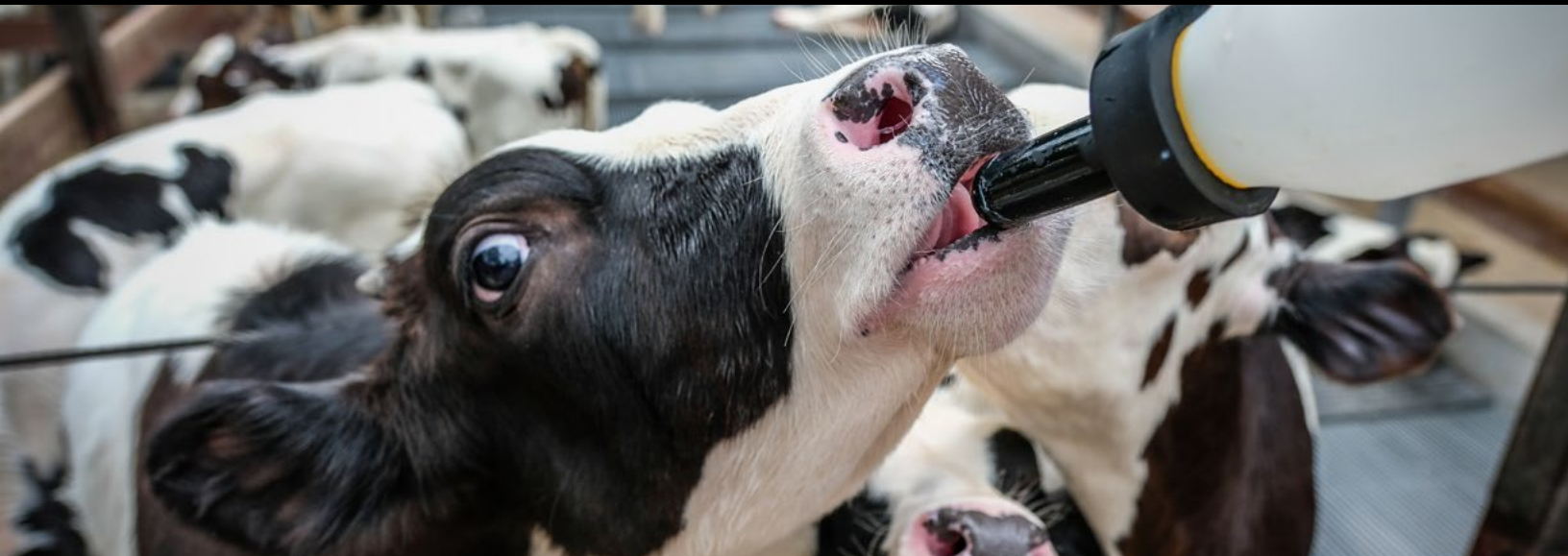


# Premolac<sup>®</sup> Boost

## Colostrum – The Most Important Meal

Rich in antibodies and high in protein,  
colostrum is essential to provide immunity  
to the newborn calf.



Born with essentially no immune system, calves rely exclusively on colostrum to provide protection during the first few weeks of life. Consumption of high-quality colostrum provides passive immunity while the calf's immune system develops. Failure to provide passive immunity can result in increased calf sickness and death.

# Premolac<sup>®</sup> Boost

Premolac<sup>®</sup> Boost is a supplement intended to be added to maternal colostrum. Premolac Boost is produced from 100% concentrated, maternal bovine colostrum collected from Grade A dairies. Zinpro's proprietary PathWhey™ technology used to make Premolac Boost yields a product with a consistently high concentration of IgG and other immune factors to provide maximum benefit for the newborn calf.

Adding Premolac Boost to maternal colostrum will improve calf health and performance by reinforcing the most essential nutrient the calf needs: Immunoglobulin G. Added complexed zinc is included in the formula to further support overall immune function.



A 110 gram colostrum supplement that provides 50 grams of IgG to the newborn calf

## How Does It Work?

Adding Premolac Boost to maternal colostrum is easy and effective. The superior mixing ability ensures IgGs are completely dispersed in the solution. A brix refractometer can be used to assess colostrum quality on farm. Use the table below along with the refractometer results to determine when and how to add Premolac Boost to your colostrum

Brix Reading of Maternal Colostrum	Premolac Boost to Add
< 16° Brix	Use Premolac Boost as a complete replacement for maternal colostrum by mixing 330 grams (Approx. 6 full scoops) of Premolac Boost in 2 quarts of warm water (110° F or 43° C).
16 - 24° Brix	Mix 110 grams (Approx. 2 full scoops) of Premolac Boost into warm maternal colostrum (110° F or 43° C).
> 24° Brix	Premolac Boost is only needed during high challenge periods.



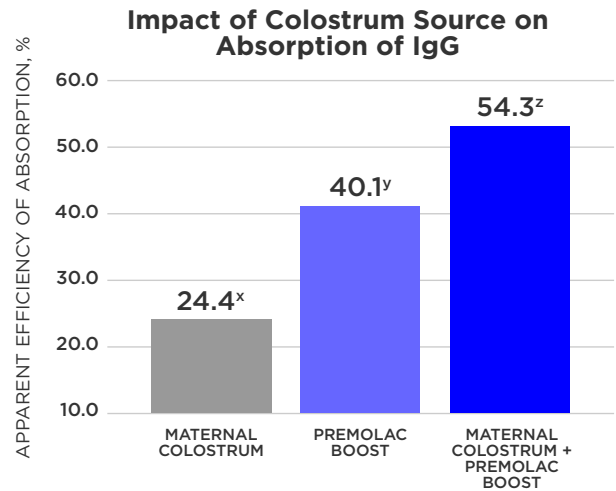
## Guaranteed Analysis

Crude Protein, Min	65.00 %
Crude Fat, Min	5.00 %
Crude Fiber, Max	0.15 %
Zinc, Min	50 ppm
Globulin Protein Min (50 g IgG per 110 g feeding)	45.5 %

## Research - Proven Results

The high IgG content of Premolac Boost make it an ideal tool to increase IgG content of maternal colostrum. The highly soluble formula is an easy mixing powder and the unique processing method used to make Premolac Boost removes factors that may inhibit colostral IgG absorption such as fat and/or casein. Research at Pennsylvania State University has proven that when Premolac Boost is added to maternal colostrum, efficiency of absorption of IgG increases.

Apparent efficiency of absorption of IgG from colostrum when maternal colostrum, Premolac Boost, or maternal colostrum + 40 g of IgG from Premolac Boost are fed.



<sup>xyz</sup> Lacking a common superscript letter differ,  $P < 0.01$

Recently, a colostrum task force comprised of industry leading experts and academics has recommended a change in approach to how passive transfer of immunity is evaluated. Traditionally, a cutpoint of 10 g of IgG/L of serum was used to determine passive transfer of immunity. Now, the following cutpoints will be used.

Categories	IgG Level (g/L)	Equivalent STP <sup>a</sup> (g/dL)	Equivalent STP ZPC <sup>b</sup> (g/dL)	Equivalent Brix (°) <sup>c</sup>	Proposed % of Calves in Each Category <sup>d</sup>
Excellent	≥ 25.0	≥ 6.2	≥ 6.0	≥ 9.4	> 40%
Good	18.0 - 24.9	5.8 - 6.1	4.8 - 6.0	8.9 - 9.3	~ 30%
Fair	10.0 - 17.9	5.1 - 5.7	4.2 - 4.8	8.1 - 8.8	~ 20%
Poor	< 10.0	< 5.1	< 4.2	< 8.1	< 10%

<sup>a</sup> Serum Total Protein

<sup>b</sup> Zinpro Performance Colostrum cutpoints for STP differ from maternal colostrum

<sup>c</sup> Brix cutpoints for ZPC not currently available

<sup>d</sup> As proposed by "USDA Colostrum Task Force"



**Quality:** More IgG per liter of colostrum

**Quantity:** Increased consumption of total IgG

**Quickness:** An easy mixing formula that can be used and fed quickly

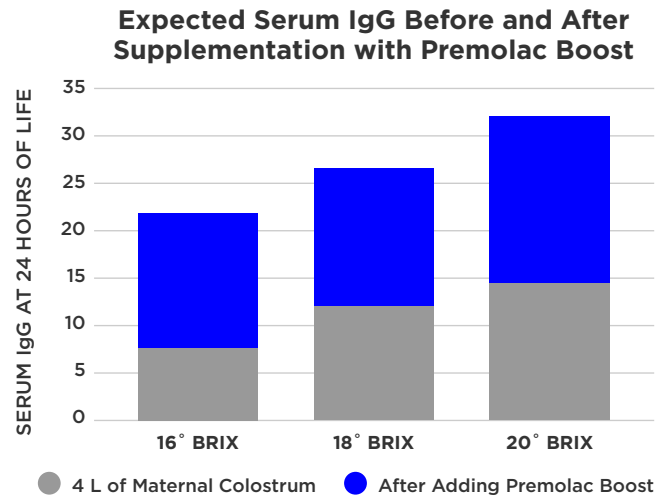
**Quite Clean:** Bacterial guarantees ensures only what is needed is added

**Quantifying:** Consistent passive transfer results from a consistent product

**Premolac Boost is a product you can trust, made with proprietary technology and designed to make maternal colostrum better!**

## Improving Maternal Colostrum

Adding one serving of Premolac Boost to maternal colostrum will help calves to consistently achieve serum IgG readings in the new good and excellent categories by increasing absorption efficiency and ultimately serum IgG. This means more healthy, productive calves.



## Industry-Leading Products, Processes and Facilities

Experienced laboratory specialists and chemists bring years of know-how in milk processing and agricultural innovation to produce Premolac Boost. Zinpro Performance Colostrum uses processing advances, product solubility improvement, immunoglobulin separation, microbiological control of heat sensitive products, and free-flow blending to create our specialized colostrum products.

Opened in 2008, our innovative and technology-driven production facility allows us to produce the highest quality colostrum on the market. Zinpro uses a

unique, automated PathWhey process to deliver the highest quality colostrum, designed to help calves achieve passive immunity and support gut health and immunity. This technology gently removes non-immune components of the colostrum, such as fat and casein, and concentrate only the nutrient-dense whey fraction to deliver highly soluble levels of immune components. The significant quantities of naturally-occurring immunoglobulins, growth factors, and natural anti-microbial properties found in Premolac Boost support healthy immune and inflammatory responses.

## Certifications and Compliances

Zinpro Performance Colostrum holds an FDA Food Facility Registration. In addition, we have earned the following certifications:



## Your First Choice in Colostrum

For more information, please call  
+1 952-983-4000 or visit [zinpro.com](http://zinpro.com)