



EFFECTIVE. AVAILABLE. RELIABLE. BOVI-LYSINE DELIVERS.

Rumen-protected for more consistent and balanced lysine delivery.

Lysine is a limiting, essential amino acid, critical to a cow's productivity. BOVI-LYSINE delivers it more consistently. QualiTech's rumen-protected lysine offers you an economical option to more traditional metabolizable lysine sources and is effective, credible and reliable.



Research cow used to validate lysine bioavailability in Plasma Free AA Dose-Response Technique — University of New Hampshire

"Amino acids have numerous and important functions in metabolism. Providing them to the lactating dairy cow in a better balance can minimize the risk of amino acid deficiencies, reduce the need for supplemental RUP and optimize dairy herd health, production and profitability.... When feeding a rumen protected amino acid supplement, feed it only when you have seen convincing research results that confirm its bioavailability."

Dr. Charles Schwab, Schwab Consulting and Professor Emeritus of Animal Sciences, University of New Hampshire

THE BIOAVAILABILITY OF BOVI-LYSINE HAS RECENTLY BEEN VALIDATED BY THE UNIVERSITY OF NEW HAMPSHIRE USING THE PLASMA FREE AA DOSE-RESPONSE TECHNIQUE DEVELOPED BY DR. SCHWAB, NANCY WHITEHOUSE AND DR. BRITO.

"We tested our Bovi-Lysine at the University of New Hampshire using the plasma assay developed there to establish a credible estimate of intestinally available lysine. Their model, the most accurate method of delivery evaluation available, was utilized to assure Bovi-Lysine as one of the highest quality products on the market."

Dr. Garrett, Director of Tech Support and Research, QualiTech, Inc.

For more information about BOVI-LYSINE contact your sales representative at 1.800.328.5870 or visit www.qualitechco.com



The BOVI-LYSINE rumen-protection system works. Here's how.

QualiTech has developed a patent-pending rumen bypass technology that effectively delivers lysine to the cow's small intestine — where it's best absorbed and used to optimize a cow's productivity. Research proves it. Unlike the conventional source of lysine, Blood meal, Bovi-Lysine provides a reliable, consistent, cost effective source of bypass lysine. Utilizing Bovi-Lysine in your rations gets more lysine through to where it's needed.

Two research studies prove BOVI-LYSINE's effectiveness.

STUDY 1

To evaluate the rumen bypass characteristics of BOVI-LYSINE, a comparative study was designed using a marker within the product (Cobalt) and an external marker (Chromium). After feeding and measurement over time, the difference between the two markers indicates the amount of product that escaped rumen breakdown (see figure 1). The study showed that 52.7% of the lysine protected within the product was delivered to the cow's lower intestinal tract, available for absorption.

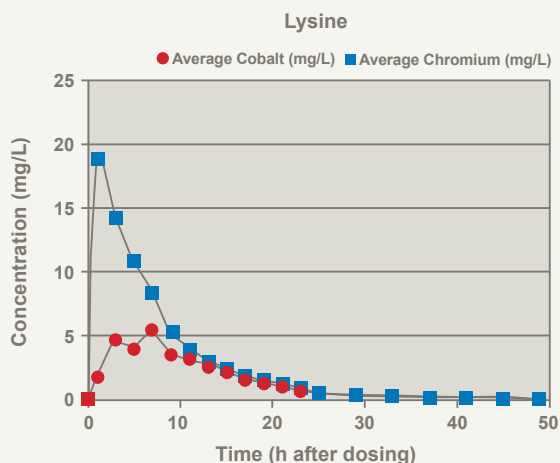


Figure 1. Areas under comparison between marker within the product (Cobalt) and marker outside the product (Chromium).

University of Pretoria, South Africa, Sakkars, 2012

STUDY 2

A second study evaluated how much of the rumen-protected lysine was bioavailable. It compared a control treatment (no additional lysine - baseline measurement), infused lysine (equal to 100 percent bypass) and rumen-protected BOVI-LYSINE. Analysis was conducted on changes in lysine content of the blood plasma (see figure 2). The study showed 26.95% of the lysine product fed was delivered to the blood stream. This equates to 12.73 g of lysine delivered per 100 g of product fed.

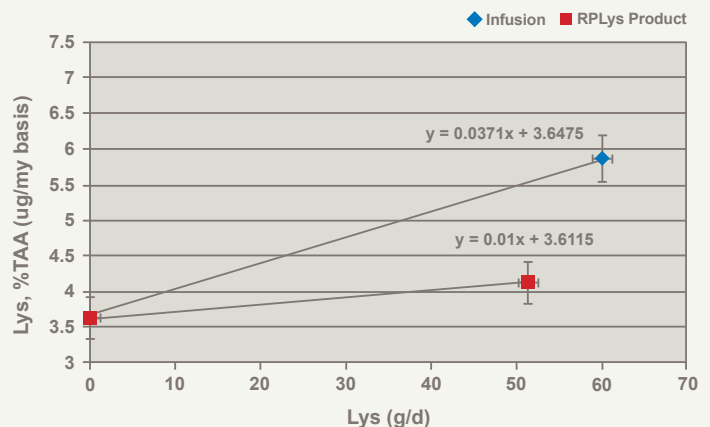


Figure 2. Changes in plasma Lys concentrations (% of total AA, umole) with increasing amounts of infused or fed Lys.

University of New Hampshire, Schwab, 2013

Key benefits of our patent pending technology

- Protection against damaging rumen microflora
- Optimum bulk density allows particles to drop to the bottom of rumen
- Maximizes lysine delivery for absorption in the small intestine

Choose the research-proven product that will consistently deliver the lysine your cows need. For more information about BOVI-LYSINE contact your sales representative at 1.800.328.5870 or visit www.qualitechco.com

BOVI-LYSINE is part of the animal nutrition line of products from QualiTech, Inc. At QualiTech, partnership with our customers drives innovation — creating products that help animals, plants, people and the environment thrive.

