

FIBRE FERMENTOR

EXTRA DRY



OLSSON'S



A lick block containing amino acids, essential minerals, live probiotics & chromium designed to break down and make palatable the toughest of winter grasses including tussock.

EXTRA DRY

AVAILABLE IN 40KG BLOCKS



An advanced block for extra dry conditions containing amino acids, essential minerals, live probiotics & chromium.



Olsson's Extra Dry is a high protein block containing essential minerals & microprotein blend, a stable and easily digestible source of amino acids produced through the microbial fermentation of natural raw materials such as raw sugar and beet molasses. The amino acids and essential minerals assist with growth, lactation, immune function and fertility, as well as digesting roughage. Olsson's Extra Dry also contains chromium for helping reduce heat stress & providing energy on a cellular level.

Warning: Products containing urea can be toxic to livestock. Please ensure proper farm management practices are employed.

DIRECTIONS FOR USE	TYPICAL ANALYSIS			
Cattle: 10-60g per head per day Use with dry feed and stubbles. Consumption rates will depend on life cycle of the herd and the quality of the available feed.	Single Cell Protein Meal (Microproteins)	15%	Sulphur (S)	3%
	Urea	10%	Magnesium (Mg)	2.9%
	Molasses	30%	Phosphorus (P)	1.2%
	Salt (NaCl)	10%	Chromium (Cr)	58mg/kg
	Calcium (Ca)	4.5%	Live Probiotics	10 ⁹ cfu/ml (1.5%)

The benefits of essential amino acids:

Olsson's Extra Dry combines a balanced array of urea, trace elements and minerals with added natural and easily digestible microproteins.

Microproteins are single cell proteins, meaning they are made up of edible unicellular micro organisms. It is a fermented bio mass of dry matter, bacteria, yeast, fungi and algae. This is a highly digestible protein source that supports gastrointestinal function and animal growth. The majority of the protein is rumen bypass, which get delivered to the intestine where it can be absorbed directly as an energy source.

The microproteins contain 17 amino acids, which assist with growth, lactation, immune function and fertility. It also contains the 5 most important amino acids for digesting roughage. For weaners, the most important amino acids are methionine, lysine, isoleucine, threonine and leucine. Methionine, for example, serves as a constituent of skeletal muscle protein, as well as optimises the development of digestive tract and growth performance. Lysine also optimises animal growth performance, as well as synthesises muscle proteins, and aids in calcium resorption, while isoleucine optimises glucose uptake and energy efficiency in intestine and muscle. The table below shows the % of each of the amino acids contained in the microprotein blend.

A deficiency in any of these amino acids results in a slowing of growth and delayed onset of maturity. Amino acids also help increase metabolic functions, immune response and maintenance. Amino acids are critical for livestock growth and overall well-being.

Amino acid (%) in the microprotein blend			
Lysine	4.12%	Methionine	1.58%
Aspartic acid	7.19%	Isoleucine	3.24%
Threonine	3.16%	Leucine	5.76%
Serine	2.52%	Tyrosine	1.60%
Glutamic acid	8.11%	Phenylalanine	3.27%
Glycine	3.64%	Histidine	2.58%
Alanine	5.88%	Arginine	4.38%
Cystine	0.02%	Proline	2.02%
Valine	3.60%		
Total amino acid percentage			62.63%

The benefits of of supplementing with chromium:

Studies into the benefits of chromium supplementation in livestock diets have shown:

- It plays a key role in lipid, protein, and nucleic acid metabolism in livestock, allowing more energy to be utilised from the feed in normal pastures.*
- It positively affects milk production in cows and has a profound effect on calf growth*
- It alleviates the negative effects of stress by improving the health and performance of livestock*
- It improves immune function*
- It helps with heat stress (it takes energy to cool down or to warm up the animal)*
- It provides more energy to the cells, useful for gidgee & heart leaf poisoning where the energy is cut off at the cell level.*

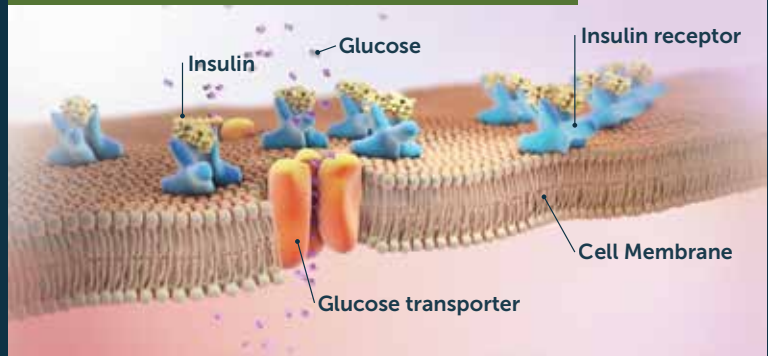


How it works:

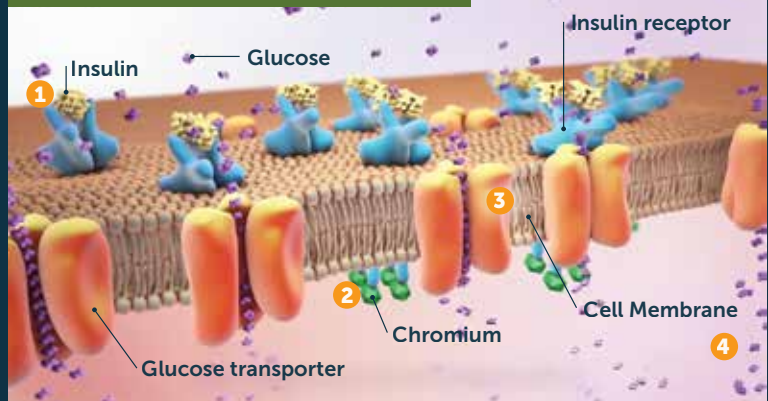
Chromium helps enhance the effect of insulin, stimulating the glucose uptake by organs and muscle. This aids in the production of energy from carbohydrates, fats and protein. This means the animal has more energy to help with maintenance, reproduction, growth, performance and immunity.

The top right image shows the cells without chromium. The available glucose is not efficiently transported to the cells. However, with the addition of chromium (lower right image) the insulin receptors increase the glucose metabolism.

WITHOUT CHROMIUM



WITH CHROMIUM



1. Insulin stimulates glucose uptake by cells.
2. Chromium optimises the activation of the insulin receptor.
3. The cell increases glucose uptake.
4. The additional glucose allows for more energy to be available for proper cell function, which can boost the animal's immunity maintenance and reproductive performance.

Sources:

Amata, I. (2013). Chromium in Livestock Nutrition: A Review. *Global Advanced Research Journal of Agricultural Science*, Vol. 2(12) 289-306.

Ewing, W. C. (2007). *The Minerals Directory*. Leicestershire: Context.

www.kemin.com. (n.d.). KEMTRACETM Chromium For Stress Management | Kemin Asia. [online] Available at: <https://www.kemin.com/ap/en/markets/animal/products/kemtrace-chromium>





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