

Byo-DigestAid

PRODUCT DESCRIPTION

Nutritional Supplement for Beef Cattle

Byo-DigestAid is a proprietary blend of *Aspergillus oryzae* 458, *Bacillus subtillis* 681 and *Trichoderma viride* 007 fermentation products for normal fiber, starch and other nutrient digestion in beef applications. Byo-DigestAid has shown effectiveness in cattle on pasture and in feed yard settings and exhibits normal weight gain, performance and feed efficiency. Reports show fiber digestion helps in maintaining normal body temperatures during periods of heat stress. It has also been shown to be effective in other ruminant species such as sheep and goats.

TECHNICAL

<u>Digestibility</u>: The use of microbial-based feed additives, which includes cultures of specific organisms, metabolic byproducts and enzymes to alter rumen fermentation and improve animal performance have increased dramatically in recent years. This is partly in response to a desire for more "natural" solutions and a move from additives that are antibiotic in nature. A second driving factor is an increased need to find tools which enhance feed efficiencies as a result of ever increasing feed costs. Products of this nature have been shown to improve the digestibility of various nutrients including fiber components, proteins, and fats in both forages and feed grains.

The use of microbial fermentation products of *Aspergillus oryzae, Bacillus subtillis* and *Trichoderma viride* and their associated metabolic products and enzymes in ruminant feed have been shown to help maintain both starch and fiber digestibility. This may contribute in energy availability to the animal and a subsequent normal weight gain, milk production and feed efficiency.

BENEFITS

Nutrient availability of the animal's diet is largely associated with the availability of critical digestive enzymes which facilitate the breakdown of feed and forage components and the basic molecular structures. The animal's ability to digest and utilize a given feed or forage is reflected by its performance in terms of weight gain, milk production and reproduction. Microbial Fermentation Products (MFP) such as *Aspergillus oryzae*, *Bacillus subtillis* and *Trichoderma viride* include enzymes such as cellulose and amylase which are known to help maintain the digestive process. The MFP combination in Byo-DigestAid has proven benefits which include:

- Utilization of high fiber ingredients and by-products
- Competitive environment in the small intestine for undesirable organisms
- Help maintain microbial balance in the rumen
- Help to maintain the overall digestive system environment

FEEDING RECOMMENDATIONS

Adult Cattle: 5 to 10 ml/day/head	Feedlot Cattle: 3 to 5 ml/head/day
Replacement Heifers: 3 to 5 ml/head/day	Calves: 1 to 2 ml/head/day