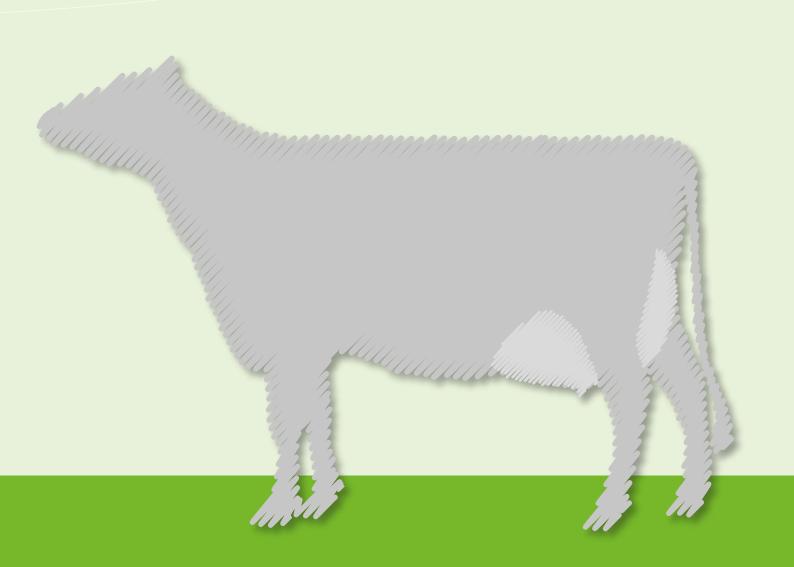
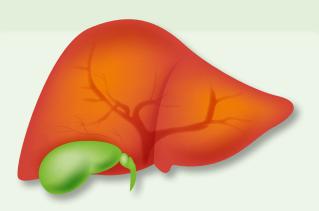
KULMIN LEINEX Aktiv







Active liver protection, ketosis prophylaxis and performance optimisation

- I-carnitine (rumen protected) improves fat burning and energy supply, relieves the liver
- niacin (rumen protected)
 Inhibits fat loss, promotes
 gluconeogenesis and energy supply
- niacin (rumen active)
 promotes energy turnover and protein
 formation in the rumen
- choline, methionine (rumen protected)
 Reduce the risk for fatty liver and ketosis,
 support gluconeogenesis
- methionine, betaine (rumen active)
 Provide more valuable microbial protein, better protein utilisation and better fermentation
- *rape protein* (rumen protected) improves protein supply (usable protein)

Strong per stable me



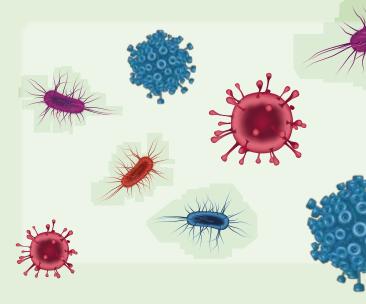
EnhancemenIncreasing of p

Increasing of n composition



Strengthening the immune system

Omega-3 fatty acids increase the power of the immune system and support the physiological regulation in inflammation.



rformance etabolism





Optimisation of rumen fermentation

Specially processed linseed high in Omega-3 fatty acids, provides

• stabilisation of pH

(protection against acidosis)

- inhibitory effect on lactic acid bacteria
- better digestion of free fatty acids
- Greater permeability of the cell membrane
- Less oxygen ions in the rumen

• better protein and energy utilisation

- Reduction of protozoa
- More microbial protein and energy, energy efficiency increases by 10 - 15 %

• better rumen fermentation

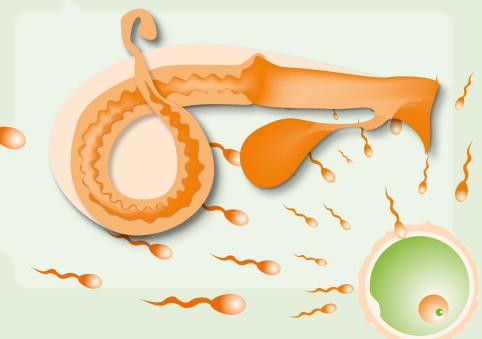
- reduction of nitrogen turnover
- less competition for the desired rumen flora
- increased fiber digestion
- reduction of methane formation
- negative effects on the flora of lactic acid (anti-acidosis effect)

nt of performance

nilk yield and milk

Improvement of fertility

Omega-3 fatty acids are the precursor of prostaglandin and contribute to the improvement of fertility.



KULMIN LEINEX Aktiv

Special supplementary feed for dairy cows for the transit phase and for the early and high lactation to support the liver metabolism, optimise rumen fermentation and reduce the energy deficit.

The start of lactation causes a natural process in dairy cows to mobilise body resources to supply their descendants with adequate nutrients.

This system works as long as the mobilised fatty acids can be excreted as milk fat or can be converted in the liver for further use.

If the adaptation of metabolism fails, the fat mobilisation leads to increased lipid levels (NEFA) and ketone bodies in the blood.

These metabolic disorders have a negative effect on feed intake and may end up like in a downward spiral in an acute ketosis.

The consequences of subclinical ketosis:

- decreased immune response
- increased risk of mastitis and infection
- fertility problems
- decreasing milk yield
- poor persistence
- reduced life performance
- high replacement rate

The transit phase is also decisive for performance, health and longevity. Obesity in the dry period leads to disturbances of the rumen and liver metabolism; by fat accumulation in the liver the function of this central metabolic organ is severely impaired

KULMIN LEINEX Aktiv supports the high performance dairy cow from transit phase to high lactation:

Special processed linseed high in Omega-3 fatty acids provides:

- *stabilisation of pH* (protection against acidosis) in the rumen
 - inhibitory effect on lactic acid bacteria
 - better digestion of free fatty acids
 - Greater permeability of the cell membrane
 - Less oxygen ions in the rumen

better protein and energy utilisation

- Reduction of protozoa
- More microbial protein and energy, energy efficiency increases by 10 - 15%

better rumen fermentation

- reduction of nitrogen turnover
- less competition for the desired rumen flora
- increased fiber digestion
- reduction of methane formation
- negative effects on the flora of lactic acid (anti-acidosis effect)

Strengthening the immune system

Omega-3 fatty acids are an important part of cell membranes and the precursor of relevant substances in cell metabolism, i.e. higher preparedness, physiological regulation in inflammation, Precursor of prostaglandin / fertility

Special additives for liver protection, ketosis prophylaxis and performance optimisation:

- I-carnitine (rumen protected) improves fat burning, relieves the liver (fatty liver), enhances energy supply
- niacin (rumen protected)
 Inhibits fat loss, promotes gluconeogenesis and energy supply
- niacin (rumen active)
 promotes energy turnover and protein formation in the rumen

- choline, methionine (rumen protected)
 Reduce the risk for fatty liver and ketosis, support gluconeogenesis
- methionine, betaine (rumen active) more valuable microbial protein, better protein utilisation, better fermentation
- rape protein (rumen protected) improves protein supply (usable protein)

The main effects of **KULMIN LEINEX Aktiv:**

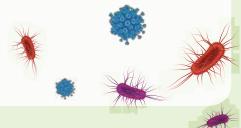
- active liver protection
- optimisation of rumen fermentation
- better feed efficiency
- higher fitness and stability in performance
- improved fertility, longer life performance
- increased milk yield and milk composition
- better health status
- higher well-being
- sustainable success in dairy farming

Feeding recommendation for **KULMIN LEINEX Aktiv:**

1. transit phase

(about 3 weeks before calving): 1 kg per cow per day.

- 2. early lactation(up to 4 weeks after calving):1 to 1,5 kg per cow per day.
- 3. high lactation(5-10 weeks after calving):1 kg per cow per day
- ⇒ The duration depends on the amount and duration of negative energy balance!
- ⇒ The amount depends on the quantity and quality of grass silage used (omega-3 fatty acids!).





Livestock-friendly concepts.

Healthy growth.

Ecological responsibility.
Economic success.







Kronacher Straße 13 · 95326 Kulmbach Tel. 09221 806 - 0 · Fax 09221 806 - 188 www.bergophor.de www.hohburg-mineralfutter.de