

# **FOCUS ON MILK FAT**

Milk fat accounts for around half of the energy requirements for milk production and maintaining 'normal' milk fat is a good indicator of rumen and cow health.

Milk fat can be affected through changes in diet, including:

- Type of ingredient
- Physical form
- Method of feeding

Around half

Where does milk fat come from?

is produced directly in the udder from acetate and butyrate resulting from digestion of fibre in the rumen

Around 45% comes directly from fat in the diet

The remainder

comes from body fat more comes from body fat in early lactation when cows are losing body condition

Increase milk fat %	Decrease milk fat %
Increase fibre	Reduce fibre
Long fibre	Finely-chopped forages
Low grain / Low starch	High grain / High starch
Cracked or coarse-rolled grains	Ground cereals
Small, frequent concentrate feeding (e.g. TMR or out-of-parlour feeders)	Large, infrequent concentrate feeds (e.g. twice per day in parlour)
High-C16 fat supplements (e.g. Mega-Fat 88 and Mega-Fat Extra)	Rumen-active fat supplements, vegetable oil, fish oil, high-oil byproduct feeds (e.g. brewers grains)





### **Fibre**

Long fibre provides the 'scratch' factor in the rumen which stimulates rumination - chewing the cud - and production of saliva. Saliva contains bicarbonate which acts as a rumen buffer to help reduce acid in the rumen and reduce risk of acidosis (low rumen pH).

Fibre-digesting bacteria, which produce the acetate and butyrate raw materials for milk fat production, require rumen pH above 6.0 to survive and grow.

### Starch

Cereal grains contain starch which is fermented to acid in the rumen, increasing risk of acidosis.

Starch also alters the production of hormones in the body, leading to diversion of nutrients away from the udder and a reduction in milk fat production.





## Diet fat

Adding vegetable oils, or high-fat ingredients such as brewer's grains, can lead to an oil 'slick' in the rumen. The released oil physically coats the diet fibre, preventing its break down by rumen bacteria. This can be avoided by using rumen-protected fat sources such as Volac Wilmar's Megalac or Mega-Fat product ranges.

# Try a Mega-Fat supplement

Volac Wilmar's Mega-Fat range is targeted specifically to improve production of milk fat. These rumen-protected fat supplements contain high levels of the target C16 fatty acids which are proven to stimulate milk fat %, as well as providing energy for increased milk production.

## THE CONCLUSION

Increase milk fat % by increasing fibre and adding a **Mega-Fat supplement.** 

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More milk fat