

# INPROBIOTIC

## Probiotic Whey Protein Isolate

### □ DESCRIPTION

INPROBIOTIC is a whey protein isolate which contains probiotics, the friendly bacteria that protects intestinal health and stimulates normal physiological processes. INPROBIOTIC is manufactured using a gentle cross-flow microfiltration technique and contains a specific strain of probiotic Bifidobacteria that improves digestion, enhances intestinal health and strengthens the immune system. It is ideal for health supplements, functional foods and drinks, and sports and clinical nutrition applications.

### □ APPLICATIONS

This high performance, completely natural protein product, offers nutritional, biological and functional advantages. INPROBIOTIC is a reliable source of high quality, biologically active proteins and a probiotic, which is stable throughout shelf life and subsequent passage through the gastro-intestinal tract. Recent research in the area of probiotics indicate that there is a great potential to produce functional foods that will reduce infectious and chronic illnesses. INPROBIOTIC is specifically suited for nutraceutical and functional products designed to deliver high quality protein and a positive probiotic effect.

### □ BENEFITS OF INPROBIOTIC

#### ***Inpro whey protein isolate benefits***

Whey proteins are easily digested and contain all the essential amino acids. Individual whey proteins contain a variety of functional and nutritional attributes, which are related to the structure and biological functions of these proteins.

Several physiological roles have been defined for whey proteins. The components of whey provide: 1) high quality amino acids; 2) growth enhancement of beneficial gut microflora, such as bifidobacteria; 3) control of specific diseases, including cancer; 4) antitoxin activity; 5) antimicrobial action; and 6) immuno-enhancing properties.

Research studies have demonstrated that individual whey protein fractions, such as lactoferrin and IgG, have the ability to modulate immune functions and responses.

The biological activities of lactoferrin include iron transport,<sup>1</sup> antifungal activity,<sup>2</sup> antiviral activity,<sup>3</sup> anticancer activity,<sup>4,5</sup> toxin binding properties,<sup>6</sup> and immunomodulating effects.<sup>7</sup> It is also reported to stimulate intestinal cell growth and the growth of bifidobacteria.

Immunoglobulins are well recognized to provide disease protection to newborns through passive immunity and there is evidence that the immunoglobulins may also have a role in disease control in adults.

#### ***Probiotics and prebiotics benefits***

Probiotic is a live microbial food supplement that beneficially improves human intestinal microbial balance. A prebiotic is a nonviable food component that is specifically fermented in the colon by indigenous bacteria thought to promote health. Any food ingredient that enters the large intestine is a candidate prebiotic. Probiotics and prebiotics are used in combination to achieve a synbiotic effect.

The most common probiotics used in dairy products are lactobacilli and bifidobacteria. Whey carbohydrates are currently the best understood prebiotics.

Strain selection of probiotics is key to probiotic performance. *Bifidobacterium longum* BB536 has been studied by many experts and found to have several beneficial effects. Scientific research shows that BB536 1) improves intestinal environment<sup>8</sup>; 2) stimulates immunity<sup>9</sup>; 3) reduces cancer risk<sup>10</sup>; 4) starts regularity<sup>11</sup>; 5) suppresses harmful bacteria<sup>12</sup>; 6) prevents diarrhea<sup>13</sup>; and 7) enhances bone strength<sup>14</sup>.

New health food products have been developed that combine probiotics, immunoglobulins and prebiotics to achieve desired functions. INPROBIOTIC is specifically developed to meet all these demands: high quality biologically active whey proteins and a positive probiotic effect.

## □ REFERENCES

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