CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE MYSORE-570 020, INDIA

Roller milling process for fenugreek fiber and gum

Use:

Dietary fiber from fenugreek is very stable, with a long shelf life. It withstands frying, baking, cooking, and freezing. Minor modification in the physical conditions of processing can yield dietary fiber with distinct water absorption properties. Thus, dietary fiber with a high water retention capacity is made into jelly and spreads, and used as thickener. The fiber rich fraction containing soluble and insoluble fiber has established itself in the modern food ingredient or functional food sector. The powder of fiber rich fraction can be mixed with fruit juices, other spice mixes and seasonings. As direct supplements, it can formulate as tablets or capsules along with the other vitamins and nutrients. It may also be applied to milk shakes, soups, dressings, sweets and candies. It may also be used to fortify wheat flour for bread, pizza, bagel, muffins, cake mix, noodles, tortilla & flat bread, fried and baked corn chips etc. It may also be used in any food preparation as a source of dietary fiber. It can be stored in LDPE poly bags / PET bottles, which gives a shelf life of 5 months at ambient conditions of storage.

Raw material: Whole fenugreek seeds

EQUIPMENTS REQUIRED:

Separator with Aspirator & Destoner, Bucket elevator for fenugreek, Gravity Spouting (set), Roller mill, Bran finisher, Plan sifter, Pneumatic Fan, Hammer mill, Cyclone with airlock. Flour cyclone with airlock & Lift, Abrasive machine, Roaster, Electrical motors (set) etc.

PROJECT REQUIREMENT (an estimate):

Land (Approx. in Sq. Metres)	500
Building (Approx. in Sq. Metres)	4000
Plant & Machinery (Approx. Rs. in '000)	2000
Total Project cost (Approx. Rs. in '000)	3500

CAPACITY:

Suggested economic capacity: 4000 kg/day

Working : 300 working days/ year