

# Ai/E<sup>10</sup>®

## PURIFIED WHEY EXTRACT



### Positioning Statement

Ai/E<sup>10</sup>® is a purified whey extract that provides the body with a high concentrate of low molecular weight molecules that help support immune cell communication.\*

### Concept

Ai/E<sup>10</sup>® was developed to meet the need for a consistent and pure antigen infused whey extract. Researchers discovered that infusing the udders of pregnant cows with various antigens effectively protected newborn calves against many health problems, particularly those of the digestive tract. Researchers found that antigen infusion of pregnant cows dramatically lowered calf mortality. Later, it was discovered that feeding animals of other species (sheep and pigs) with antigen infused bovine colostrum also protected these animals from several common health problems. This development led to speculation that antigen infused bovine colostrum might offer similar benefits to humans.

Ai/E<sup>10</sup>® is produced using a proprietary and patented method to ensure the highest quality and is derived from privately managed dairy herds infused with antigens shortly before parturition, utilizing a proprietary intra-mammary infusion process (U.S. Patent #4,402,938). The dairy herds are carefully controlled to avoid exposure to antibiotics, hormones, and bovine protein. The product is derived only from organically raised cows in privately managed dairy herds. Hyper-immunization is accomplished by antigen infusion of the cows' udders. This process has been shown to be the most effective method of antigenic stimulation.

The final product contains only small molecular weight molecules including cytokines, peptide neurohormones, and other "transfer factors" produced through the infusion process—giving this product a unique twist on immune enhancement capabilities.\*

### Primary Benefits

- Provides additional low molecular weight molecules including cytokines, lactoferrin, lysozymes, defensins, and disaccharides\*
- Provides a concentrate of immune system messengers, including Interleukins, interferon, and other memory transfer factors\*
- Provides substances involved in immune cell communication\*

### What Makes This Product Unique?

- The ultra-filtered extract provides a concentrate of low molecular weight immune molecules.

### Who Should Use This Product?

Ai/E<sup>10</sup>® is intended for adults interested in supporting healthy Immune cell communication.\*

### Did You Know?

- The immunoglobulins in bovine colostrum are the same as those found in raw milk and human milk.
- Pasteurization destroys the undesirable bacteria in milk, but also denatures and inactivates the majority of the beneficial immunoglobulins and immune factors.
- Numerous factors can weaken the human immune system including age, sickness, stress, alcohol consumption, and excess physical exertion.

### Frequently Asked Questions

#### What is Ai/E<sup>10</sup>®?

Ai/E<sup>10</sup>® is a purified bovine whey extract that provides the body with a concentrate of low molecular weight molecules (fewer than 100,000 KDa), including lactoferrin, granulocytes, cytokines, disaccharides, and memory transfer factors.

\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

# Ai/E<sup>10</sup>®

## How is Ai/E<sup>10</sup> unique?

Ai/E<sup>10</sup>® is an ultra-filtered bovine whey extract that provides a concentrate of low molecular weight molecules naturally found in bovine milk. Ai/E<sup>10</sup>® is filtered to completely remove large milk proteins, antibodies, and other higher-molecular weight molecules naturally found in the bovine milk. Ai/E<sup>10</sup>® utilizes a proprietary application technology that concentrates the level of low molecular weight molecules that are naturally present in bovine whey (under 100,000KDa).

## What ingredients does Ai/E<sup>10</sup>® have?

Each capsule of Ai/E<sup>10</sup>® provides 100 mg of purified bovine whey extract.

## How is Ai/E<sup>10</sup>® processed?

Ai/E<sup>10</sup>® production begins with a privately managed herd of dairy cows. This herd is carefully controlled to avoid exposure to antibiotics, hormones, and bovine protein. Just prior to birth, pregnant cows undergo a proprietary process to help the cow produce a number of natural immune cells that will be transferred through the milk to the young calf. After birth, the excess milk is collected, separated, sterilized, filtered (dialyzed), and freeze-dried (lyophilized). Ultrafiltration is accomplished through dialysis, allowing the passage of only molecules less than 100,000 KiloDaltons (KDa). This process eliminates antibodies, large milk proteins, and other higher molecular weight substances, leaving lower molecular weight molecules that function as messenger molecules in the immune system.

## How does Ai/E<sup>10</sup>® work?

A majority of these low molecular weight molecules found in this product are involved in immune cell communication including cytokines, interleukins, and interferon. These messenger molecules are produced by the cow in response to a proprietary technology and are readily excreted into the milk. Consumption of Ai/E<sup>10</sup>® has been shown to confer immunomodulatory benefits to both animals and humans.\*

## Why is it important to modulate immune cell communication?

When functioning properly, the immune system is a formidable defense mechanism essential to maintaining optimal health. Normal immune function is affected by three primary factors: stress, inadequate nutrient intake, and exposure to environmental pollutants and toxins. The introduction of these factors to the immune system can overload important communication pathways between immune cells. Communication between immune cells is accomplished through a number of low molecular weight molecules that are naturally present in our immune system.

## Are there scientific studies validating Ai/E<sup>10</sup>®?

The benefits of Ai/E<sup>10</sup>® have been explored in preliminary animal and clinical studies.

## Key Scientific Studies

1. Greenberg, P.D., Cello, J.P. Treatment of severe diarrhea caused by *Cryptosporidium parvum* with oral bovine immunoglobulin concentrate in patients with AIDS. *J AIDS and Hum Retroviro*, 1996;13:348–354.
2. Niess, A.M., Fehrenbach, E., Schlotz, E. et al. Effects of RRalpha-tocopherol on leukocyte expression of HSP72 in response to exhaustive treadmill exercise. *Int J Sports Med*, 2002;23:445–52.
3. Takahashi, N., Eisenhuth, G., Lee, I., Schachtele, C., Laible, N., and Binion, S. Nonspecific antibacterial factors in milk from cows immunized with human oral bacterial pathogens. *J Dairy Sci*, 1992; 75:1810–1820.

## Supplement Facts

Serving Size 1 capsule

Amount Per Serving	% Daily Value
Ai/E <sup>10</sup> ® Whey Extract	100 mg *

\*Daily Value not established.

**Other Ingredients:** Microcrystalline Cellulose, Gelatin, Magnesium Stearate, Silicon Dioxide.

## Directions for Use

Take one (1) capsule with liquid one (1) time daily.

## Warnings

Keep out of reach of children. If you are pregnant or lactating, consult a physician before using this product.