



# Zinpro® Availa® Se

## Maximizing Lifetime Performance

Dairy cows in late gestation and early lactation along with new born calves are severely challenged. Health, environmental and nutritional stressors are examples. Maintaining a well-functioning immune system and boosting antioxidant capacity is key during these periods. Feeding Zinpro® Availa® Se leads to significantly more selenium body reserves than with any other organic selenium source, making this unique compound the most efficient organic selenium source to successful management of challenged dairy cattle.

### REPRODUCTION

Rebuilding the reproductive tract and preventing disorders are key to get cows pregnant sooner. Increasing the selenium status strengthens antioxidant defence and has been shown to reduce retained placentas. Feeding Zinpro Availa Se is highly effective in increasing selenium status, making it an excellent tool to help dairy cows towards improved recovery after calving.

- ↑ Better Recovery From Reproductive Disorders

### PRODUCTION

Proper immune function and boosting the antioxidant system is critical for dairy cows to improve udder health and milk production. Research has shown that cows with increased selenium status have less mastitis. Zinpro Availa Se is highly efficient in increasing milk selenium concentration, which enables immune cells to fight bacteria more effectively.

- ↑ Improved Transitioning
- ↓ Lower Somatic Cell Counts

### BIRTH

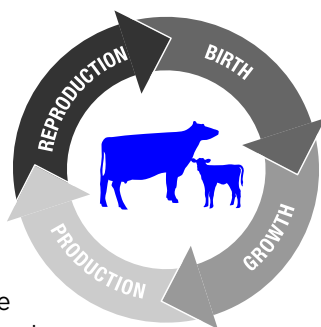
Passive transfer of immunity is critical for a good start of newborn calves. Research has shown that supplying selenium in organic form increases colostrum selenium concentration and enhances antioxidant capacity, which in turn supports immune function and calf health.

- ↑ Improved Colostrum Quality
- ↑ Better Calf Protection

### GROWTH

Reaching target body weight at first insemination is key to successful heifer raising. Feeding Zinpro Availa Se has been proven to increase selenium stores, which will increase antioxidant capacity, aid immune function and ultimately support the development of heifers.

- ↑ Rumen Stable



## UNIQUE

Patented and unique. Zinpro Availa Se (zinc-L-selenomethionine) has been designed to be the world's first rumen-bypass selenium compound for superior stability, solubility and metabolism.

## MORE EFFICIENT

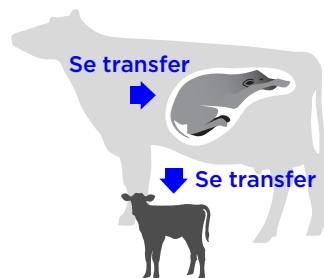
Zinpro Availa Se is the world's first and only rumen bypass selenium. Zinpro Availa Se is absorbed with high efficiency, which results in greater selenium body stores 1.7 times more compared to Se-yeast. These stores support antioxidant defence and health of both the cow and calf.

## RELIABLE

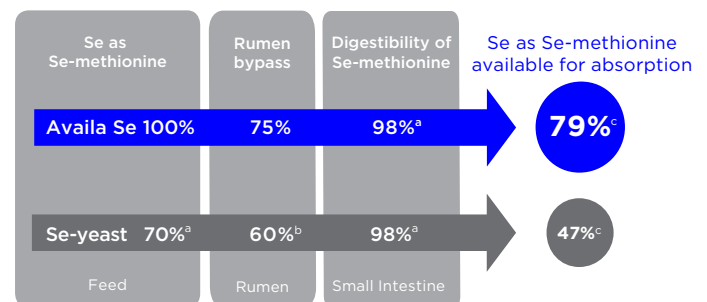
Zinpro Availa Se provides 100 percent zinc-selenomethionine. Each selenomethionine molecule is protected from antagonists (and rumen degradation) by its zinc chaperone.

## IMPROVED SELENIUM NUTRITION IN DAIRY COWS HELPS COWS AND CALVES HAVE A BETTER START

Effective control of mastitis and reproductive disorders improves milk production. Preventing these disorders requires a responsive immune system and increases the need for antioxidants to fight oxidative stress. Good quality colostrum and transfer of selenium reserves from the cow to the embryo are key to protect the calf. Feeding Zinpro Availa Se has been proven to increase selenium stores beyond what other selenium sources achieve, making it an excellent tool to support wellbeing and productivity of cows and calves.



### 1.7x Amount of Se-methionine Available for Absorption from Zinpro Availa Se Compared to Se-yeast



<sup>a</sup> Robert J.C. and Williams P.E.V., 1997. Influence of forage type on the intestinal availability of methionine from a rumen protected form. J. Dairy Sci., 80 (Suppl.1), p. 248

<sup>b</sup> Weiss W.P., 2005. Selenium sources for dairy cattle. In: Proceedings of the Tri-State Dairy Nutrition Conference. Fort Wayne, IN (USA), pp. 61-71

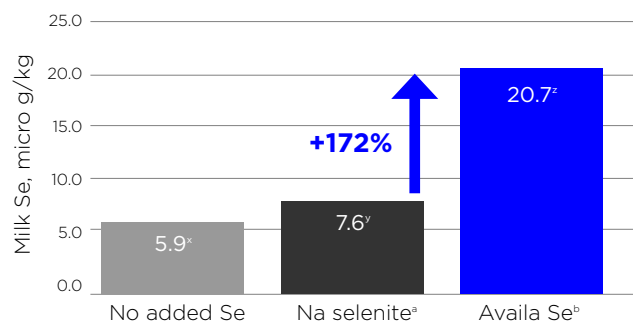
<sup>c</sup> Includes ca. 6% Se-methionine from microbial biomass

## MORE MILK SELENIUM

The superior effectiveness of Zinpro Availa Se to raise milk selenium concentration was demonstrated in a dairy cow study. Milk selenium level increased by 172 percent when zinc-L-selenomethionine from Zinpro Availa Se replaced equal amounts of selenium from sodium selenite.

Source: Erskin *et al.*, 1987; Weiss *et al.*, 1990; Malbe *et al.*, 1995; Swecker *et al.*, 1995; Awadeh *et al.*, 1998; Allison and Laven, 2000.

### Increased Milk Selenium Concentration with Zinpro Availa Se



<sup>a</sup> Sodium selenite provided 0.3 ppm Se to the diet (DM basis)

<sup>b</sup> Zinc-L-selenomethionine provided 0.3 ppm Se to the diet (DM basis)

<sup>xyz</sup> Means lacking a common superscript differ,  $P < 0.05$



For more information contact your Zinpro representative or visit [zinpro.com](http://zinpro.com)