Mega Min

Livestock Supplements

Supplementation Feeding Guidelines

Ag Solutions AUSTRALIA

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Supplementation Feeding Guidelines

MegaMin Livestock Supplements come in a range of loose licks and lick blocks to help manage nutrition deficiencies while assisting animals in reaching production targets, and complements a diverse range of feeding requirements including low quality mature pasture, high quality improved pastures and grain feeding programs.

Key Points To Remember

- Feed salt to identify and satisfy any salt cravings prior to supplementing.
- Stock must have access to ample pasture at all times.
- Feed loose mixes in an appropriate feeder, which is preferably covered from the weather and can be drained.
- Place feeders where livestock are going to come into contact with the trough, but they should be placed out of the way from water (at least 100m) to encourage stock to graze the entire paddock.
- Provide adequate trough space to avoid 'bullying'.
- Do not feed MegaMin Supplements in conjunction with other types of supplements as toxicity may occur (discuss with AgSolutions regarding feeding with other products).
- Ensure an adequate supply of fresh, clean water is available at all times.
- Try to avoid letting supplements run out, especially late in the dry season.
- Start feeding protein supplements early in the dry season before livestock have already lost condition and developed cravings.
- Feed to the intended species; some mixes contain Rumensin® or Bovatec® that could be lethal to horses and dogs.
- Monitor intake - daily intake and cost can be monitored by keeping a few basic records.

Records To Keep

- Total number of livestock in the paddock (eg. 200 head of steers)
- Amount of loose lick put into feeders (eg. 5 x 20Kg Bags = 100Kg)
- Number of days taken for supplement to be consumed (eg. Supplement was put out on Monday, and had to refill Saturday = 5 days)

Calculations To Make

It is important to remember that it is the cost per head per day which is considered when feeding supplements, not the cost per tonne of supplement.

Daily Intake Formula

Kg of supplement / No. of days / No. of head x 1000

Example
(100kg / 5 days / 200 head) x 1000 = 100g/hd/day

Cost/Head/Day Formula

Supplement cost ($/T) / 1000kg/T / 1000g/kg x Daily Intake

Example
($920 / 1000 / 1000) x 100g = $0.092/hd/day = 9.2c/hd/day

When To Supplement

Minerals are required year-round by livestock for optimum production, health and fertility. There is an obvious need to supplement livestock to maintain condition or avoid losses during Winter and dry conditions. Not so obvious are the clinical and sub-clinical mineral deficiencies that can restrict animal performance during good seasons or periods of lush pasture growth.

Feed Ration Formulation Service

AgSolutions' nutrition team can review your current ration or formulate a new ration for you, using ingredients readily available to you in your area. This service can help ensure animals are receiving an adequate diet to meet market growth.

Consumption Management

Choosing a loose lick or lick block supplement depends on your production management requirements and what your animals do with salt. Minerals cannot be synthesised within the animal, therefore, supplementing livestock with broad spectrum minerals can help stimulate metabolism and feed efficiency, assisting daily weight gain and body condition scores for stock grazing both native and improved pastures.

Slowing Consumption

Livestock are initially prone to consume greater levels of product at the beginning of a supplementation program, usually due to cravings for a particular mineral or protein that the mix provides.

Reducing the intake of supplements is much easier than increasing intake, for this reason it is particularly important to introduce any addition to feed or rations slowly. If too much is added, palatability will be severely impacted and the livestock may go off the supplement completely.

Satisfy Salt Cravings

Salt is often the number one mineral that livestock can crave, and cravings will vary depending on the type of country and water supply. The first step is to provide free access to straight salt to see if the livestock are craving salt, or not interested at all. From this observation it can be decided if salt will be an inhibitor of intake or an enticement.

If salt is an inhibitor, begin introducing 2kg of salt per bag of supplement and monitor intake. If consumption is not reduced, increase the salt by another 2kg and repeat the process until the target intake control is reached.

Phosphorus

Phosphorus is one of the most important minerals in animal nutrition and is essential for energy metabolism, appetite, efficiency of feed utilisation, bone growth, and fertility. If diets are deficient in phosphorus it can severely impact production and income. Supplementation is particularly critical in country that has marginal or deficient levels of phosphorus.

Providing stock with a high-phosphorus supplement can potentially alleviate this deficiency however achieving adequate intake may be challenging. If consumption of the phosphorus supplement is too high, and salt has been introduced in an effort to reduce intake, add 2kg of an additional phosphate-calcium source (for example, dicalcium phosphate (DCP), monodicalcium phosphate (MDCP), or Kynofos) per bag of supplement and monitor the livestock's response. If consumption is not reduced, increase the salt by another 2kg and repeat the process until the target intake control is reached.

Additives may vary from class of stock on your property, to paddock location due to the individual animals demands, and varying mineral and trace element levels within each paddock.

Monitoring and recording feeding rates and supplementary inclusions necessary in each area or paddock can assist in ensuring the correct mineral balance and adequate consumption required to achieve effective production and health of your livestock.

Increasing Consumption

Palatability of a feed mix or a supplement is imperative to ensuring livestock consume sufficient amounts. Minerals and trace minerals often have a bitter taste, which is why some stock may not take to some supplements. A protein meal, grain, or sugar can be added to the top 15cm of the lick to help the stock acquire a taste for the supplement. Ideal protein meals include Copra Meal and Cotton Seed Meal.

Similar to the process of controlling over consumption start by introducing 2kg of the additive per bag of supplement. If consumption has not increased, add an additional 2kg of additive per bag of supplement whilst following the monitoring steps previously suggested. Repeat until the desired consumption is obtained.

Consider A Soil Test

A soil test can identify the underlying mineral deficiencies in soil and pastures, and provides a guide for supplement requirements for your stock.

Loose Supplement Feeding Guide

The MegaMin Loose Supplement range comprises grass-fed, feedlot or grain assist products that are suitable for cattle, sheep, goats and horses, and includes an array of blends formulated to meet nutritional requirements in seasonal and environmental conditions along with feedlot premixes, and USDA/NOP specific blends and Organic Allowed Input approved supplements.

Recommended daily intake has been formulated based on an average body weight per animal grams per head per day.	 Cattle (400kg)	 Sheep (50kg)	 Goats (50kg)	 Horses
Mineral Blend	40-80	5-10	5-10	30-80
10% Protein Meal	40-80	5-10	5-10	30-80
Extra Phosphorus	40-100	5-10	5-10	50-100
Extra Phos8	40-100	5-10	5-10	50-100
Extra Sulphur	40-80	5-10	5-10	N/A
SulPhos	40-80	5-10	5-10	N/A
Extra Magnesium	100-200	10-20	10-20	30-80
BovaMag	100-150	10-15	10-15	N/A
Pre/Post Lambing	100-150	10-15	10-15	N/A
Lush Legume Lick	200-250	N/A	N/A	N/A
Graze & Grow	150-300	N/A	N/A	N/A
Graze & Grow 3% Urea	150-300	20-30	20-30	N/A
Graze & Grow 6% Phos	150-300	N/A	N/A	N/A
Dry Season Breeder Blend	150-300	N/A	N/A	N/A
50% Protein Meal	200-400	20-40	20-40	100-200
USDA/NOP Blend	40-80	5-10	5-10	50-100
USDA/NOP Extra Sulphur Blends	40-100	5-10	5-10	30-80
USDA/NOP Extra Phosphorus Blends	40-100	5-10	5-10	30-80
USDA/NOP Custom Protein Blends (10-20% Protein Meal)	40-100	5-10	5-10	30-80
USDA/NOP Custom Protein Blends (30-50% Protein Meal)	200-400	20-40	20-40	100-200

The below feeding rates are general inclusion rates when part of a balanced ration.	 Cattle (400kg)	 Sheep (50kg)
Feedlot Enhancer	20kg/tonne of feed ration (Less for silage rations on an as fed basis)	20kg/tonne of feed ration

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Lick Block Feeding Guide

The MegaMin Lick Block range has been formulated with macro and trace minerals plus molasses in a convenient and palatable, weather resistant option for year round to help livestock meet nutritional requirements in seasonal and environmental conditions.

Recommended daily intake has been formulated based on an average body weight per animal grams per head per day.	 Cattle (400kg)		 Sheep (50kg)		 Goats (50kg)		 Horses	
Mineral Block	40-80		5-10		5-10		30-80	
Head Per Block	**17kg**	**75kg**	**17kg**	**75kg**	**17kg**	**75kg**	**17kg**	**75kg**
	15	45	40	100	40	100	15	45
Extra Sulphur Block	40-80		5-10		5-10		N/A	
Head Per Block	**17kg**	**75kg**	**17kg**	**75kg**	**17kg**	**75kg**		
	15	45	40	100	40	100		
Dry Feed Block	40-80		5-10		5-10		N/A	
Head Per Block	**16kg**		**16kg**		**16kg**			
	15		40		40			

Feeding Notes

Lick Blocks offer a convenient means of feeding and are generally safe for livestock. However, there are precautions for blocks containing urea: only feed to designated species, don't allow livestock to consume too much of the block too quickly and preferably keep blocks dry (animals can lick a hollow in the top of blocks that can act like a well and capture rainfall, allowing water to pool and potentially increase concentrations or amounts of urea that can be quickly consumed)

Calculating the number of blocks required and maintaining a record of feeding is desirable. Overfeeding with blocks can become expensive and underfeeding can result in poor animal performance and deficiencies not being rectified. Look at the daily recommended intake for the block being used and using similar calculations as described for loose supplements establish actual amounts being consumed. If daily intake consistently falls outside of the target range contact AgSolutions Australia.

Warning

MegaMin Dry Feed Block contains Urea that may be harmful if excessive amounts are consumed too quickly.
Do not feed to starving livestock. This product is not suitable for horses or other equines.

Equine Supplement Feeding Guide

MegaMin Equine Supplements includes AgSolutions' new premium equine products that have been specially formulated by a leading Australian Equine Nutritionist with top quality macro and trace minerals to meet the needs of all types of horses and ponies with access to diets consisting largely of pasture or hay.

Average feeding rate:
Horse: 100g per day
Pony: 50g per day
Feeding rates are in grams per head per day.

Horses

MegaMin Equine Enhancer	400kg	500kg	600kg
Not in work	45	55	65
Light work	60	70	80
Moderate work	80	100	120
Pregnant Mares (first 8 months)	60	70	80
Pregnant Mares (last 3 months)	80	100	120
Lactating Mares	60	80	100
Aged Horses	60	70	80
Weanlings, Yearlings and 2YOs	45	55	65

MegaMin Bone Defender	400kg	500kg	600kg
Not in work to light work	140	180	220
Moderate work	160	200	240
Heavy work	180	220	260
Pregnant Mares	140	180	220
Lactating Mares	190	230	270
Aged Horses	140	180	220
Weanlings, Yearlings and 2YOs	140	170	200

Important Notes on Feeding

MegaMin Bone Defender feeding rates are in g/day and should be fed in conjunction with recommended dose of MegaMin Equine Enhancer or as part of a balanced diet.

Note: Bone Defender feeding rates are for horses on pasture who are not receiving significant amounts (less than 1kg/day) of supplementary hay or hard feed. If your horse is grazing Setaria pastures the dose rates are 3 times the amounts given above.
If your Setaria is the Kazungula variety please contact us for advice on dose rates.

Feed Reduction Guide

For horses given supplementary hay or hard feed, reduce MegaMin Bone Defender by the following amounts.

Amount to reduce MegaMin Bone Defender by	
For every 1kg of Lucerne Hay	70g/day
For every 1kg of Grass Hay (Low Oxalate)	25g/day
For every 1kg of Complete feed[Δ]	50g/day

[Δ]Fortified with 8.5g/kg of calcium at minimum.

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Helping Australia Grow

The AgSolutions Difference

A company dedicated to 'Helping Australia Grow'

AgSolutions is a family owned Australian company founded in 1989. Our aim is to support you to improve soil fertility, to boost crop quality and production, and to maximise the performance of your livestock.

Because minerals are essential for the health and fertility of both soil and livestock, broad spectrum macro and trace minerals are the core ingredient in all of our soil and livestock products.

For your soil: In university trials, NatraMin has proven itself to enhance soil moisture holding capacity, increase root biomass and improve crop production. Our qualified Field Advisors can provide soil testing and advice for fertiliser and soil improvement programs.

For your livestock: Our range of MegaMin livestock supplements provide natural minerals to assist overall health, fertility and production. To maximise stock performance, our Field Advisors can provide supplement advice that has a focus on using the 'right product for the right time'.

For your grain fed stock: To ensure animals are receiving an adequate diet to meet market specifications, we can assist you with free advice for the formulation of feedlot or backgrounding rations. Feed testing is also available.

For your horses: MegaMin Equine Supplements are premium products that have been formulated in conjunction with a leading Australian equine nutritionist to meet the needs of horses and ponies that have diets consisting largely of grass and hay.

In all that we do, our team is committed to '***Helping Australia Grow***'.

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