ActiSaf

Benefits from feed to food

Veterinarian

ActiSaf

Control rumen ecosystem balance to prevent metabolic disorders

Nutritionist

ActiSaf

Increase feed assimilation to maximise productivity

Farmer

ActiSaf

Optimise herd management to deliver full genetic potential

Feed miller

ActiSaf

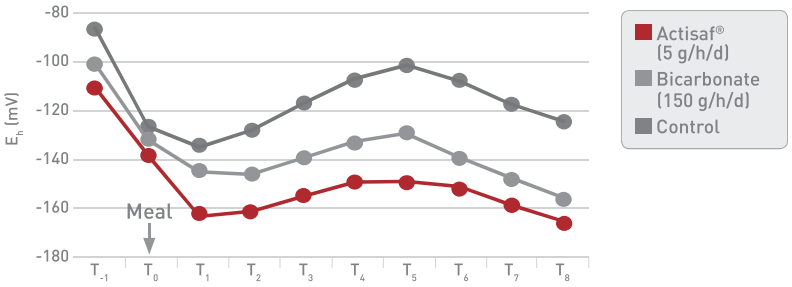
Ensure resistance to processing and compatibility with other feed ingredients

Improve rumen health by preventing metabolic disorders

Actisaf® added to the ration of lactating dairy cows challenged with high-concentrate diet has the same ability to regulate ruminal pH as sodium bicarbonate. Sodium bicarbonate had smaller effects than live yeast on ruminal Eh: it only buffers excess acid in the rumen whereas Actisaf® increases the relative abundance of fibrolyitic and lactic-acid-utilizing bacteria by strengthening reducing conditions of ruminal environment.

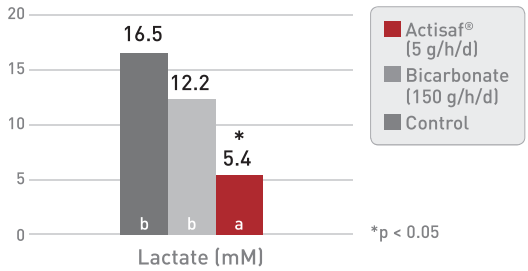
Eh

Redox potential (4)

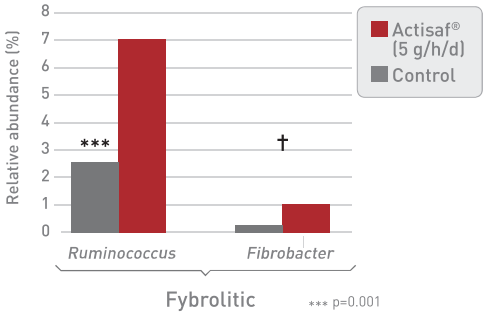


Flora

Lactate-utilizing bacteria (4)

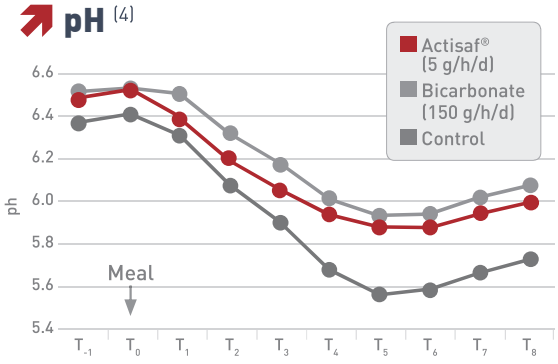


Fibre-degrading bacteria (3)

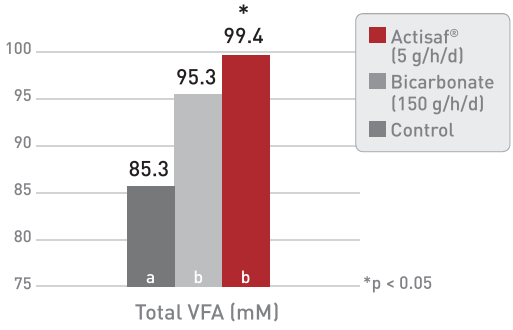


pH

pH (4)



Volatile Fatty Acids (4)



Reduced risk of acidosis

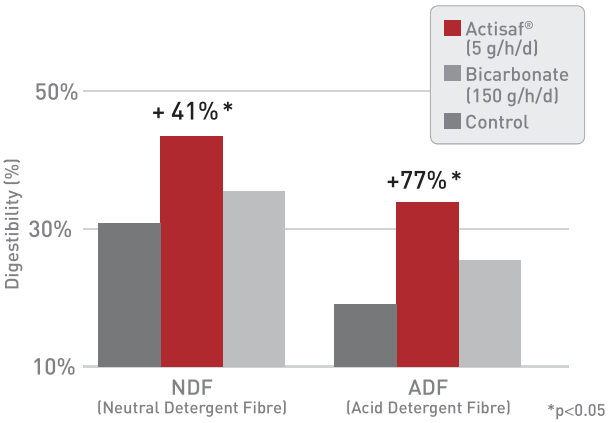
Increased digestibility

(4) Marden et al., 2008. How does live yeast differ from sodium bicarbonate to stabilize ruminal pH. J Dairy Sci.:91: 3528-3535.
(3) Pinloche et al., 2013

Improve digestibility for feed efficacy

Fibre digestibility [4]

The lower redox potential due to Actisaf® stimulates fibrolytic bacteria, improving feed digestibility.



Feed conversion efficiency

The effects of Actisaf® visually result in:

- fewer non-digested particles in the dung (grains, fibre)
- more homogeneous dungs

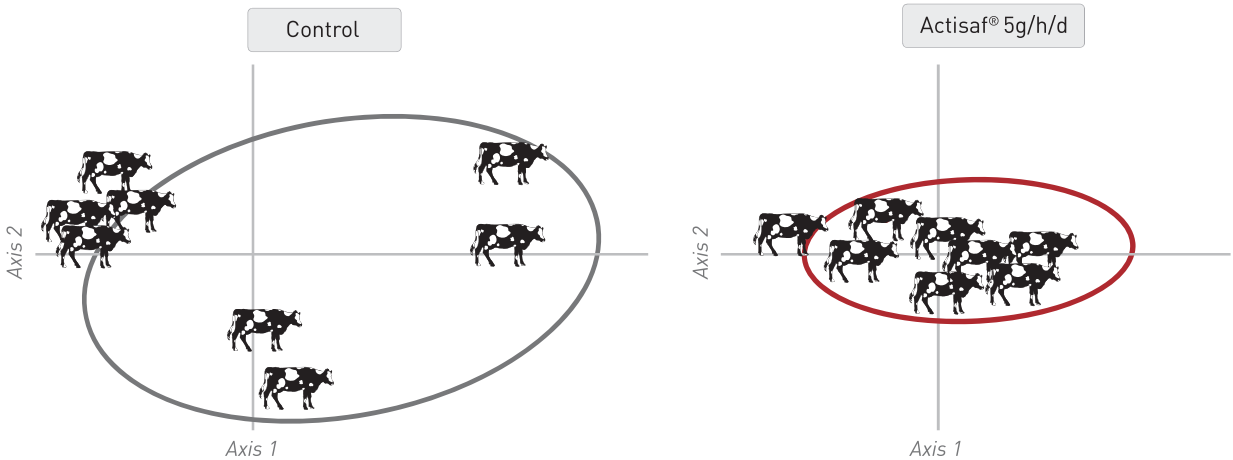
Control period *Actisaf® period*

Consistency in herd management [5]

The role of Actisaf®, as a potent microbiota modulator in ruminants, allows a significant decrease in between-cow variability of rumen bacterial communities, leading to a stabilising effect of live yeast on microbiota.

Effect of Actisaf® supplementation on bacterial variability in the rumen of dairy cows.

A total of 177 genera of rumen bacteria were identified and grouped into two groups. Actisaf® supplementation decreases between-cow variability of the rumen bacterial community. This leads to a stabilising effect on rumen microbiota.



Heterogeneous microbiota between cows **Homogeneous microbiota between cows**

Principal Component Analysis performed on the 177 identified genus relative abundance

(4) Marden et al., 2008. How does live yeast differ from sodium bicarbonate to stabilize ruminal pH. J Dairy Sci.:91: 3528-3535.
(5) Julien C., Cauquil L., Combes S., Bouchez O., Marden JP., Bayourthe C. Study of the effect of Live Yeast *Saccharomyces cerevisiae* (CNCM I-4407) on ruminal bacterial community in lactating dairy cows using 454 GS FLX pyrosequencing. 8th INRA-RRI symposium, June 17-20, 2012, Clermont-Ferrand, France

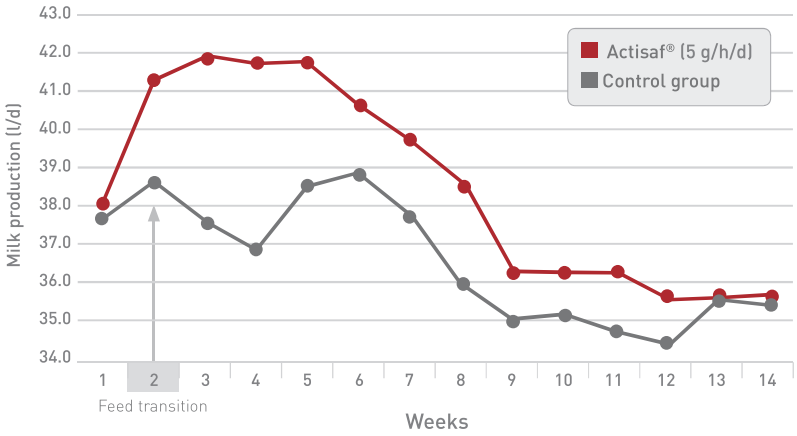
Farmer

Maximise herd performance through herd management

Maintain production during feed transition [6]

Actisaf® reduces the between-cow variations in the microbiota, balancing and stabilising the rumen ecosystem. This stabilisation of the rumen ecosystem leads to a more consistent and steady response to diet changes and other stress conditions (such as heat stress). When added to the feed, Actisaf® secures the cow's performance and response to any stress or challenges..

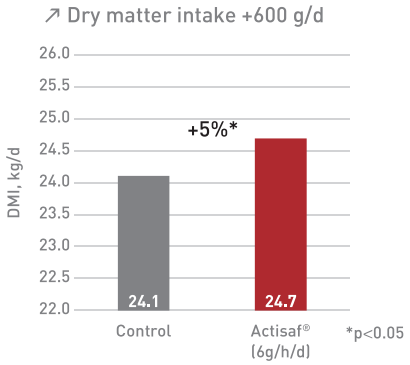
During a change in concentrate feeding, a milk drop was observed in the control group while Actisaf® group maintained high and stable performance.

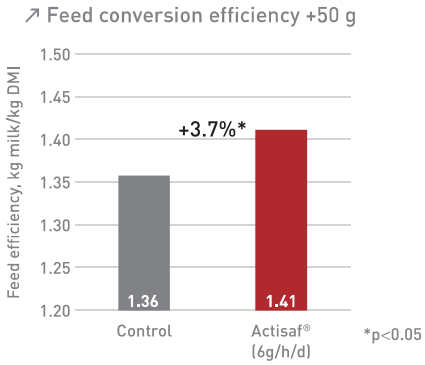


Performance under challenging conditions [7]

Actisaf® also helps to tackle any kind of stressful challenges in the herd environment such as heat stress issues.

Effect of Actisaf® in intense heat stress conditions (THI between 69 and 79) in high producing dairy cows (around 40 kg/day) improved feed intakes and feed conversion efficiency.





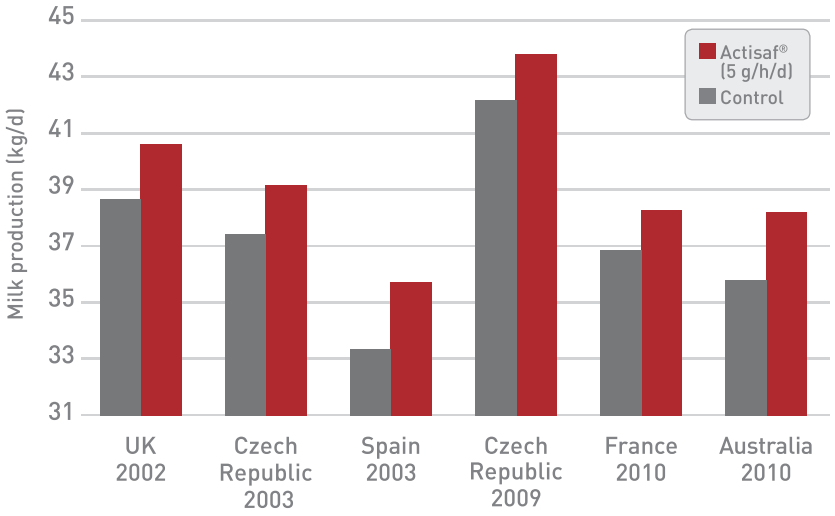
(6) Data on file, 2010.
(7) Moallem et al., 2008. The effects of live yeast supplementation to dairy cows during the hot season on production, feed efficiency, and digestibility. J dairy Sci.:98: 1-12.

Deliver full genetic potential of the herd

By stabilising and balancing the rumen environment, Actisaf® improves the digestion and nutrient availability for the cow and thus improves the cow's productivity.

Repeatable effect of Actisaf® supplementation in dairy cows [8]

A series of trials have shown that on average cows receiving Actisaf® increased milk production by 1.86 kg/day.

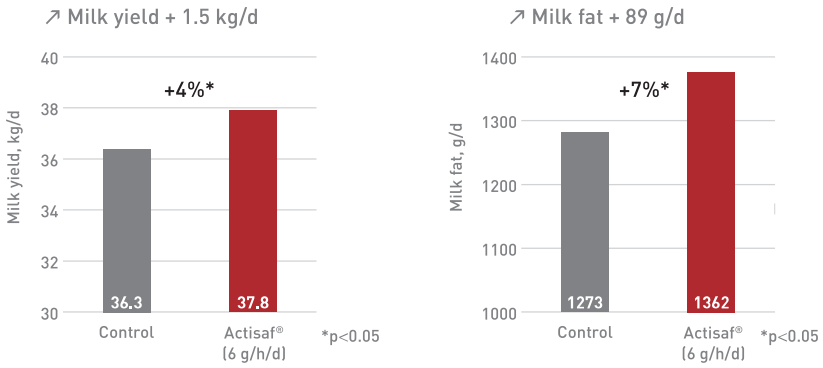


> Actisaf® increases milk production by 1.9 kg/d

Production in heat stress situations [7]

In multiple trials over the years, in different parts of the world, Actisaf® proved its performance and benefits, even in heat stress conditions.

Effect of Actisaf® in intense heat stress conditions (THI between 69 and 79) in high producing dairy cows (around 40 kg/day) increased yield and milk fat content.



[7] Moallem et al., 2008. The effects of live yeast supplementation to dairy cows during the hot season on production, feed efficiency, and digestibility. J dairy Sci.:98: 1-12.
[8] Data on file.