

Background to product design

Farm animals have been genetically improved to produce more lean meat with less fat, have increased milk yields and give more egg production. These benefits can be achieved in practical farm situations only when the animal is maintained in a healthy state. The maximum use of nutrients supplied by the diet will only occur when the intestinal tract is operating at optimum efficiency. This involves maintenance of ideal acidity (pH) throughout the digestive tract, maximum production of digestive enzymes, a healthy intestinal structure, a balanced high population of beneficial bacteria to control the numbers and types of potential pathogenic bacteria. The harmful bacteria can produce toxins that stimulate a defensive immune reaction by the animal and this diverts dietary nutrients away from productive purposes. Biological anti-oxidants and anti-inflammatory substances can help to minimize these adverse effects. Maintenance of feed intake with optimal digestion of the feed will ensure the animal receives all the nutrients needed for optimal growth, reproduction and output of milk and eggs.

The product composition

No single feed ingredient can maintain the ideal balance of all critical factors in the intestinal tract. A blend of nutritional feed supplements is required.

The key ingredients used in the blended formula of PERFORMANCE BOOSTER are:

- a) Components derived from heat treated bacterial organisms and yeast cells
- b) Oligosaccharides
- c) Feed enzymes
- d) Herbal extracts

Primary benefits of the components

Bacteria and yeast cell extracts can assist in the:

- production of organic acids, stabilizing the gastric pH
- stimulation of rumen micro-organisms
- maintenance of optimum balance of intestinal microflora
- reduction of effects related to external stress factors
- decrease in gastric oxygen status to minimize the effect of harmful bacteria

Oligosaccharides can:

- stimulate the growth of beneficial bacteria (Lactobacilli and Bifidobacter sp.)
- prevent pathogenic bacteria adhesion to the lining of the intestinal tract
- increase organic acid production
- enhance the immune function

Enzymes help to improve feed efficiency by:

- breaking down complex starches, non-starch polysaccharides (fibres) and proteins
- improving feed digestion and absorption
- increasing the uptake of important vitamins, trace minerals, amino acids and fatty acids

Herbal Extracts benefit many metabolic functions including:

- minimize anti-inflammatory reactions
- provide anti-oxidant properties to reduce cell damage
- anti-stress reaction (calming effects)
- optimal functioning of the liver
- enhance immune system
- reduce the incidence of digestive problems (diarrhea)

RECOMMENDED DOSE LEVELS FOR THE PRODUCT					
<u>Species</u>	<u>Type</u>	<u>Environment</u>	<u>Condition</u>	<u>Dose gm/head/day</u>	<u>Dose kg/tonne of feed</u>
Cattle	Dairy	Lactating	Good	10	
		Dry	Good	5	
	Feed Lot		Good	10	
			Sick/Stressed	15	
Sheep	General	Feedlot	Good	2.5	
			Sick/Stressed	15	
		Ship	Any	3	
Horses	Racing	Intensive	Good	5	
	Equestrian	Intensive	Good	5	
	Others		Good	2.5	
			Sick/Stressed	15	
Poultry	Broilers		Day 1-7		2
			From day 8		1
	Layers				1
Aquaculture	Starter				2
	Other				1
Pigs	Lac. Sows				1
	Gilts				1
	Dry Sows				½
	Creep				4
	Weaner				2
	Porker				1
	Finisher				1
Domestic Pets	Any				10



PERFORMANCE BOOSTER

Unit 5/44 Cheviot Road
SALISBURY SOUTH SA 5106
AUSTRALIA
P: (08) 8182 3510
F: (08) 8182 3509
W: www.nueranutrition.com.au