Elevate Your Nutritional Mastery with Zinpro® IsoFerm®

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How can you advance nature, improve sustainability and drive profitability, all while enabling dairy cows to become better cows? Zinpro IsoFerm is the breakthrough that makes this possible.

Zinpro IsoFerm is a breakthrough. It is an essential nutrient that optimizes the performance of fiber-digesting bacteria to naturally enhance rumen function and improve efficiency.

By directly fueling the rumen, Zinpro IsoFerm enables cows to improve fiber digestion and protein utilization. Today, as marketplace pressures demand producers do more with less, it is more important than ever for cows and operations to be productive, efficient and profitable.

With Zinpro IsoFerm, it's possible. Elevate your nutritional mastery with this one-of-a-kind innovation. Propel nutrition forward to build customer trust and improve retention. By delivering Zinpro IsoFerm to your customers, you can generate results that have never been possible before.

A Nutritional Breakthrough in Dairy

Zinpro IsoFerm is a breakthrough innovation in dairy ration formulation. It provides branched-chain volatile fatty acids (BCVFAs or 'isoacids'), which are essential nutrients required by rumen fiber-digesting bacteria. These BCVFAs act as carbon sources to be utilized with highly digestible protein and produce much-needed microbial protein and energy. This is a primary source of key amino acids and BCVFAs needed for production of milk by the mammary gland. When you feed the rumen bacteria directly, cows increase their energy and microbial protein production. This reduces the need for greater dry matter intake (DMI) and helps cows to increase performance with fewer inputs.

"Ten years ago, I was convinced that cows require branched-chain VFAs, but there was no way to directly supplement them. I see potential to improve or maintain production with fewer inputs, reduce the environmental impact and drive feed efficiency with a product like this." – Dr. Mike Van Amburgh

Normally, the fiber-digesting bacteria in the rumen receive BCVFAs through the digestion (proteolysis) of rumen degradable protein, such as soy, canola or cottonseed meal. Typically, fiber-digesting bacteria must rely upon amylolytic, or starch-digesting, bacteria to complete proteolysis – the protein breakdown process to release branched-chain amino acids and ultimately the BCVFAs (Figure 1). This is inefficient as amylolytic bacteria can compete with fiber digesters for the BCVFAs being released, and under certain dietary conditions there are simply not enough BCVFAs produced to meet the requirements of the fiber-digesting bacteria.

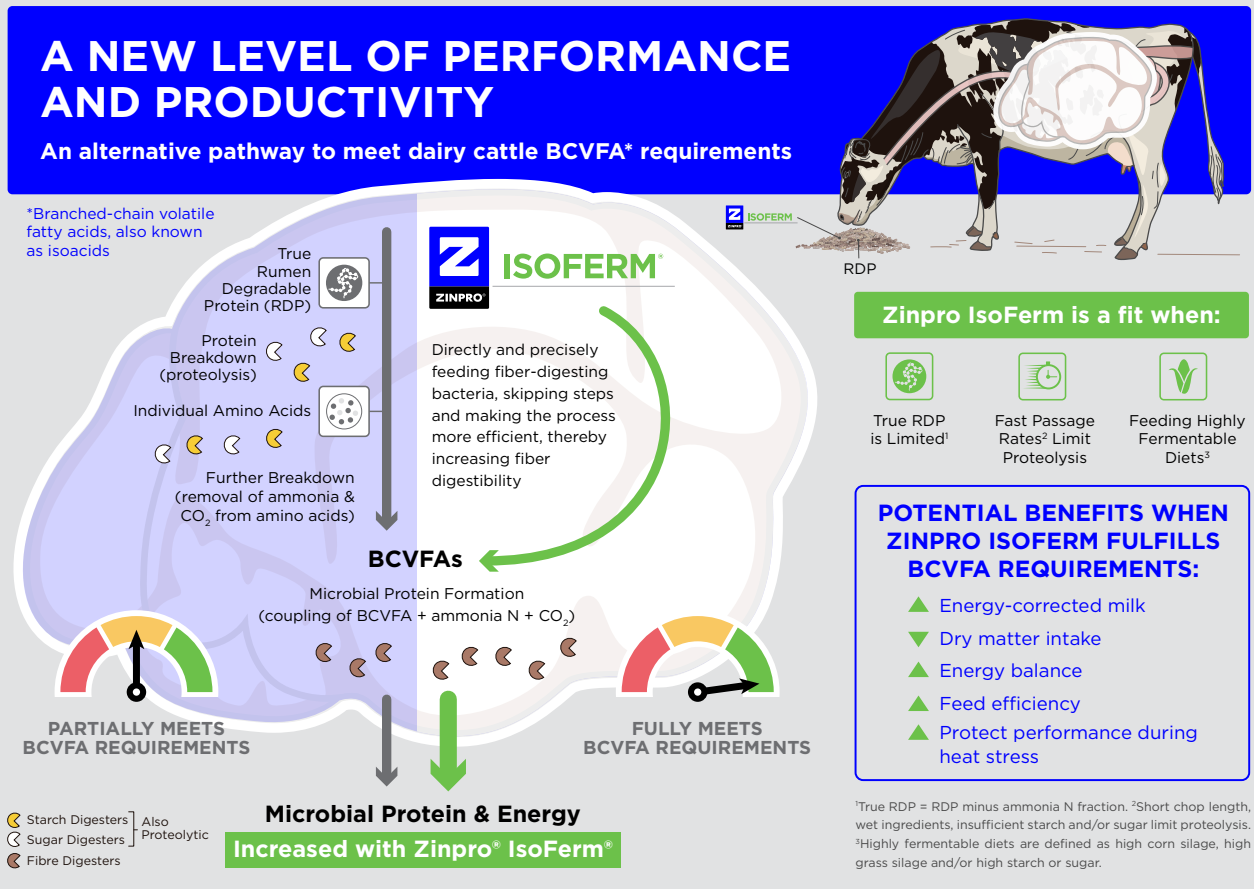
When you fuel the rumen directly with the BCVFAs found in Zinpro IsoFerm, you reduce this inefficiency and optimize the rumen by enhancing the natural fermentation process. You help cows to be better cows.

As market pressures and feed costs continue to increase, it's more important than ever for cows to perform at their best and do more with less. By improving neutral detergent fiber digestibility (NDFd), Zinpro IsoFerm increases diet flexibility. This means you have the opportunity to include more forage and non-forage fiber feedstuffs while making smarter use of feed inputs and fine-tuning your diet formulation.

Take Performance to the Next Level

Zinpro IsoFerm is a unique blend of BCVFAs proven to significantly enhance rumen function by directly feeding the fiber-digesting microbes. Multiple studies have shown the positive benefits of supplementing lactating dairy cattle diets with BCVFAs. By enhancing rumen performance, Zinpro IsoFerm has a game-changing effect on production efficiency. Specifically,

Figure 1



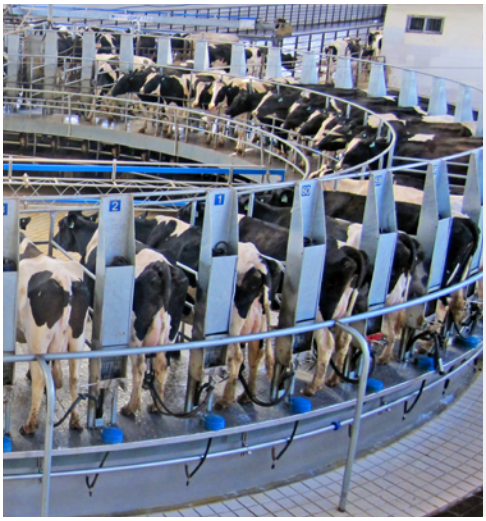
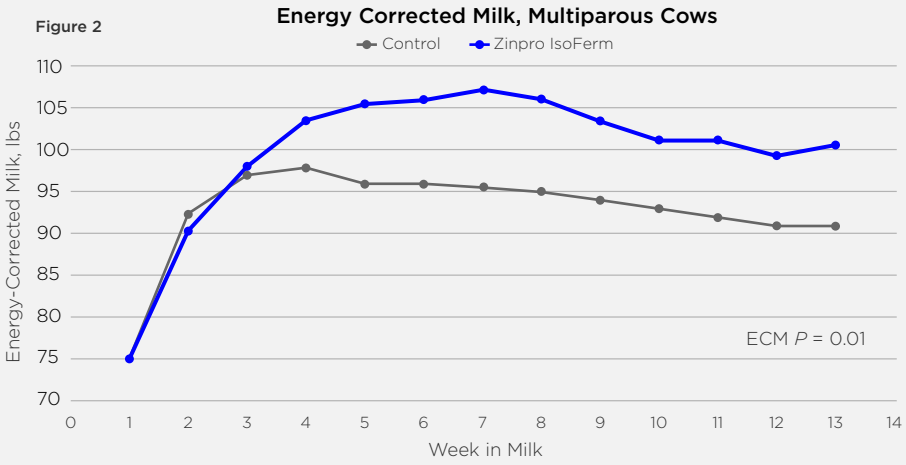


Figure 2



to maintain or reduce dry matter intake while improving milk production (depending on stage of lactation). When the rumen is not performing at this level, untapped potential exists within the herd.

Research conducted at a private research institute in Europe showed decreased dry matter intake, increased energy-corrected milk and improved feed efficiency.

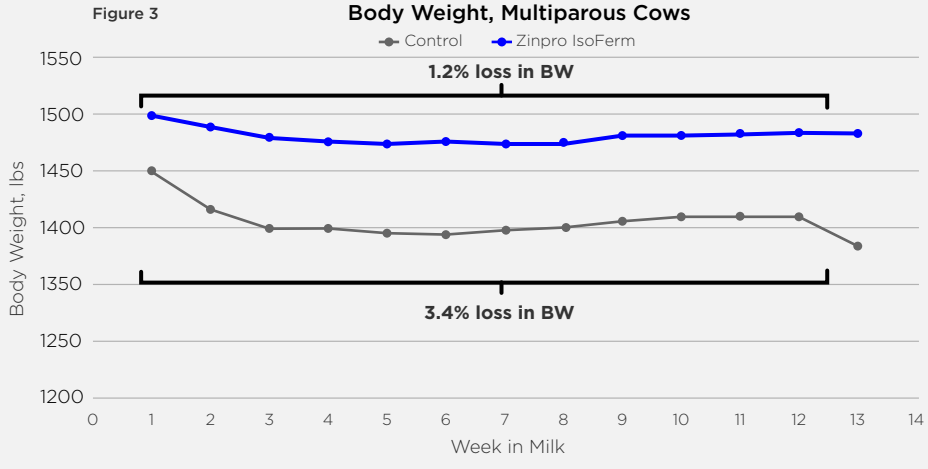
Cows were supplemented with BCVFAs beginning 27 days pre-calving through 90 days in milk. Cows received the equivalent of 20 grams of Zinpro IsoFerm during the pre-calving period and 40 grams during lactation. Meanwhile, Control cows received the same diet without the addition of Zinpro IsoFerm. Dry cows received a diet with 12.3% crude protein (CP) while lactating cows received a diet with 15.4% CP.

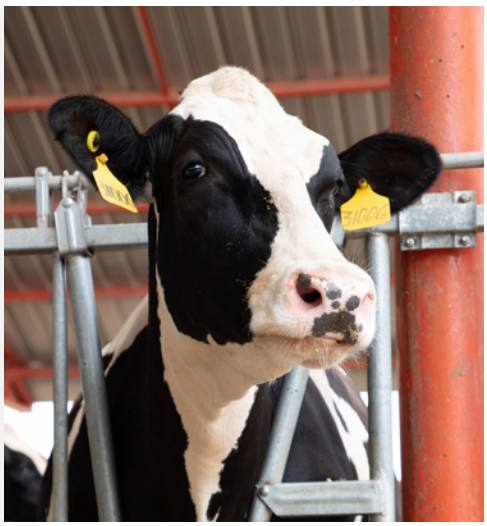
Multiparous cows fed Zinpro IsoFerm had numerically lower DMI (P = 0.12), and higher milk yield, fat percent, protein yield and energy-corrected milk (Figure 2; ECM P = 0.01) than Control cows.

This study also showed improved energetic status among multiparous cows receiving Zinpro IsoFerm. While eating less and milking more, they were better able to maintain their body weight (BW) in early lactation vs. the unsupplemented Control cows (1.2% BW loss vs. 3.4% BW loss in Control; Figure 3). These findings are supported by observational results from on-farm validation herds in USA and Europe.

Cows can also maintain body weight and may regulate body temperature more easily, improving herd resiliency. Research has shown that cows receiving Zinpro IsoFerm during heat stress have been better able to maintain milk yield and body weight due to the benefits on microbial performance and NDF digestibility, thus potentially reducing the heat of fermentation and movement of undigested feed through the gastro-intestinal tract.

Figure 3





Field observations were conducted in more than 50 herds representing over 70,000 cows. Cows receiving Zinpro IsoFerm for 60 days or more had on average a 2% reduction in DMI (whole herd basis) with 4.3% greater energy-corrected milk resulting in a 5.5% improvement in feed efficiency. Optimal responses are seen when cows receive Zinpro IsoFerm from the late dry period through the whole lactation.

Supplementing with Zinpro IsoFerm gives you the opportunity to improve feed efficiency without asking the cow to consume more.

Do More with Less

Lead the charge in operational and environmental sustainability while driving profitability. Zinpro IsoFerm improves operational sustainability by allowing fewer inputs and greater stewardship of resources. When you fuel the rumen to more fully utilize the nutrients cows consume, they are able to direct them more effectively towards production and excrete less. This has positive benefits for both the environment and the business.

Dairy producers have both an economic and environmental incentive to improve nitrogen efficiency.

Much of the dairy industry's focus on improving nitrogen efficiency has been on providing higher quality rumen undegradable protein and rumen-protected amino acids. This strategy has been effective. Today, it is common to have diets with <16.5% CP, while 18% CP diets were common not too long ago.

The next stage in improving nitrogen efficiency is to maximize rumen microbial protein production and efficiency. Zinpro IsoFerm and our nutritional expertise are effective tools to achieve this objective, enhancing the mastery of nutritionists and increasing dairy profitability. When the rumen is performing at its best, cows have the potential to meet their full energy and protein requirements without needing to eat more, potentially reducing dry matter intake while supporting greater milk production with less waste.

Make Your Best Better with Zinpro IsoFerm

Supported by experienced ruminant nutritionists, Zinpro IsoFerm is the proven choice for doing the right thing for the cow, the business and the environment.

As your trusted nutrition partner, you can be confident when choosing Zinpro IsoFerm that it's backed by the same research, expertise and superior quality that you've come to trust from Zinpro.

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To embrace this game-changing technology, contact your Zinpro representative today or visit **zinpro.com/isoferm**