



Levucell[®] SC

Rumen Specific Yeast

LEVUCCELL SC[®] RUMEN SPECIFIC LIVE YEAST

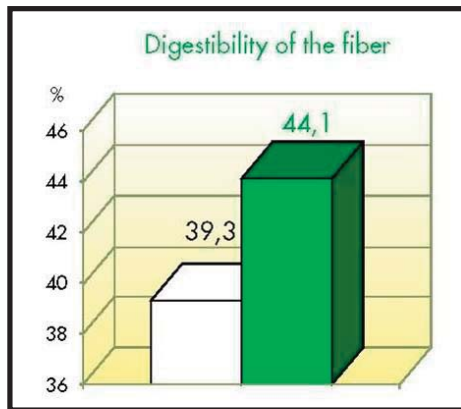
Levucell SC is a natural and well documented rumen specific live yeast (*Saccharomyces cerevisiae* CNCM I-1077). Levucell SC is classified as an active dry yeast; the strain has been selected among thousands of strains for its high capacity to improve rumen function. It has also been validated by leading research centers and more than 50 scientific publications.

LEVUCCELL SC[®] MODE OF ACTION

Levucell SC for beef improves rumen health and function through several mechanisms:

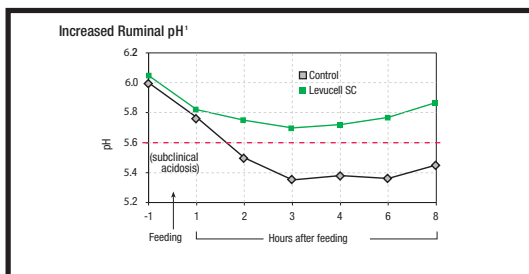
- #1 Increased fiber digestibility
- #2 Increased rumen pH, reducing the incidence of acidosis
- #3 Improved rumen health

#1 INCREASED FIBER DIGESTIBILITY



The rumen specific live yeast, Levucell SC, stimulates fiber digesting microbes, their enzymatic activity, and fiber digestibility; this results in maximizing energy from the forage and the diet with improved feed efficiency.

#2 INCREASED RUMEN PH, REDUCED INCIDENCE OF ACIDOSIS



Levucell SC increased rumen pH. Subclinical acidosis occurs when the rumen pH falls below 5.6.

Levucell SC for Beef



#3 IMPROVED RUMEN HEALTH



Levucell SC improves rumen function and health.

Treatment	Healthy Rumen Wall*	Rumen Wall Lesions*
Control	63.3%	36.7%
Levucell SC	83.3%	16.7%

Values expressed as a percentage of animals per treatment
Erasmus, University of Pretoria



Levucell[®] SC

Rumen Specific Yeast

Levucell SC for Beef

LEVUCCELL SC[®] FOR CALF



Levucell SC accelerates rumen development
Improves intake and feed digestion
Strengthens natural defenses
Optimizes animal health

The use of the Levucell SC has been shown to accelerate the establishment of the microbial communities (cellulolytic bacteria, anaerobic fungi and protozoa), increase fiber digestion, positively regulate rumen pH and improve rumen function.

The beneficial effects of accelerating rumen development by adding LEVUCCELL SC are increased feed intake, weight gain and a lower incidence of digestive problems. This was clearly shown in a calf trial at University of California, Davis. (Santos et al 2003).

PRODUCT SPECIFICATIONS

Guaranteed Analysis

Contains a source of live (viable) naturally occurring microorganisms. **Levucell SC20**: 20 billion CFU/g minimum (*Saccharomyces cerevisiae* I-1077) **Levucell 10ME**: 10 billion CFU/g minimum (*Saccharomyces cerevisiae* I-1077).

Ingredients

Active dry yeast

Storage and Handling

Store in a cool, dry area. Keep tightly sealed when not in use.

Expiration Date

Shelf life is 16 months from date of manufacture when stored as directed. Manufacturing date is stamped on the package.

Feeding Rates

- Levucell SC20: Apply to feed at the rate of 400 mg (0.4 grams) per head per day
- Levucell SC10ME: Apply to feed at the rate of 800 mg (0.8 grams) per head per day.
- Levucell SC10ME is micro-encapsulated and can be pelleted.

Packaging

PACKAGE	SHIPPING UNIT
Levucell SC20	
500 g foil pouch	20 x 500 g
20 kg box	1 x 20 kg
Levucell SC10ME	
20 kg box	1 x 20 kg

LEVUCCELL SC[®] FOR BEEF



Levucell SC for beef maximizes growth potential through:
Increased average daily weight gain
Optimized feed efficiency
Reduced overall morbidity.

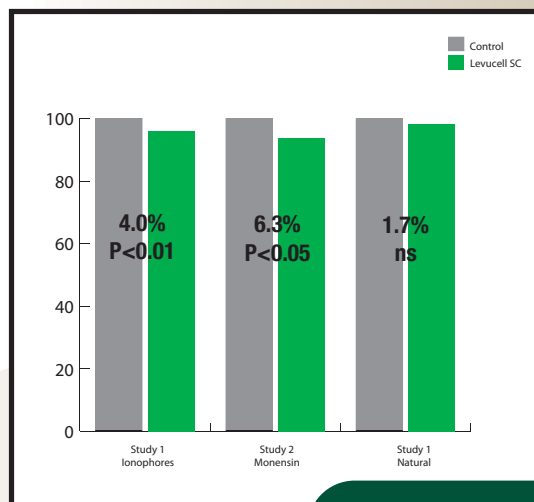
Two recent meta-analysis summarized the results of international trials:

Study 1 : Erasmus (Pretoria Uty, JAM-ADSA 2009) measured the effect of Levucell SC fed with or without monensin (15 trials in 9 countries).

Study 2 : Elanco-Vetlife / Lallemand (internal report 2009) reported the effect of Levucell SC on natural or conventional production systems (19 studies).

Levucell SC improves feed efficiency and average daily gain in growing cattle fed high roughage diets, as well as in natural finishing cattle. In conventional diets, Levucell SC has a synergistic affect with ionophores.

The effect of feeding Levucell SC results in additional revenue of \$13.50/head with a trend for an even higher return with conventional diets: + \$17.50/head; Natural programs return \$9.67.



+\$13.50 Added Value Per Head

Lallemand has developed a patented micro-encapsulation system to ensure that Levucell SC remains viable through the pelleting process.



Ruminant Probiotic - Beef