



Summary of

IS 7021 : 2017 (Protein-Rich Food Supplements for Infants and Pre-School Children - Specification(First Revision))

Protein-rich food supplements for infants and pre-school children are specially formulated foods designed to provide essential nutrients, particularly protein, to support growth, development, and overall health during critical early years. These supplements aim to address **nutritional deficiencies**, promote proper growth, and prevent **malnutrition**, which is crucial for physical and cognitive development in children.

Protein-rich food supplements are commonly available in various forms, including powders, fortified cereals, and ready-to-eat pastes. Consumers prefer these products for their ability to deliver balanced nutrition conveniently. Parents and caregivers value supplements that ensure children's diets are enriched with the necessary proteins, vitamins (e.g., A, C, D, B-complex), minerals like calcium and iron, and are free from harmful substances. The focus on hygienic packaging, clear labelling, and adherence to safety standards reassures consumers about the product's quality.

The Indian Standard **IS 7021:2017** prescribes requirements for Protein-rich food supplements for infants and pre-school children for ages **18 months to 5 years**. The standard defines specifications for these supplements, focusing on ensuring minimum nutritional content. The product must contain at least **15% protein by mass**, and its quality should meet 70% of the protein efficiency of casein. Additionally, the supplement must be nutritionally complete to cover one-third of a child's daily protein and calorie needs, plus the entire daily **vitamin requirements** in a 100-gram serving.

The raw materials used, including edible oilseed flours like groundnut, cottonseed, and soya shall be of good quality. The standard mandates rigorous testing for **afatoxin** levels (not exceeding 30 µg/kg), **gossypol**, and **urease activity** when specific flours are used, to ensure safety. **Hygienic conditions** in production, **packaging**, and distribution are essential, with the use of food-grade, hermetically sealed containers to maintain quality. Routine testing checks that products meet the requirements for protein, **fat**, **moisture**, **microbial safety**, and absence of harmful bacteria. **Testing and sampling** methods are also detailed to maintain adherence to quality and safety standards.