

## Protein Isolate PF

Soya protein is a complete high quality protein free from cholesterol and lactose. Soya protein is the protein ingredient of choice in a wide range of foods and supplements for infants, children and adults around the world because of its suitability to human physiological needs.

The protein content is appx.85 to 90% having good compatibility with many types of foods and is therefore more easily used as an ingredient in a variety of good-tasting food products and nutrition supplements. In addition Soya protein offers a distinct and high functionality that enables excellent dispensability and solubility of the beverage / supplement in water / milk.

Specific functional properties Isolates have specified functional priorities that enable them to modify the physical properties of food products. Soy Isolates are characterized by certain functional properties: Solubility, Gelatin, Emulsification, Dispensability, Viscosity, and retort stability.

Functionality is similar to meat and dairy protein. Functional / physical properties involved are dispensability, water absorption solubility, viscosity, emulsification and gelatin.

Isolates have high water absorption values. It Possess both emulsifying and emulsion stabilizing properties, are excellent binders of fat and water, and are good adhesive agents. In bakery products, SPI improve crumb softness, dough characteristic & shelf life extension. In ethnic food they improve water retention and impart better softness.

**APPLICATION:** Application areas include General Health Supplements, Infant Nutrition, Sports Nutrition, Female Nutrition and Clinical Nutrition etc.

Used in Variety of applications: viz: - Healthy Nutritional Beverages, Meal Replacement Beverages, Sports Nutrition Beverages, Growing up Foods, Adult Nutritional Supplements,

External Feeding Products, Food Bars, Yogurts, Non Daily Frozen Deserts, Cream Soups, Coffee Whiteners, Baked Goods etc. Milk Alternatives. / Milk Replacer, Processed Daily Foods, Dry Powdered Beverages / Mixes, Soups / Sauces, Sport Nutrition Products. Infant Nutrition / Formulas, Weaning Foods, Adult Nutritional Products / Supplements., Protein Supplements Protein Tablets.

## ADVANTAGES

Protein content is very high, A complete Protein Source, Primary benefits of ISP is economy, functionality and nutritional properties.

Can be used as a direct nutritional supplement.

PDCAAS is 1.00 equivalent to caesin.

Protein quality equivalent to milk, fish and meat.

Calcium-to-protein ratio is equivalent to milk.

Have high nutrition value. Rich source of Glutamine and Arginine.

Functionality similar to meat and daily protein. Meets / Exceeds Amino Acid Requirement in adults and children as per pattern given in Food & Nutrition Board, National Research Council USA (1980).

**PHYSIOLOGICAL BENEFITS:** - Excellent Source of Nutrition

- High percentage of protein / High quality protein / Highest attainable protein quality.
- Offers complete protein profile. Provides all nine essential amino acids.
- Meets all the essential amino acid requirements for adult & children.
- Maintains nitrogen balance. / Have high nutritional value.
- Highly digestible & economical.
- Rich source of the amino acid Glutamate and Arginine.
- Cholesterol Free. No saturated Fat. / Free of flatulence causing carbohydrates.
- Lactose free. No allergenic responses.

#### Quality Specification

Total Ash - 4.5% Max

Fat - 0.5% Max

Crude Fibre - 1% Max

Protein - 85 - 90 %