



# MEGA-MAX™

The multi-purpose rumen-protected fat



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Optimum balance



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**Mega-Max is a multi-purpose fat supplement for dairy cows and other ruminants targeted to improve milk yield, milk fat, fertility and body condition score throughout lactation.**

Mega-Max is the new supplement in the Megalac range of rumen-protected fats, developed based on the latest scientific research on feeding fats to dairy cows. Fat supplements differ depending on the type of fatty acid building blocks they contain and this is the key factor determining the effects of a product when included in a diet.

Mega-Max is uniquely-formulated with a specific balance of C16:0 and C18:1 fatty acids to achieve performance benefits through the whole lactation.



Properties	Typical value (%)
<b>Fat</b>	<b>84</b>
<b>Calcium</b>	<b>9</b>
Typical fatty acid profile (% total fatty acids)	
<b>C16:0</b>	<b>58</b>
<b>C18:0</b>	<b>5</b>
<b>C18:1</b>	<b>28</b>
<b>C18:2</b>	<b>6</b>
<b>Others</b>	<b>3</b>

## Importance of C16:0 to C18:1 ratio

Research studies have demonstrated the effects of individual fatty acids on dairy cow productivity. Supplements with high levels of C16:0 fatty acid have been shown to increase milk fat while C18:1 has been shown to increase fat digestibility and fertility.

More recently, the effects of fatty acids on partitioning of nutrients - between milk and body fat - in dairy cows has been evaluated in studies in the USA.

This work indicates that supplements with higher C16:0 and low C18:1 lead to increased milk production, in particular milk fat output, while supplements with higher levels of C18:1 and lower C16:0 are more effective in maintaining body condition through early lactation.



## Why is Mega-Max unique?

Manufactured to Volac Wilmar's unique specification, Mega-Max combines C16:0 and C18:1 fatty acids in the ratio determined to be most effective in the critical early lactation period to balance milk production and body condition. In later stages of lactation, Mega-Max supplies C16:0 to increase milk fat and C18:1 to improve fertility, offering an ideal one-product solution to fat supplementation for dairy farmers.

## Compound pellets

For feed mills, Mega-Max offers the potential to increase C16:0 concentration of compound pellets without compromising pellet quality as is the case when products with very high concentration of C16:0 are used.

## Proven by research

Recent research at Scotland's Rural College (SRUC; Crichton Royal Farm, UK) has demonstrated the benefits of supplementing the diet of early lactation dairy cows with Mega-Max.

Cows offered the Mega-Max supplement ate a similar quantity of feed dry matter but produced an additional 1.6 litres of milk per day, combined with higher milk fat production.

Importantly, despite producing higher volumes of milk and milk fat, cows offered the Mega-Max diet maintained body condition score.



	Control (no fat supplement)	Mega-Max
Dry matter intake (kg/day)	22.7	22.5
Milk yield (kg/day)	38.8	40.4
Milk fat (%)	4.01	4.05
Milk fat (kg/day)	1.52	1.61
Body condition score	1.98	1.99

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# How to feed Mega-Max

Mega-Max should be mixed with other ingredients in the diet and can be included as part of a total mixed ration, blend or compound pellet.

## Typical feed rates\*

Species	g/head/day
Lactating dairy cows	300 - 800
Beef cattle	150 - 300
Sheep	50 - 100
Goats	50 - 100

\* For more specific recommendations consult with a nutritionist

## Mega-Max description and packaging

- Dry, free-flowing granules
- Off-white in colour
- 48 x 25 kg bags per pallet (1.2 t)
- Mini-bulk bags (2 x 600 kg bags/pallet; 1 x 1050 kg bag/pallet)



For further information:  
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Experts in fat nutrition

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