OPTISYNC™

MANAGING PROTEIN PLATFORM ON-FARM

WHAT IS OPTISYNC?

Optisync is Alltech's safe and traceable non-protein nitrogen (NPN) source with controlled release technology designed to provide a concentrated source of rumen degradable protein.

Due to the high concentration of nitrogen, a small amount of Optisync can provide the equivalent of a larger amount of vegetable protein, allowing for customisation of the diet, to support higher production or potentially reduce feed costs.

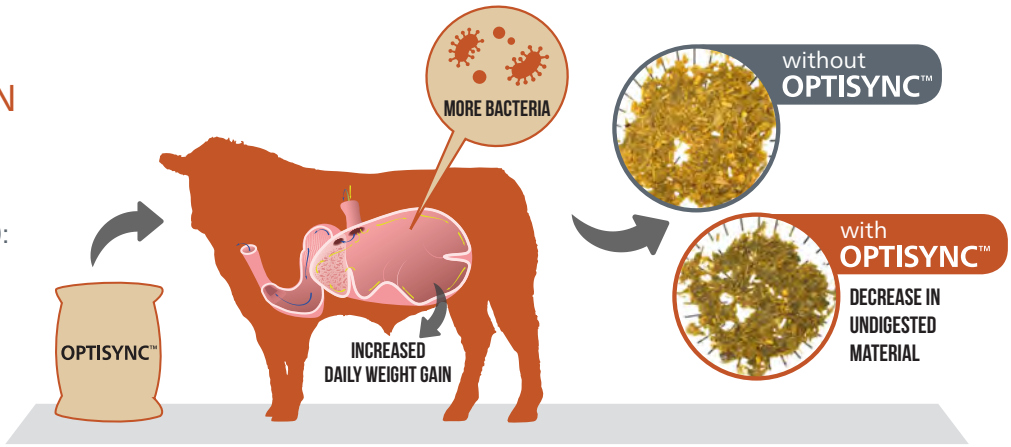
WHY SHOULD I FEED OPTISYNC?

Optisync supports efficient rumen function and fibre digestion. The slow release technology provides a safe and constant level of ammonia to the rumen environment, ensuring the rumen bacteria have continued access to this excellent rumen degradable protein source.

Without it rumen bacteria can't grow, which leads to poor digestibility of fibrous materials in the diet.

OPTISYNC CAN REPLACE CONVENTIONAL PROTEIN SOURCES IN FINISHING BEEF DIETS

Studies (Bourg et al, J. Anim. Sci. 90: 3914 –3923, 2012) have indicated that feeding Optisync in finishing steer diets can improve efficiency (F:G) by 15% compared to a conventional Urea containing ration.



Example: Replace 1kg of Canola with 100g of Optisync + 900g of Silage

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WHAT ARE THE BENEFITS OF A SUSTAINABLE RELEASE OF NITROGEN IN THE RUMEN?

82% of rumen bacteria are capable of using N (in the form of NH_3) as a food source. In fact, fibre digesting bacteria only use NH_3 as a food/protein source.

Optisync supplies NH_3 at a rate similar that of vegetable protein sources, preventing shortages between feedings. This stimulates bacteria growth and increases microbial protein (MP) yield. This valuable source of protein can meet 60-90% of the animal's total protein requirement.

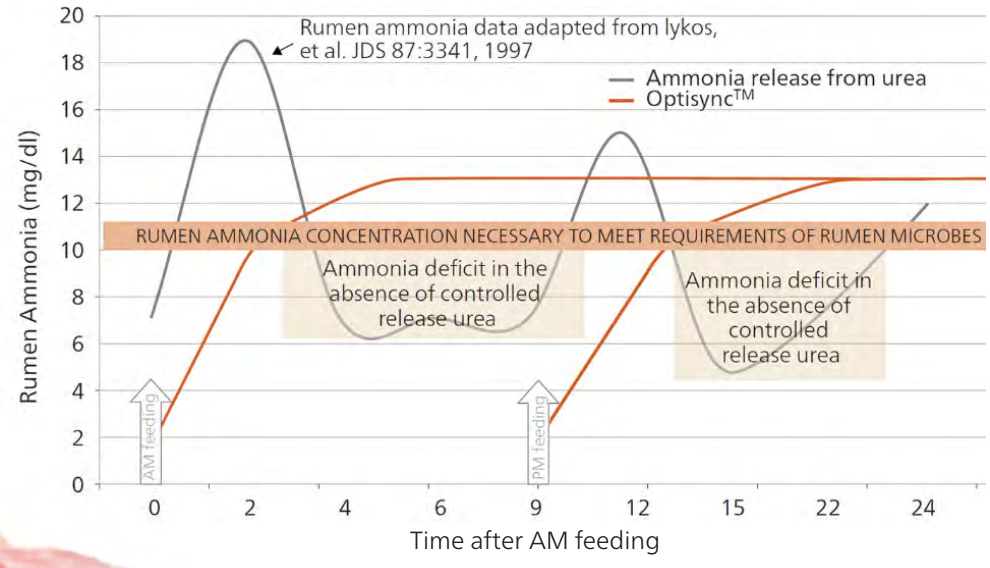
Vegetable protein sources often have large variations in quality in relation to rumen degradable protein (RDP) content, anti-nutritional factors (trypsin inhibitor, gossypol) or the risk of mycotoxins. Optisync provides a consistent source of rumen degradable protein without these problems.

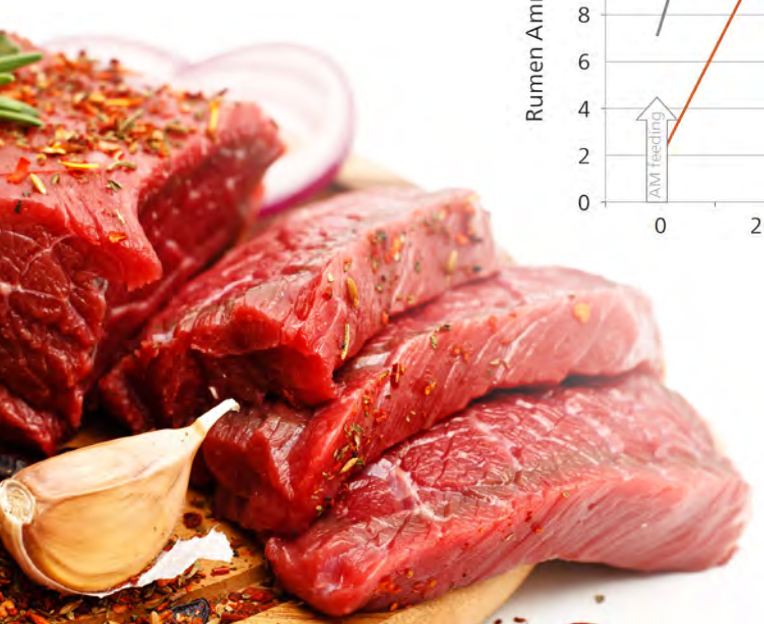
HOW DOES IT DIFFER FROM UREA?

Urea releases a lot of NH_3 in a very short time. Rumen bacteria can't use enough of it, before it gets absorbed, ending up in the blood. This can be dangerous as too much ammonia in the blood can lead to urea poisoning.

The technology used in manufacturing Optisync controls the release of nitrogen, in such a way for the rumen bacteria to utilise it effectively, reducing the risk of high blood ammonia levels and energy sparing effect from not having to remove excess NH_3 from the body.

Optisync is produced locally in Australia and is subjected to strict quality control procedures for improved safety, consistency and traceability.

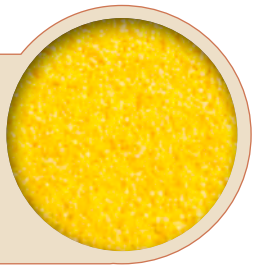




HOW SHOULD I USE OPTISYNC?

Can be mixed with forages, like good quality silages and/or dry feeds (cereals, hays) in a mixer wagon or on a feed pad. It can also be added to concentrated meals and can be pelleted.

Optisync is in a yellow prill form and comes in either **25kg bag packaging** or **1 tonne bulka bags.**
Rate of use is generally between 90-240g/head/day



WHAT SHOULD I USE TO FILL THE SPACE IN THE DIET?

- Preferably homegrown forages like good quality silages and/or hays can be used for a more cost-effective ration.
- Fibre byproducts like brewers/distillers' grains, citrus/beet pulp, hominy chop, rice bran/hulls, almond hulls.
- Increased energy (wheat, barely, corn) or alternative available vegetable protein sources (lupins, peas, cottonseed) to address a deficiency or production goal.

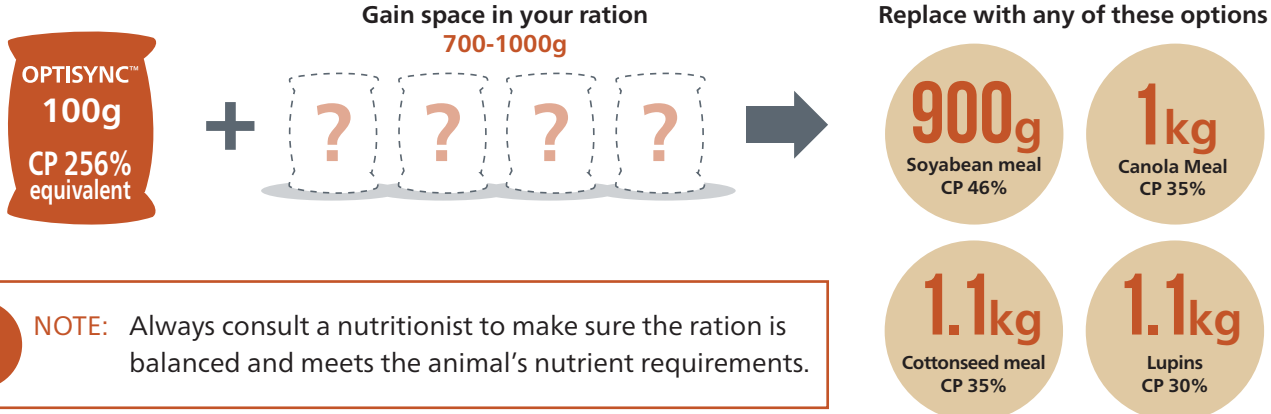
FEEDING OPTIONS:

ON-TOP: Optisync can be used over the top, of existing diets if the rumen degradable protein levels are low, to increase overall protein levels. Which is particularly relevant if there is a shortage of protein due to poor pasture quality or high NDF (fibre) levels.

REFORMULATED: Optisync can be used to reformulate balanced diets where there is a need to create space for the inclusion of more energy (for production) or roughage (to prevent acidosis). It is also reformulated in diets where a lot of expensive vegetable protein is being used.

ASK YOUR ALLTECH LIENERT REPRESENTATIVE FOR MORE INFORMATION REGARDING INCLUSION LEVELS AND FEEDING OPTIONS.

Optisync™ degradable protein equivalence (fresh product)



NOTE: Always consult a nutritionist to make sure the ration is balanced and meets the animal's nutrient requirements.

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WHEN SHOULD I USE OPTISYNC?

Optisync can be used all year-round in ruminant diets as it supports rumen efficiency and improved fibre digestion.

This becomes particularly important when:

- Drought conditions persist and availability of raw materials decline.
- Summer pasture conditions, limited energy and protein availability because of high fibre content.
- High rate of undigested starch in manure. Protein/energy imbalance.
- Animals are being supplemented with on farm forage. Variable pasture quality or under-utilisation of pasture.

WHEN CAN I EXPECT TO SEE RESULTS FROM USING OPTISYNC?

The rumen bacteria do take time to respond, and if NPN had not been fed prior to Optisync, an adaptation period of 5-7 days is recommended. It also depends on the rest of the ration composition. Generally, you would expect to see improvements in fibre digestion after 10-12 days.

Date:

For more information on Optisync,
call your local Alltech Lienert representative
or call 1800 649 231.

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