

**BIO-CHLOR decreased** metabolic disorders, improved milk production on three large commercial dairies.

### HERD CHALLENGES

When metabolic disorders climbed in the fresh cow group, an astute dairy producer with three operating dairy sites turned to his nutritionist for help. Upon reviewing the rations, the nutritionist recommended feeding BIO-CHLOR<sup>™</sup> in the close-up pen three weeks prior to calving on all three sites to help control early lactation metabolic challenges.

- Measurement period: Spring 2007\*- Spring 2009
- Feeding rate: 1 2 pounds/cow/day based on changes in health response and urine pH
- Dairy's goal: Reduced metabolic disorders and improved early lactation milk production

\* Each dairy began feeding BIO-CHLOR in April or May of 2007.

## DECREASED METABOLIC DISORDERS

- Retained Placentas (RPs) declined significantly on all three dairies, falling as much as 90%.
- Milk fever dropped from 4.2% to almost 0% on Dairy 1. Dairies 2 and 3 maintained low to zero incidence of milk fever throughout the trial period.

# INCREASED EARLY LACTATION MILK PRODUCTION

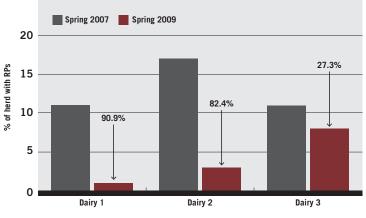
• Week 4 milk production increased over all lactations on both Dairies 1 and 2. Dairy 3 produced the same amount of milk prior to and during BIO-CHLOR supplementation.

## **ECONOMIC IMPACT**

The health and production improvements translated to important economic benefits:

- Decreasing RPs can lower incidence of metritis, which can save producers \$300<sup>1</sup> per diagnosis.
- Fewer metabolic disorders reduces early lactation culling rates, allowing more cows to remain in the herd through the most productive stages of lactation.
- Improved early lactation milk production leads to additional peak and late-lactation milk production. A one pound increase in peak milk results in an additional 200 pounds of milk<sup>2</sup> over the lactation.

#### FIGURE 1: Decreased retained placentas.



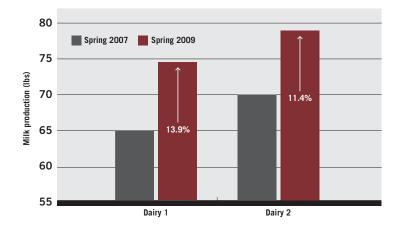


FIGURE 2: Improved early lactation milk production.

To learn more about BIO-CHLOR contact your nutritionist, veterinarian or ARM & HAMMER™ representative or visit AHfoodchain.com.

1 Overton M, Fetrow J. Economics of Postpartum Uterine Health, in Proceedings. 3rd Annual Dairy Cattle Reproduction Conference 2008;39-43.

2 Hoover, Webster. Difference in feed intake pre- and postpartum, urine pH prepartum, and difference in production parameters postpartum for cows fed a control diet vs. a BIO-CHLOR containing diet for 21 days prepartum. ADSA Abstract, 1998