





Rumen-protected fat, providing energy for improved milk yield and fertility



**CALFAT** More milk, better fertility



## What the expert says...



Calfat was developed to provide energy for high producing cows. It is a calcium salt of fatty acids, providing fatty acids for energy in a form that is insoluble, thus unreactive, in the rumen. Standard fat sources are reactive in the rumen, inhibiting digesting bacteria, and promoting formation of unsaturated fatty acid isomers that cause milk fat depression. The unreactive fatty acids of Calfat are highly digestible in the intestine and contribute directly to milk production with greater energetic efficiency than non-fat energy sources. Research has shown that Calfat increases milk yield more consistently than other fat supplements and contributes to improved fertility.

#### **Prof Don Palmquist**

*Ohio Agricultural Research and Development Center The Ohio State University, USA* 

# What the farmers' say...



Calfat is a key part of the ration for my cows all year round. With an average milk yield of 13,000 litres/cow, energy demands are high and Calfat allows me to increase energy supply without compromising herd health. The farm also maintains high levels of fertility with a calving interval of 392 days, supported by attention to detail and sound nutrition.

#### John Hannan

Friarstown, Crecora, Co. Limerick, Ireland



Calfat has been an integral part of our all-year-round feeding regime for many years to help promote milk yield and fertility. Maintaining body condition score on high yielding cows is very challenging, particularly in early lactation, so boosting the energy density of the diet with Calfat helps support yields while preserving body condition and fertility.

**Richard Best** Marsh Farm, Saltash, Cornwall, UK



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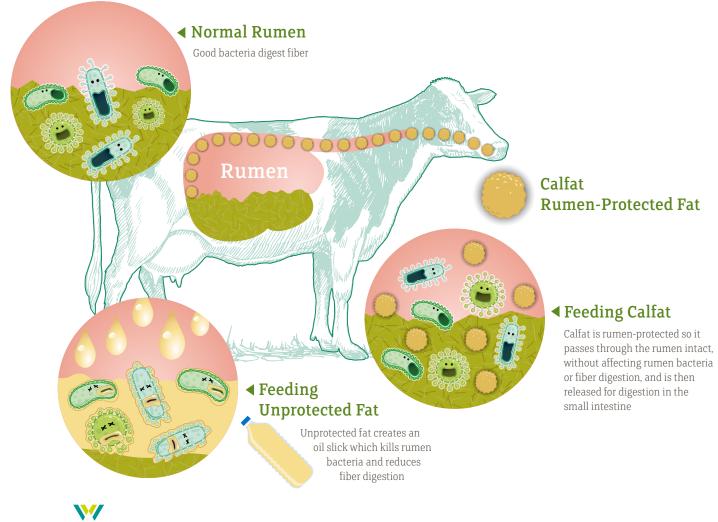


# **Calfat** - More milk, better fertility

### What is Calfat?

- Calfat is a high-energy rumen-protected fat made by reacting fatty acids and calcium to produce a rumen-insoluble fat supplement.
- Calfat avoids the disruption to fiber digestion associated with liquid oils and highoil ingredients in the ration.
- Calfat granules pass through the rumen (ideal pH >6) but are broken down in the acidic small intestine (pH 2.5) to release the fat and calcium for digestion.

## How does Calfat work?



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### Why feed Calfat?

Calfat is a proven ingredient for increasing milk yield and cow fertility. It also supplies fat, one of the essential nutrients for productivity in dairy cows.

With over thirty years of research work at universities and research centers, and practical experience on farms, Calfat is one of the most proven feed ingredients on the market.

### More milk

- The average increase in milk yield, recorded across 18 research studies, is 2.3 litres/cow/day from a standard supplement of 500 g of Calfat.
- This additional milk is produced primarily from the increase in energy supply from Calfat which has an energy concentration over 2.5-times that of cereals.
- Calfat also has the highest measured net energy of lactation (NE<sub>L</sub>) value of any ingredient, indicating its very high efficiency for milk production.
- Adding Calfat to diets improves feed efficiency, producing more milk/kg feed.

### Better fertility

 As a concentrated source of energy, Calfat increases energy supply and is targeted to improve energy balance and reduce body condition loss of dairy cows



to increase the likelihood of successful pregnancy.

As a guideline, conception rate decreases by 10% for every 0.5 unit decrease in body condition score (5-point scale)

- Calfat also increases production of progesterone, the essential hormone for pregnancy, and improves quality of eggs and development of embryos, all of which contribute to improved fertility.
- In research work at the University of Florida (USA), Holstein cows offered 450 g of Calfat/day for 120-days from calving had higher conception and pregnancy rates.

	Control Diet	Calfat- supplemented
Conception rate to 1st service (%)	33.7	45.5
Conception rate to 2nd service (%)	28.8	75.0
Pregnancy rate (%)	52.3	86.4

University of Florida (USA)





### 'Safer' diets

Calfat is an excellent ingredient to help formulate more-balanced rations which can help reduce risk of digestive disorders.

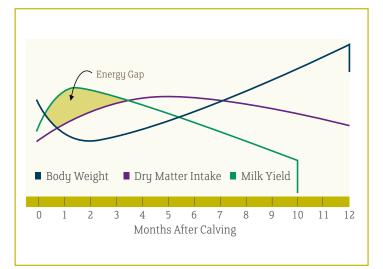
Energy without acid Calfat supplies energy as fat which, unlike starchy sources of energy such as cereals, is not fermented to acid in the rumen. This enables increased energy supply without increasing risk of acidosis and associated health problems such as lameness.

### Other benefits

- As a source of unsaturated fatty acids, adding Calfat to diets reduces the concentration of saturated fatty acids in milk fat.
- Calfat is not fermented in the rumen and reduces production of methane, one of the so-called 'greenhouse' gases. This not only has environmental benefits but also improves efficiency of use of energy in the diet.

## When to feed Calfat?

- Calfat can be fed throughout lactation, but is particularly targeted to early lactation rations.
- Milk yield increases rapidly after calving, while dry matter and energy intake rise at a much slower rate. This leads to an 'energy gap' in early lactation when cows 'milk off their backs' to meet the energy shortfall and therefore lose body condition.
- Calfat increases energy density in rations (more energy per bite) to supply additional energy despite lower intakes.





### How much Calfat to feed ?

Research indicates that the amount of fat required by a dairy cow (neither gaining nor losing body weight) is equal to the amount of fat produced in milk each day.

Example fat requirements		Species	Typical feed rate (g/head/day)'
Milk yield	40 kg/day	Lactating Cows	400-800
Milk fat	4.0 %	Dry Cows	125
Milk fat yield	1.6 kg/day	Beef Cattle	150-500
Diet fat requirement	1.6 kg/day	Sheep & Goats	50-100

Calfat should always be mixed with other ingredients in the diet and can be included as part of a total mixed ration, blend or compound feed.

Ideally Calfat should be incorporated into the ration over a few days to help acclimatize the animal to the new ingredient.

\* For more specific recommendations consult with a nutritionist

## Calfat description

A dry free-flowing granular product with a greater proportion of larger particles.

#### Typical Analysis (%)

#### Fatty Acid Profile (% of total fatty acids)



#### Calfat packaging

Available in 25 kg bags on pallets, mini-bulk bags and true bulk.

#### **Calfat storage**

Store in cool, dry conditions.

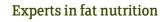


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