‘Healthifying’ Traditional Products Using FOS

Prebiotic Fortified

Flavoured Milk

An effective, wholesome & good for gut milk filled with goodness of prebiotics



- PREBIOTIC FIBERS
- REDUCED SUGAR
- RICH IN DIETARY FIBER
- GOOD FOR GUT & DIGESTIVE HEALTH
- WHOLESOME SNACK WITH GOODNESS OF PREBIOTICS FIBER

This product is custom made to provide beneficial and hard to get macronutrients for our body. It contains protein and prebiotic dietary fiber from FOS.

This can be produced without changing the conventional production process.

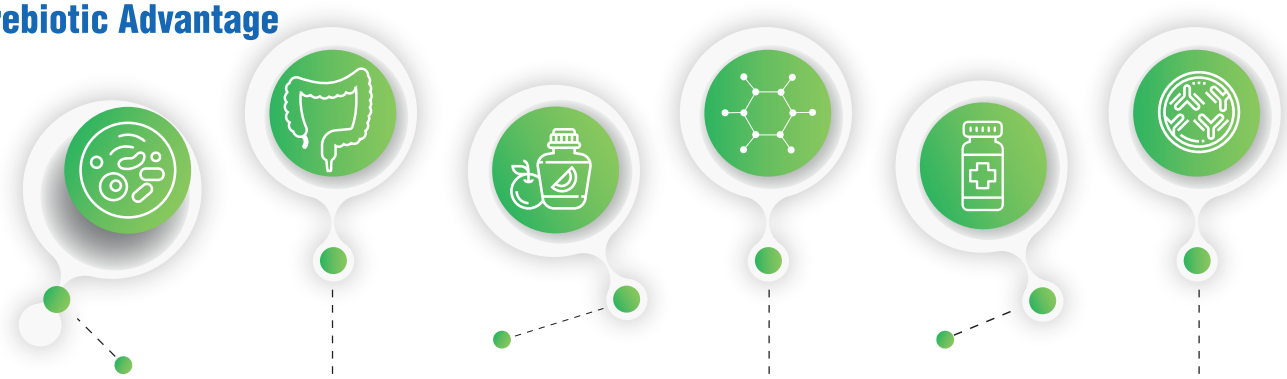
These prebiotic fortified milk make your gut feel good and smile shine bright.

Functional Advantages

- Rich mouth feel
- No change in process, no special equipment required
- Can be used for total added sugar replacement, along with polyols



Prebiotic Advantage



Fecal MIcrobial Composition
FOS increases fecal numbers of Bifidobacteria and Lactobacilli and decreases those of E.coli

Intestinal Absorption of Minerals
FOS improve the apparent total tract digestibility of several minerals

Insulin Sensitivity
scFOS reduces basal insulin resistance, alters glucose and lipid metabolism, and improve glucose homeostasis

Colonic Luminal pH
FOS increases volatile fatty acids which reduces intestinal pH that is detrimental to pathogenic growth

Fecal Bacterial Metabolites
FOS increases fecal acetate, propionate butyrate, and total SCFA and reduces circulating ammonia and fecal phenol

Immunity
scFOS supplementation has been linked with higher igM levels, an immune parameter in dogs

Specific Benefits

Muscle Building — Enhanced bio-availability of amino-acids.

Women Nutrition — Reduced bone loss, positive defense towards gestational diabetes, UTIs.

Sports Nutrition — Sustained glycemia, reduced GI distress & improved immune-competence.

Geriatric Nutrition — Improved gut barrier, regulated bowl movements improved immune-competence and over all metabolic health.

Recipe

Ingredients	With Sugar (%)	With FOSSENCE (%)
Milk	91.60	89.60
Sugar (Powder)	8.00	2.00
FOSSENCE (L55)	0.00	8.00
Strawberry Flv	0.20	0.20
Stabilizers	0.20	0.20
Total	100.00	100.00

About TATA NQ

Tata NQ is the nutritional solution Division of TATA Chemicals Ltd a group company of the $140 bn Tata conglomerate - offering science backed nutritional solutions through innovative ingredients, food technology service, R&D and world class manufacturing facilities.

- Only full scale Manufacturer of FOS and GOS Prebiotics in India
- Biggest Fully Integrated Manufacturer of Prebiotic Globally
- State - of - art Manufacturing Facilities in Nellore and Sriperumbudur.
- 60 Member food-tech & R&D Scientists based out of Pune Innovation Center
- Certification FSSC,FDA GRAS,Halal, Kosher, GMP
- Numerous patents & international Publication

TATA CHEMICALS LIMITED

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Recipe

Ingredients	Concept Composition	Control Composition
FOSSENCE	9.00	----
Whole Wheat Flours	46.35	46.35
Bakery Shortening (Fat)	21.73	21.73
Sugar	15.00	24.00
Honey/HFCS	2.00	2.00
SMP	0.87	0.87
Oats	6.00	6.00
Baking powder	0.11	0.11
Ammonium Bicarb	0.33	0.33
Salt	0.07	0.07
Vanilla	0.12	0.12

Process

1. Weigh all the ingredients accurately.
2. Dissolve salt in little amount of water.
3. Add Fat + FOSSENCE + Milk powder+ Sugar. Mix slowly for 1 min and then 2 to 3 min at higher blending speed to get uniform creamy texture.
4. Add water slowly over the cream and further mix it for 2 to 3 min.
5. Stop mixing add all dry ingredient and mix for 1 to 2 min. Over mixing should be avoided.
6. Sheet and cut the cookies as per required size. Wet cookie weight - 16 g.
7. Bake @ 160 C (top bottom mode) for 13-15 Min for FOSSENCE enriched cookies. Without FOSSENCE baking time increase to 17-18 min for the control cookies
8. After baking cookies cooled to room temperature for an hour and then it is packed and sealed for further analysis.

Nutritional Advantage

Parameter	Control	With FOS
Energy (kcal)	415.00	430.00
Total Fat (g)	21.45	21.45
Saturated Fat (g)	13.65	13.65
Trans Fat (g)	1.04	1.04
Cholesterol (mg)	0	0
Total Carbohydrate (g)	41.76	46.62
Of which Sugars (g)	7.76	7.76
Total Fiber (g)	13.09	4.95

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