

BENEFITS OF FEEDING 4-IN-1 PLUS PELLET

- A more powerful antacid than sodium bicarbonate.
- Maintains a healthy stomach and gastro intestinal tract.
- Maintains healthy bones by providing bioavailable calcium.
- Controls lactic acid build up.
- Maintains a healthy immune system.

Chitosan is a non-toxic polyglucosamine, widespread in nature, which is deacetylated to varying degrees form of chitin, a component of exoskeleton of shrimps, crabs and insects. Because chitosan contains reactive functional groups, that is, amino acids and hydroxyl groups, it is characterised by antimicrobial, anti-inflammatory, anti-oxidative, antitumor, immunostimulatory and hypocholesterolemic properties when fed as dietary additive for performance animals.

Swiatkiewicz, S., Swiatkiewicz, M., Arezewska-Wlosek, A. and Jozefiak, D. (2015), Chitosan and its oligosaccharide derivatives (chito-oligosaccharides) as feed supplements in poultry and swine nutrition. *J Anim Physiol Anim Nutr*, 99: 1-12. doi:10.1111/jpn.12222

INGREDIENTS

Dehydrated Seaweed Meal (Rhodophyte), Yeast Culture
Brewers Dried Yeast, Mineral Oil, Processed Grain By-Products, Cane Molasses, Soybean Oil, Propionic Acid, Amorphous Silicon Dioxide, Verxite, Hydrated Sodium Calcium Aluminosilicate, Water & Ammonium Hydroxide, Sodium Saccharin, Carbohydrates, Vanillin, Glycyrrhizin, Mixture of flavoring compounds, Sugar, Dextrose, Silicon Dioxide, Natural and Artificial Flavor.

DIRECTIONS FOR USE

- Feed at the rate of 1/2 lb. per head per day.

NOTE: Divide the above feeding recommendation equally among the daily feedings, or feed during the first feeding of the day.

Manufactured for

ADVANTAGE EDGE NUTRITION, LLC.
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Skeletal injuries are a major concern in athletic horses. It is known that nutrition can play a critical role in bone health.

STUDY DETAILS

The study investigated 14 yearling Arabian horses: 4 geldings and 10 fillies. The study ran for a duration of 112 days.

Test 4-in-1 Plus vs. Limestone (calcium carbonate)

- Mineralization of MCIII
- Markers of bone metabolism

Bone Markers

- Osteocalcin: a marker of bone formation
- Serum CTX-1: a marker of bone resorption

TREATMENTS

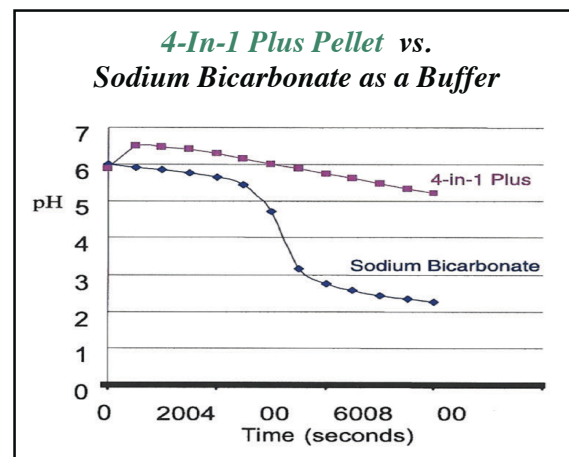
4-in-1 Plus: 75g/day/horse - provides 15g Calcium and 0.07g Phosphorus

Limestone: 39.5g/day/horse - provides 15g Calcium and 0.008g Phosphorus

RESULTS

The 4-in-1 Plus treatment group showed an increase in CTX-1 ($P=0.001$). This group also had a trend towards increased osteocalcin ($P=0.07$).

Bone Marker	4-in-1 Plus	Control	Difference
Osteocalcin	53.3 ± 2.1 ng/ml	47.1 ± 2.1 ng/ml	$P = 0.07$
CTX-1	0.387 ± 0.016 ng/ml	0.293 ± 0.014 ng/ml	$P = 0.001$



Advantage Edge
4-In-1 Plus Pellet™

A powerful antacid, pH balancer and natural source of bioavailable calcium

IMPROVE YOUR ODDS

INVEST IN
EQUINE HEALTH

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GET THE EDGE

WHAT IS ADVANTAGE EDGE 4-IN-1 PLUS PELLET?

4-In-1 Plus for horses reduces lactic acid build up and maintains a higher pH over a longer period, resulting in twice the level of acid being buffered, compared to sodium bicarbonate.

TRIALS SHOW EXCELLENT RESULTS

Recent trials showed that racehorses fed 4-in-1 Plus for only 4 weeks showed significantly reduced symptoms of EGUS.

	EGUS at Start of Trial	EGUS at End of 4-Week Trial
Horse 1	Grade 2	Grade 0
Horse 2	Grade 2	Grade 0
Horse 3	Grade 2	Grade 0
Horse 4	Grade 2	Grade 0
Horse 5*	Grade 2	Grade 2*
Horse 6	Grade 2	Grade 1
Horse 7	Grade 2	Grade 0
Horse 8	Grade 2	Grade 0
Horse 9	Grade 1-2	Grade 0

*This horse raced twice during the trial period.

Advantage Edge 4-In-1 Plus Pellet TM

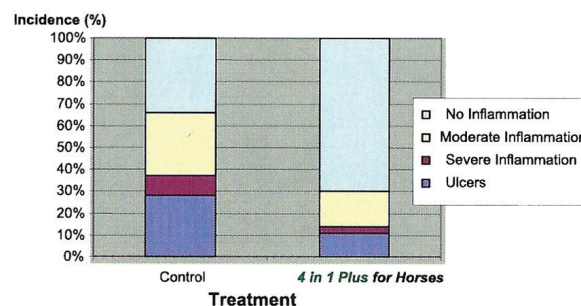
Did you know that 25-50% of foals and 60-90% of adult horses in the USA suffer from Equine Gastric Ulcer Syndrome?

Studies demonstrate that transporting horses to and from shows, feeding twice a day, and only light exercise can cause ulcers similar to those found in race horses.

Ulcers are painful for horses and can result in aggressive or nervous behavior, poor appetite, unpredictable performance, and are responsible for large economic losses to the equine industry.

EFFECT OF 4-IN-1 PLUS PELLET

for Horses on Ulceration and Inflammation of the Stomach Wall



THE RESEARCH

Research conducted at Michigan State University (Nielsen et al., 2008) demonstrated that the calcified seaweed (CSW) in 4-In-1 Plus was a more effective source of calcium than limestone (LS).

The yearlings fed CSW showed significantly higher blood levels of Osteocalcin and Serum Crosslaps than LS fed yearlings, demonstrating greater bone remodeling. The importance of this research indicates that CSW aids in bone repair and that yearlings are more likely to recover from bone injury.

FEATURES OF 4-IN-1 PLUS PELLET

Natural ingredients that reside in the calcified skeleton of red seaweed (lithothamnion calcareum), which grew in the pollution-free, mineral-rich waters of Iceland and southwestern Ireland.

Natural technologies that supply the gastro-intestinal tract with a number of beneficial metabolites, d-glucose polymers and mannanoligoscharides.