



Targeted Nutrition

## TECHNICAL REVIEW SHEET

# BMC™

Total digestive buffer

### Marine-derived calcium supplement for horses

In research studies, BMC™, an easy-to-feed marine-derived calcium, was shown to effectively buffer the horse's stomach and hindgut, as well as support improved bone density in exercising horses.

Reducing the acidity in both regions of a horse's gut is important to maintain a healthy gastrointestinal tract. Limestone (calcium carbonate) is commonly used as a source of calcium in feeds and has some ability to buffer acid. BMC contains a more bioavailable form of calcium that provides a greater buffering capacity throughout the digestive tract.

### Gastric Buffer

Excessive gastric acidity in the stomach is a major factor in the development of gastric ulcers in horses. Laboratory studies at Kentucky Equine Research showed that when BMC was included as an ingredient in horse feed, it increased buffering capacity by 28% compared to limestone in acid conditions typically seen in the stomach (Figure 1).



Research Separates the  
Innovator From the Imitator.

ker.com ■ 859.873.1988 ■ info@ker.com

Developed by:

Kentucky  
Equine  
Research®

World Leaders In Equine Nutrition

## Hindgut Buffer

Hindgut acidosis often occurs in horses with high grain intakes or in horses grazing rich pasture. Symptoms of hindgut acidosis include poor appetite, loose manure, chronic colic and stereotypic behaviors such as wood-chewing and stall-walking. Acute hindgut acidosis can lead to intestinal damage and even laminitis.

Research at Kentucky Equine Research has shown that feeds fortified with BMC have a 54% better capacity to buffer acids produced in the horse's hindgut compared to the same feeds fortified with limestone (Figure 2).

## Bone Density

Triacton™, a supplement recently developed by Kentucky Equine Research, includes BMC and has demonstrated efficacy in increasing bone density in Thoroughbred racehorses. Horses receiving Triacton had a threefold greater increase in bone density in the dorsal cortex of the cannon bone (shin) compared to horses receiving a placebo (Figure 3).

BMC can be top-dressed onto a horse's regular feed to increase the amount of calcium in the diet for a beneficial buffering effect and to support the development of healthy bone. For best results, feed 30 g of BMC with each grain meal.

## Why should I use BMC for my horse?

- Provides a highly digestible source of marine-derived calcium
- Shown to provide a buffering effect in the stomach and hindgut
- Also has benefits for bone density in horses in training
- Palatable, easy-to-feed digestive support for performance horses and those susceptible to ulcers or hindgut acidosis
- As a maintenance supplement following ulcer treatment

### Buffering Capacity Gastric Environment

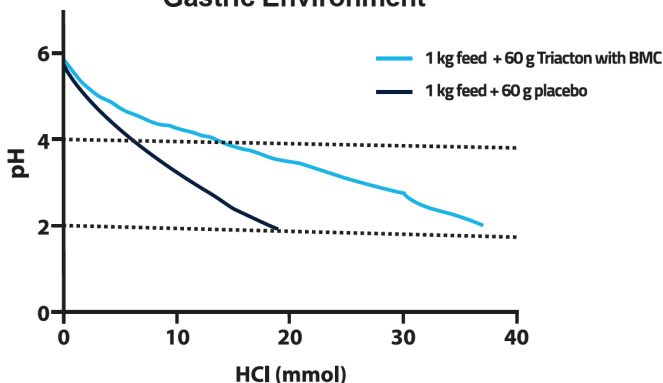


Figure 1.

### Increased Buffering Capacity Hindgut Environment by 54%

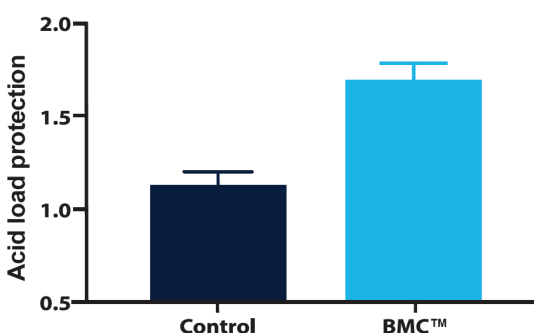


Figure 2.

### Dorsal Cortical Bone Density

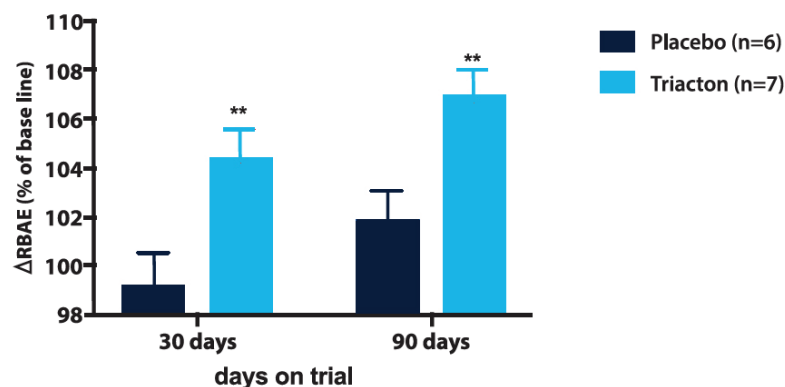


Figure 3.