

CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE, MYSORE

CORN-SOY SWEET EXTRUDED SNACK NUTROCRISPO-SWEET (Ready-to-eat)

The product Nutrocrispo-Sweet has been developed during the project "Development of low cost nutrient supplement for malnourished children - a biotechnological approach," funded by Department of Biotechnology, New Delhi. The main target is to develop a cost-effective but nutritious food for children in the age group of 6-10 years. Keeping in view of the requirements of a growing child, the product Nutrocrispo-Sweet has been developed as a ready-to-eat crisp sweet product. This supplies a minimum of 15 gram protein and about 370 kcal energy per 100 gram product. As children like sweets very much, this product has been made sweet in taste.

This product has been developed employing extrusion technology that has already established itself to be a commercially successful technology to develop snacks and breakfast foods throughout the world. The advantages of employing extrusion technology lie in requirement of less space, energy and manpower while manufacturing in a hygienic way. The developed product is not only nutritionally excellent but also possess an attractive crisp taste. Though this product has been made especially for children and for intervention programme, it can also be marketed as protein rich food or as a health food for persons of all ages.

To make the processing economic and industrially suitable, commonly available cost effective raw materials have selected; the main ingredients are corn grits, defatted soybean flour and sugar powder.

The present technical document is aimed at entrepreneurs who wish to start the manufacture of. this product. Thus, an outline of the process of manufacture, cost of investment, price of unit packs and selling price have been incorporated for a plant of capacity 1 ton per day.

Market for products - present and potential

The product can be used as low-cost high-protein convenience foods suitable as a ready-to-eat snack as an alternative to fried traditional snack foods. The product has a market throughout India. Further, it can be consumed as high-protein low-fat snacks. It is particularly suitable for nutritional intervention programmes especially for school children. Owing to good shelf-life besides other good qualities, these products also have a good market in rural areas which form the large percentage of consumption. Further, they can be used for emergency food programmes, which arises due to flood, earthquake, etc. Preparation, packaging, handling and storage of the product are very convenient rendering the technology ideally suitable for a better impact on socio-economic front.

Capacity	:	1 ton product/day (2 shifts/day); 300 tons/annum
Expected Capacity Utilization	:	1 year = 100%, 300 working days/annum
i) Land & Building		
ii) Plant & Machinery		Rs.30,00,000