopper, leaving a layer of grain about 40 mm deep and 100 mm wide. This allows all animals access to the grain and prevents gorging.



Grain poisoning

Lactic acidosis or grain poisoning is caused by excess consumption of concentrates (grain) which results in high levels of acid being produced in the rumen. Affected sheep appear depressed and listless and may have abdominal pain. Acidosis can be a life-threatening condition. If you suspect acidosis, consult a veterinarian immediately.

Feed additives, which reduce acidosis problems are available. Consult your veterinarian or industry specialist.

Contact your local seed and grain merchants regarding the availability of grain in your region.



This information has been drawn from a number of New Zealand industry publications. For more information see **FAR Arable Update 100 Feeding Grain to Sheep**, available on the FAR website www.far.org.nz or contact far@far.org.nz

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