

ProTernative[®] *Advantage Plus*

SPECIFIC FOR YOUR SUCCESS

Lallemand Animal Nutrition is a primary manufacturer that researches, develops and markets microbial strains that are specific and scientifically selected for consistency and enhanced nutritional performance. In other words, they are the right microbial strains for the right applications.

- Lallemand has a bank of more than 1,000 different strains of bacteria and yeast that drive the innovation and product development pipeline.
- The efficacy of both probiotics and prebiotics are entirely linked to the strain identity, growth, manufacturing and quality-assured production processes and practices.



Lallemand Animal Nutrition is committed to optimizing animal performance and well-being with specific natural microbial product and service solutions.

A COMPLEMENTARY APPROACH

Modern dairy cattle have been bred to be high-performance animals and, unwittingly, the slightest change can add undue stress to the system.

ProTernative[®] *Advantage Plus* is a specific complementary formulation of ProTernative – the naturally occurring, active dry yeast probiotic, *Saccharomyces cerevisiae boulardii* CNCM I-1079 – plus a unique yeast extract that has consistently high levels of prebiotic properties for use in all life stages of beef and dairy cattle.

The proprietary specialized formulation contains:

ProTernative, *S. c. boulardii* CNCM I-1079, a unique, naturally occurring active dry yeast probiotic that has been shown to favor beneficial microbes in the lower gastrointestinal tract. This has been demonstrated in multiple species, including cattle – especially during periods of stress.



A distinctive yeast extract that is purified from a unique strain of *S. cerevisiae* and results in a reliable and consistent product. The yeast extract is produced with a specialized manufacturing process that encourages more branch-chain sugar molecules and an abundant mannoprotein matrix that is readily-available for the bacterial communities within the lower gastrointestinal tract.

This multi-faceted approach is just what high-performance animals need to deal with day-to-day stressful situations.

ProTernative® *Advantage Plus*

STRESS CAN COME IN MANY FORMS, INCLUDING:

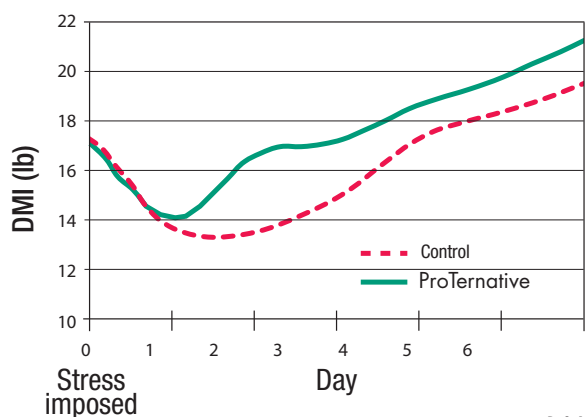
- Weaning
- Transition
- Illness or vaccination
- Changes in feed or diet
- Pen movements and shipment
- Weather related stress (heat or cold)

HEALTHY CATTLE ARE BETTER EQUIPPED TO FIGHT STRESS

In research trials, animals fed ProTernative had fewer negative effects of stress, which resulted in:

- Improved feed uptake¹
- Reduction in therapy usage¹
- Lower mortality¹
- Improvement in post-fresh fecal consistency
- Reduction in post-fresh fecal starch loss

Calves fed ProTernative had greater feed intake when they needed it most¹



$P < 0.1$

¹Keyser et al., 2007. J. Anim. Sci. 85: 1264-1273

PROTERNATIVE ADVANTAGE PLUS A SPECIFIC, COMPLEMENTARY FORMULATION

1. Includes naturally occurring, active dry yeast probiotic, *Saccharomyces cerevisiae boulardii* CNCM I-1079, plus a unique yeast extract with consistently high levels of prebiotic properties for use in all life stages of beef and dairy cattle.
2. Available as a Titan product, which is the patented micro-encapsulation technology that allows for the product to be pelletized and remain viable.
3. A ready-to-use formulation that is:
 - Easy-to-blend
 - Highly palatable
 - Available in a 20 kilogram box - 40 boxes to a pallet
 - Resulting in 1,600 – 12.5 gram feedings/box
 - Each 12.5 -gram feeding supplies 10 billion colony-forming units (CFU) of *S. c. boulardii* CNCM I-1079

PROTERNATIVE ADVANTAGE PLUS FITS ANY MANAGEMENT PROGRAM

This highly palatable, ready-to-use formulation can be used as:

- As a top dress
- In on-farm mixing
- In a feed mill premix
- As a supplement
- Within pelleted feeds (only when using the Titan product)

Not all products are available in all markets nor all claims allowed in all regions. ProTernative is a registered trademark of Lallemand Specialties, Inc.