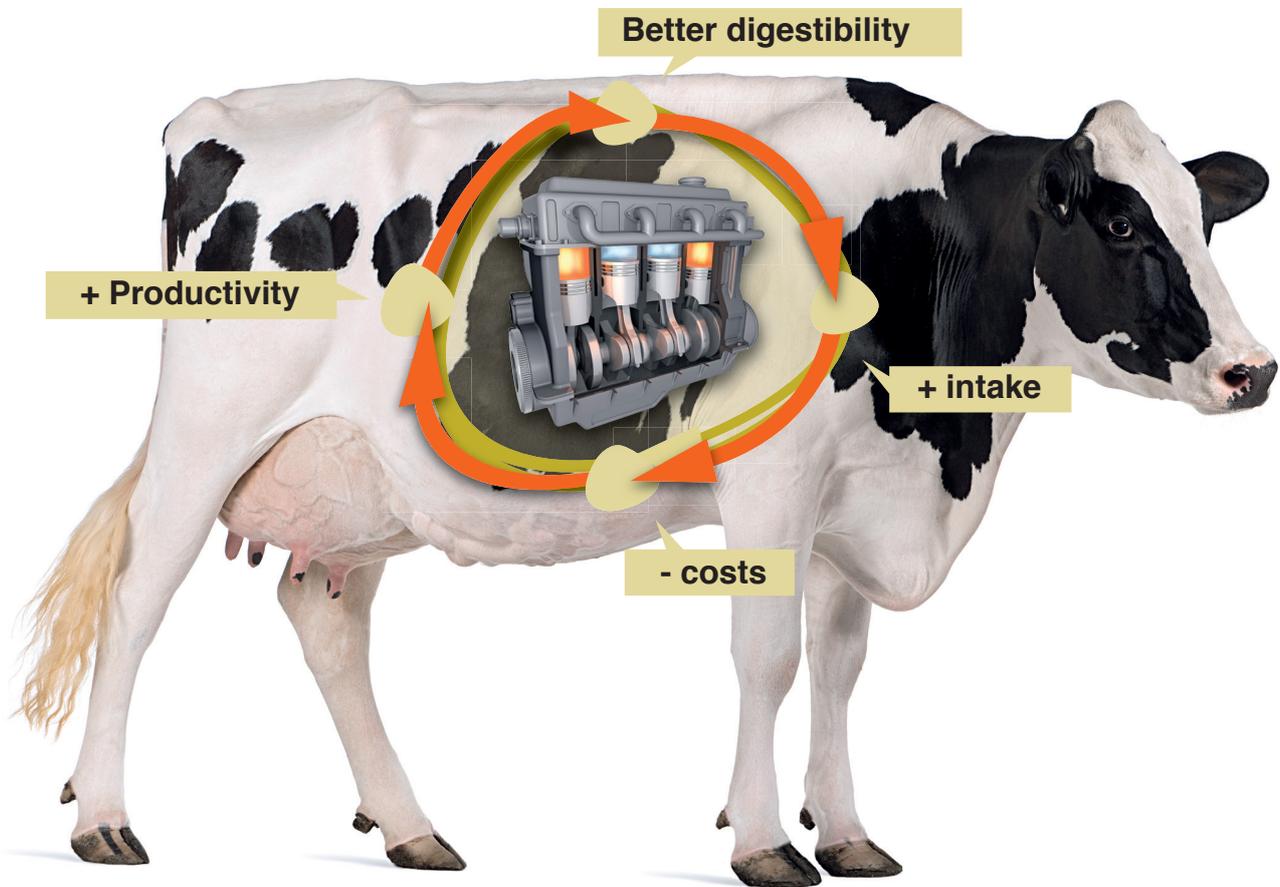


ESSENTIAL

The natural additive for the perfect ruminal balance

- Stabilizes rumen pH
- Prevents both clinical and sub-clinical acidosis
- Increases food intake and controls ketosis
- Increases digestibility
- Acts against protozoa and bacteria Gram + (*coccidia* and *clostridia*)
- Better adaptation to heat
- Probably the best natural antioxidant



+ milk production in dairy cattle

+ daily weight gain and greater performance in beef cattle

→ No residues in milk nor meat

→ Can be used at any time throughout the lifetime of the animal

→ Lacks toxicity, environmentally friendly

→ Stable at extrusion temperature

→ Easy administration

Exclusive product by

nutcat
aditivos · calidad

Importation, exportation and sale of additives and special products for animal feed
Research and studies for the use and application of the products

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Management System
ISO 22000:2005
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ESSENTIAL

Essential is based on phenolic compounds derived from oil cashew. Functional oils are natural oils that have functions beyond their nutritional value. Modern dairy production systems are based on high intakes and productions.

However, challenges such as ruminal acidosis and insufficient intakes negatively affect the profitability by decreasing fiber digestibility, microbial protein production and decreasing fertility.

Essential helps to regulate ruminal pH by controlling bacterial flora because it acts as an ionophore. The active components of **Essential** destabilize the cell membrane of protozoa and Gram+ bacteria.

Essential helps to control ruminal pH and **prevents both clinical and sub-clinical acidosis.**

The effects of controlling ruminal pH are extremely important to maximize intake. High ruminal pH results in:

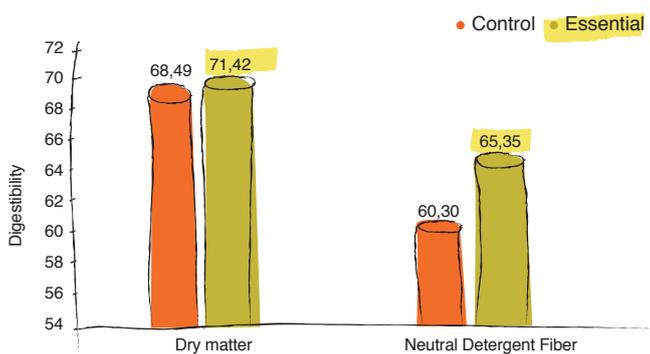
- **Better intake**
- **Better fiber and starch digestion**
- **Better protein utilization**

It keeps intestinal mucosa healthier preventing ulcers and diarrhea

Essential reduces heat stress by increasing oxide nitric production thus causing peripheral vasodilatation.

It decreases wind chill and the animal produces a feeling of increased appetite.

Better adaptation to heat.



Effects of Essential supplementation on digestibility (Branco et al., 2008)

Use in all species

DOSAGE

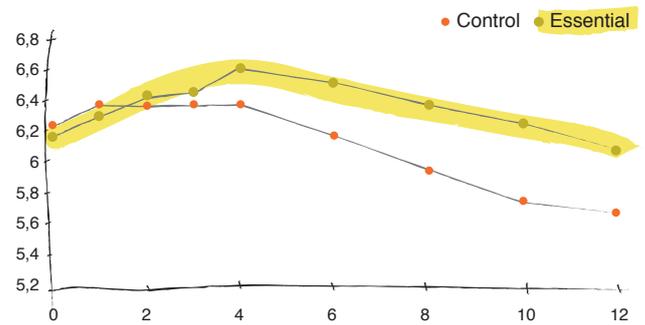
Dairy cattle: 10 g/cow/day; Calves: 0,5 kg/t; Lambs: 0,5 g/t;
Sheep and Goats: 1,5 g/animal/day

Cashew



The perfect balance for the right fermentation of the rumen

Studies conducted at different universities have shown that the active components of **Essential** are antioxidant and anti-inflammatory. The effect of increasing the antioxidant status of a cow might result in better immunity and fertility.

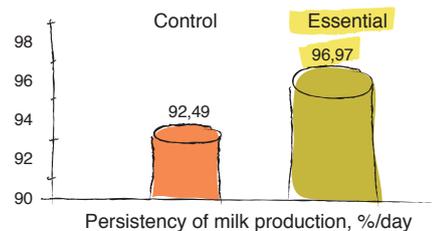


Effects of Essential on ruminal pH in calves (Branco et al., 2006)

By controlling bacterial flora in the rumen, volatile fatty acid production is increased, improving **propionic acid** production. Propionic acid is a precursor of the glucose, and so **Essential** provides a **greater energy input.**

mM	Monensina	Essential
Acetic acid	48,56	56,09
Propionic acid	27,01	34,22
Butyric acid	15,38	16,64
VFAs total	97,93	108,26

Effects of Essential on volatile fatty acid (VFAs) production. High starch diet (A.F. Branco and S.M. Coneglian, Iowa State University; 2009)



Effects of Essential on persistency of milk production in a dairy farm with 600 milking cows

PRESENTATION

Solid: bags 15 kg
Liquid: drum 950 L