



THE WORLD OF **FOSSENCE**®

Keeps your **GUT** Fit, Naturally





“

Fructo-oligosaccharides (FOS) or
oligofructose are commonly
regarded as a type of prebiotics,
favourably stimulating the growth of
"friendly" gut bacteria like
Bifidobacteria and *Lactobacilli*.
FOSSENCE® is short-chain FOS
with a degree of polymerization
from 3 to 5.

”





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Trusted and Dedicated to Add Nutritional Quotient (NQ) to food

The Nutritional Science division of Tata Chemicals Ltd, under the brand Tata NQ, offers nature-inspired and science-backed ingredient and formulation solutions catering to human and animal health. The flagship product of **TATA NQ - FOSSENCE®** is a clinically proven prebiotic dietary fiber, with a prebiotic index of 14.9 at 24 hours. Prebiotic dietary fibers are known to improve gut, digestive & metabolic health, improve mineral absorption & immune response. TATA Chemicals is among the few manufacturers of prebiotics using whole-cell fermentation and in-house developed patented technology.

TATA NQ is supported by a multidisciplinary team of scientists working on microbiome science (the core science platform) and fermentation technology (the manufacturing platform).

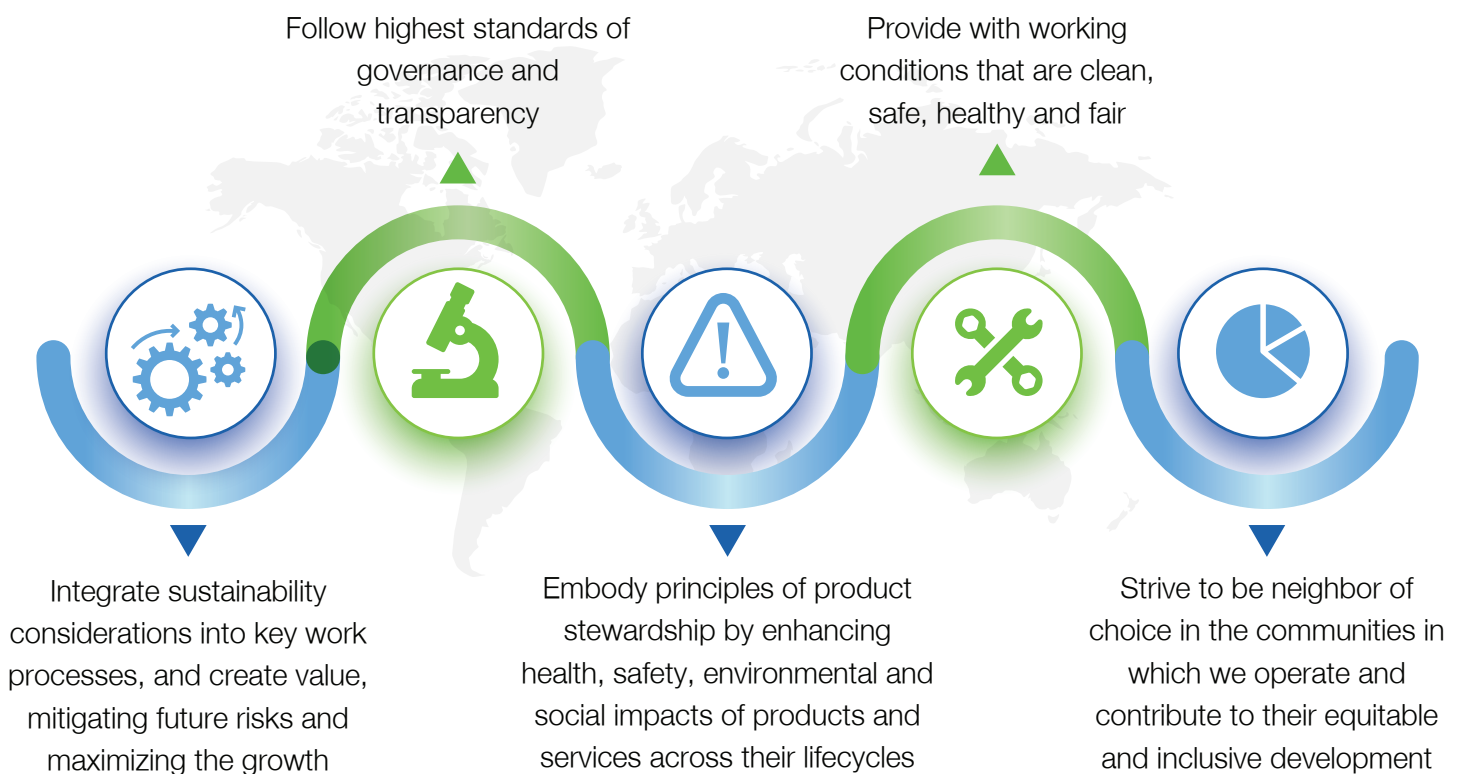
We have numerous publications and patents to our name and are actively involved in building the scientific understanding of microbiome science, especially microbiota in the gut, and the benefits rendered by them.

TATA Chemicals has formed research alliances with academia and research institutions in order to build on their shared strengths in research and innovation. We are actively working with various universities and research bodies to further develop the understanding of microbiome and its effect. Tata Chemicals has also advanced in mapping of the Indian microbiome and the effect of prebiotics on the human microbiome through independent large scale studies.

TATA NQ manufactures its products in a state-of-the-art FSSC 22000 certified facility that is designed to comply with global 21 CFR infant nutrition norms. With a traceable supply chain and automated production system, this facility ensures quality is monitored at every step.

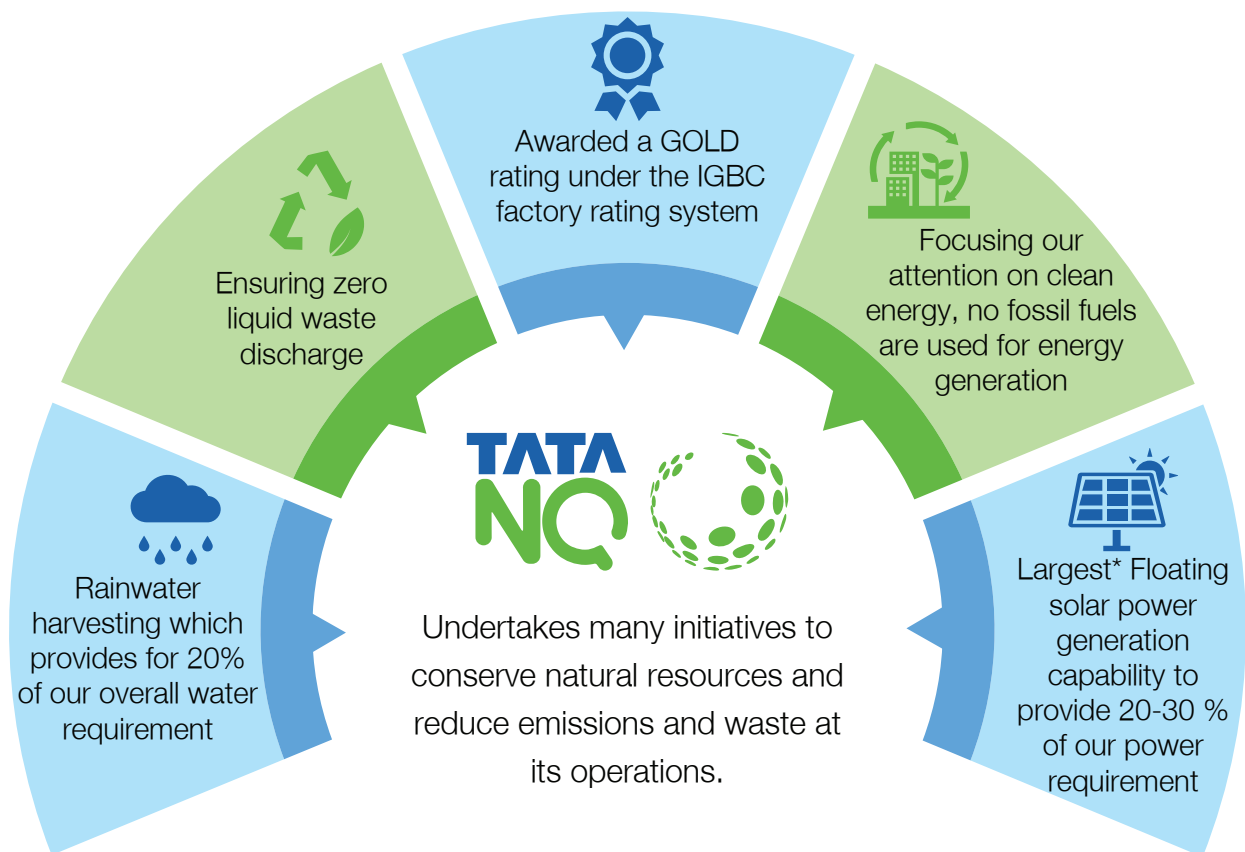
Pillars of Sustainability

TATA NQ are committed to integrating environmental, social and ethical principles into the business, which is vital for improving the quality of life of the communities it serves globally and improving the long-term stakeholder value.



At **TATA NQ**, these pillars of sustainability and responsible manufacturing are reflected in the production of **FOSSENCE®**

The Unique "QAE" (Quality combined with Advanced technology and Environmental care) gives **FOSSENCE®** a unique edge.



Assured Quality

Relevant quality certifications received so that customers are rest assured of the quality, while partnering with us

Advanced Patented Technology

Awarded CSIR Diamond Jubilee Technology Award for the advancements and innovations in the manufacturing

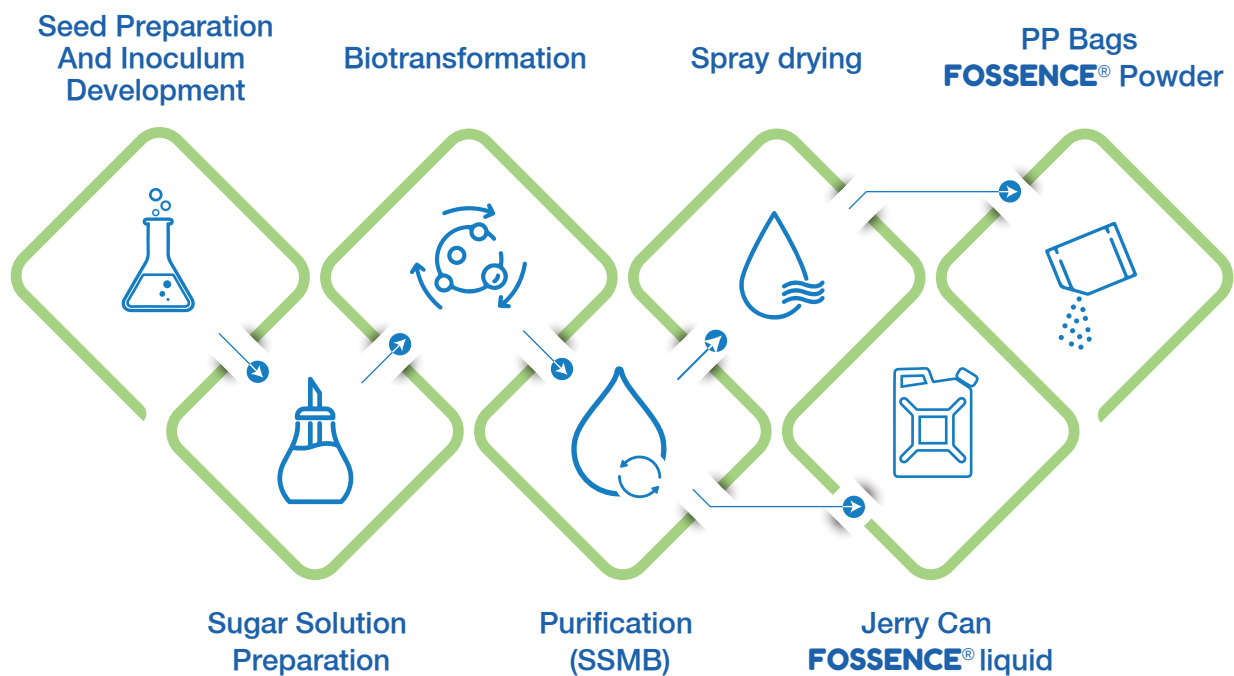
State-of-art Manufacturing Equipment

Produced in a dedicated facility in Nellore district (Andhra Pradesh, India) and is equipped best in class, state-of-art equipment

About **FOSSENCE®**

FOSSENCE® (Fructooligosaccharide) is a 100% soluble, potent prebiotic and dietary fibre derived from fermented cane sugar that selectively enhances the growth of a "good" gut microbiome. It is available in powder and liquid forms for food & beverage and nutraceutical applications.

► Manufacturing Process of **FOSSENCE®**



► Relevant Certifications

The various certifications available at the Nellore plant for **FOSSENCE®** are as follows.

FSSC 22000 V5
certified

GMP compliant

21 CFR part 11
compliant

Halal & Kosher
certified

Global Rules and Regulations

► India

2011, Oligofructose was defined in the Regulations of Food Safety and Standards (Food Products Standards and Food Additives) Regulations.

2016, Fructooligosaccharides was defined in the Regulation of Food Safety and Standards (Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose, Functional Food and Novel Food).

► Food Chemicals Codex (FCC)

Food Chemicals Codex (FCC), FOS has been approved as a food ingredient.

► United States

2016, FDA GRAS Notice, GRN No. 000605 accepted Tata Chemicals FOS as GRAS (Generally Recognized as Safe) and has no question.

2000, FDA GRAS Notice No. GRN000044 accepted FOS as GRAS.

► Europe

2003, EFSA (SCF), FOS has been approved as a food ingredient.

► Food Standards Australia New Zealand (FSANZ)

2013, FSANZ, FOS has been approved as a food ingredient.

► Japan

1995, FOS has been approved as a “specific health food” in the Health Ministry document No.873.

► China

2013, FOS has been defined as both food ingredient and nutritional fortifier by the Ministry of Health P.R.C [2013].

Our Strong Scientific Backing

TATA NQ does extensive research to create a robust scientific backing behind all its products, including **FOSSENCE®**.

Mapping of Gut microbiome and impact of prebiotic supplementation on its modulation^{1,2}

Subjects

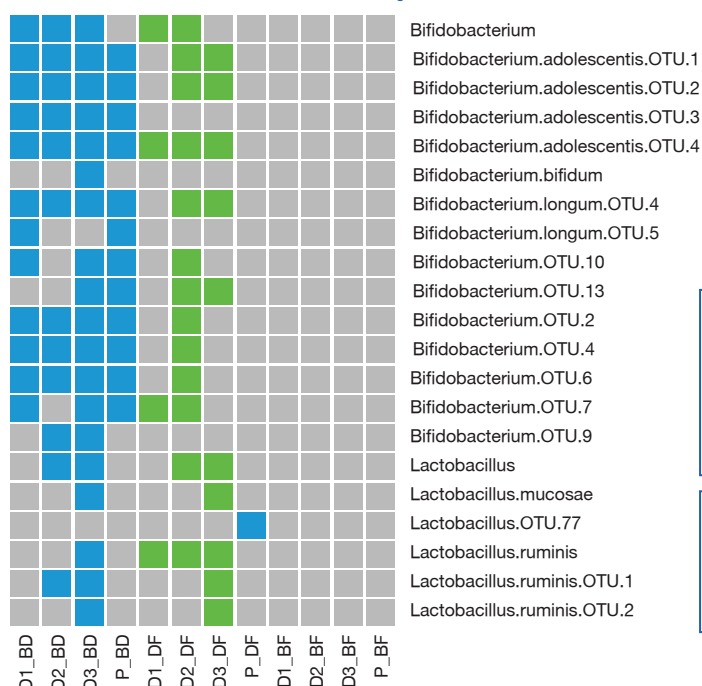
Evaluation of the effect of variable quantities of FOS intake on gut microbiota and temporal dynamics of gut microbiota were reported. Enrolled subjects provided their stool samples at multiple time-points, over a period of 210 days.

Outcome

- FOS consumption increased the relative abundance of *Bifidobacterium* and *Lactobacillus*.
- Higher FOS dosage appears to promote the *Lactobacillus* vs placebo.
- While consumption of prebiotics increased bacterial diversity, withdrawal led to its reduction.

Conclusion

FOSSENCE® intake resulted in a significant improvement in diversity, richness, and evenness of the gut microbiome.²



	Dosage	Phase
Insignificant change	D1 2.5 gm	BD Basal v/s dosage phase
Increase	D2 5 gm	DF Dosage v/s followup phase
Decrease	D3 10 gm	BF Basal vs followup phase
	P Placebo	

Figure: Abundance pattern of OTUs classified individually under *Bifidobacterium* and *Lactobacillus*, different dose intervention at different phases of the study.

The study highlights the need for the supplementation of prebiotics.

Prebiotic Effects of **FOSSENCE**[®] on Gut Microbiome

Study details

Interventional studies under collaborations with the University of Yale

Hypothesis / Objective

FOS supplementation modulates the relative abundances of the gut's bacterial taxa.

Outcome

The relative abundance of *Bifidobacterium* and *Blautia* increased on Day 28 compared to Day 0 and the pathogenic bacteria (*Sutterella*) decreased at the same time. Total SCFA production increased by 25.6%, in which the Butyrate levels increased by 61.7%.

Conclusion

The study conducted under collaboration with the University of Yale shows **FOSSENCE**[®] modulates the gut's bacterial taxa, promoting beneficial *Bifidobacterium* and *Blautia* while suppressing pathogenic *Sutterella*.³

In vitro study

To test the microbial metabolic activity (SCFA and lactate production) and gut-microflora modulation capability of **FOSSENCE**[®] under the simulated conditions of human proximal colon.

Prebiotic Index of the **FOSSENCE**[®] was 11.2 and 14.9 at 10 and 24 hours, respectively.

- **FOSSENCE**[®] fermentation suggested that it can positively modulate host gut-microbiota if consumed appropriately.
- Fermentation of **FOSSENCE**[®] significantly ($p=0.00$) produced acetate, propionate and butyrate at 48h compared to control arm.

FOSSENCE[®] shown to exhibit a strong prebiotic effect under simulated conditions.

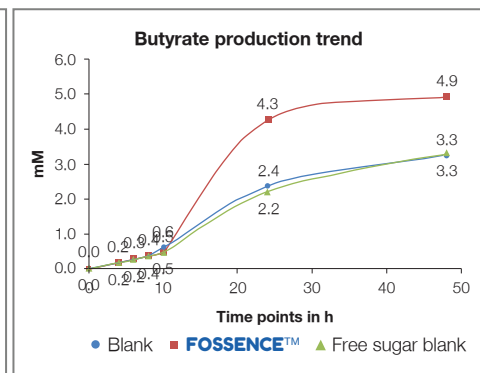
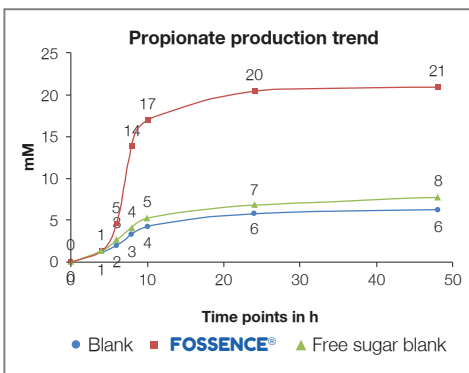
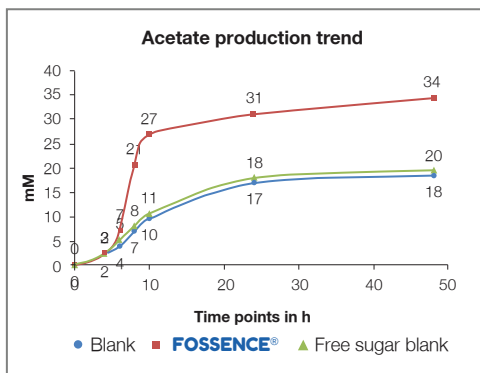


Figure: SCFA production by **FOSSENCE**[®] across time points compared to control.

Our Strong Scientific Backing

FOSSENCE® consumption may improve Vitamin D levels

Study details

The study investigates the plausibility of 7-DHC biosynthesis through dietary prebiotics supplementation⁴.

Outcomes

Supplementation of prebiotic (as **FOSSENCE®**) reported increased metabolic flux with respect to vitamin D₃ biosynthesis. The composite models representing human as host and residential bacteria such as *Faecalibacterium prausnitzii* and *Bacteroides thetaiotaomicron* indicated a two-fold increase in inward flux for provitamin D₃ biosynthesis as compared to the baseline.

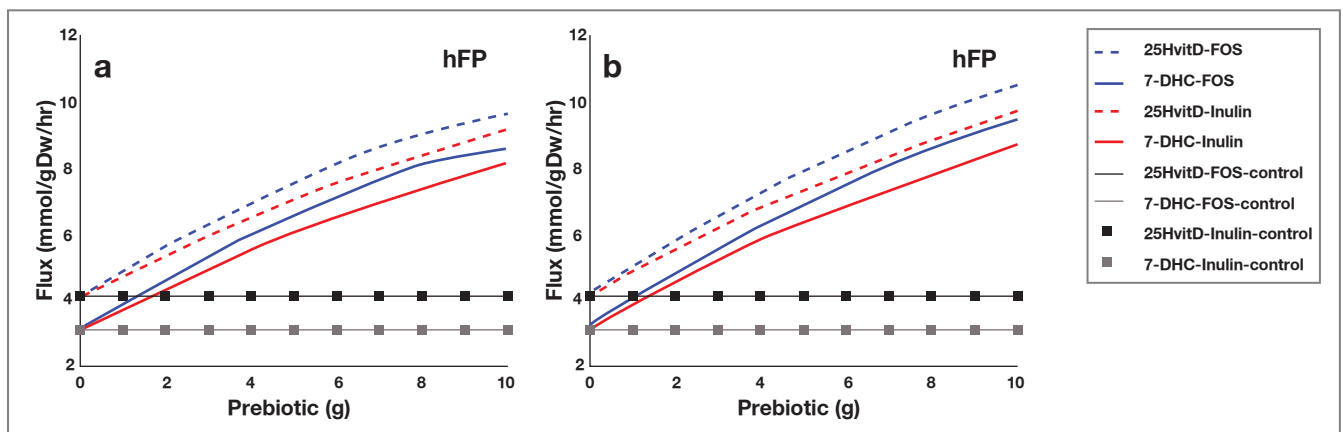


Figure: Effect of prebiotics on 7-DHC flux.

DHC: dehydrocholesterol

The model indicated that the prebiotic intervention of FOS might positively improve vitamin D status in individuals exposed to sunlight.

Glycemic and insulinemic response of **FOSSENCE®**

Study details

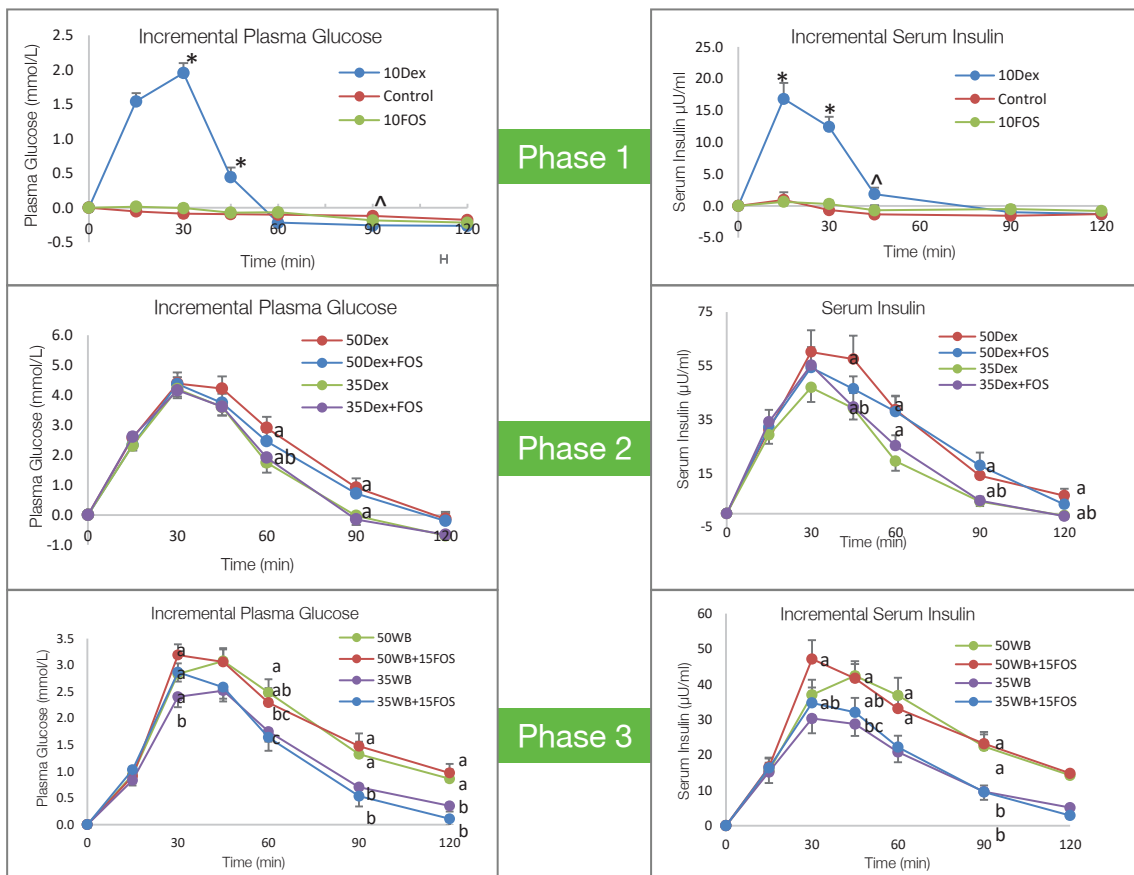
This study was conducted with INQUIS clinical research (Formerly GI Labs, Canada). The clinical trial (in 3 phases) was a randomized, controlled, cross-over design among 25 healthy subjects.

Study objective

FOSSENCE® was investigated for its glycaemic response when consumed by itself or when it is either added or substituted into a carbohydrate load.

Outcomes

FOSSENCE® does not increase postprandial glucose and insulin levels. (ClinicalTrials.gov: NCT03755232)⁵.

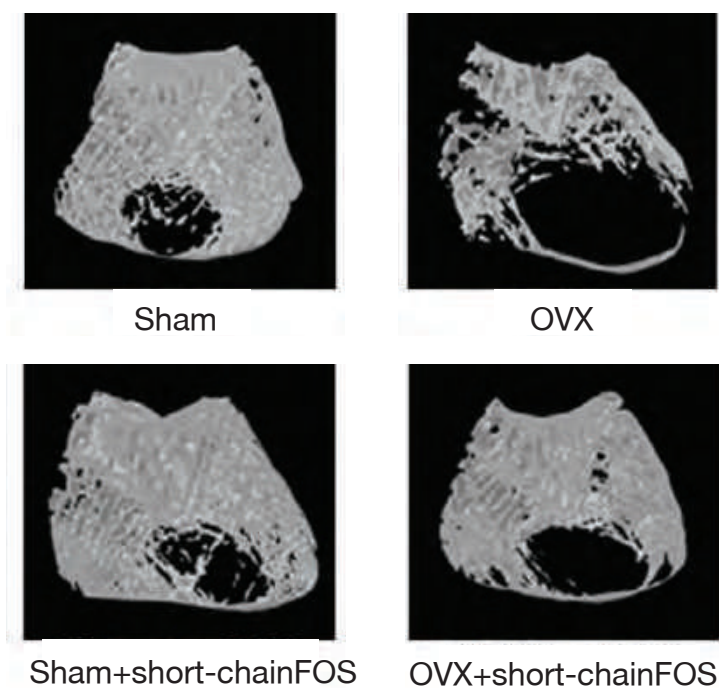


FOSSENCE® attenuates Postprandial plasma glucose when it replaces 30% of glycaemic carbohydrate.

Our Strong Scientific Backing

Impact of **FOSSENCE**[®] on PBM and bone loss⁶

- ▶ Short-chain FOS may help in mineral solubilization, and it is known that estrogen deficiency influences bone loss and peak bone mass (PBM).
- ▶ In a rodent model, rats (group 1: ovary intact (SHAM) and group 2: ovariectomized (OVX) rats) were administered **FOSSENCE**[®]. **FOSSENCE**[®] was administered (dose: 1.85 g / kg / rat) for 12 weeks, equivalent to human converted dose (16 g/day).
- ▶ Compared to control, SHAM and OVX rats with **FOSSENCE**[®] arm demonstrated improved skeletal parameters.
- ▶ **FOSSENCE**[®] was able to increase the serum levels of butyrate, known for its osteogenic property.



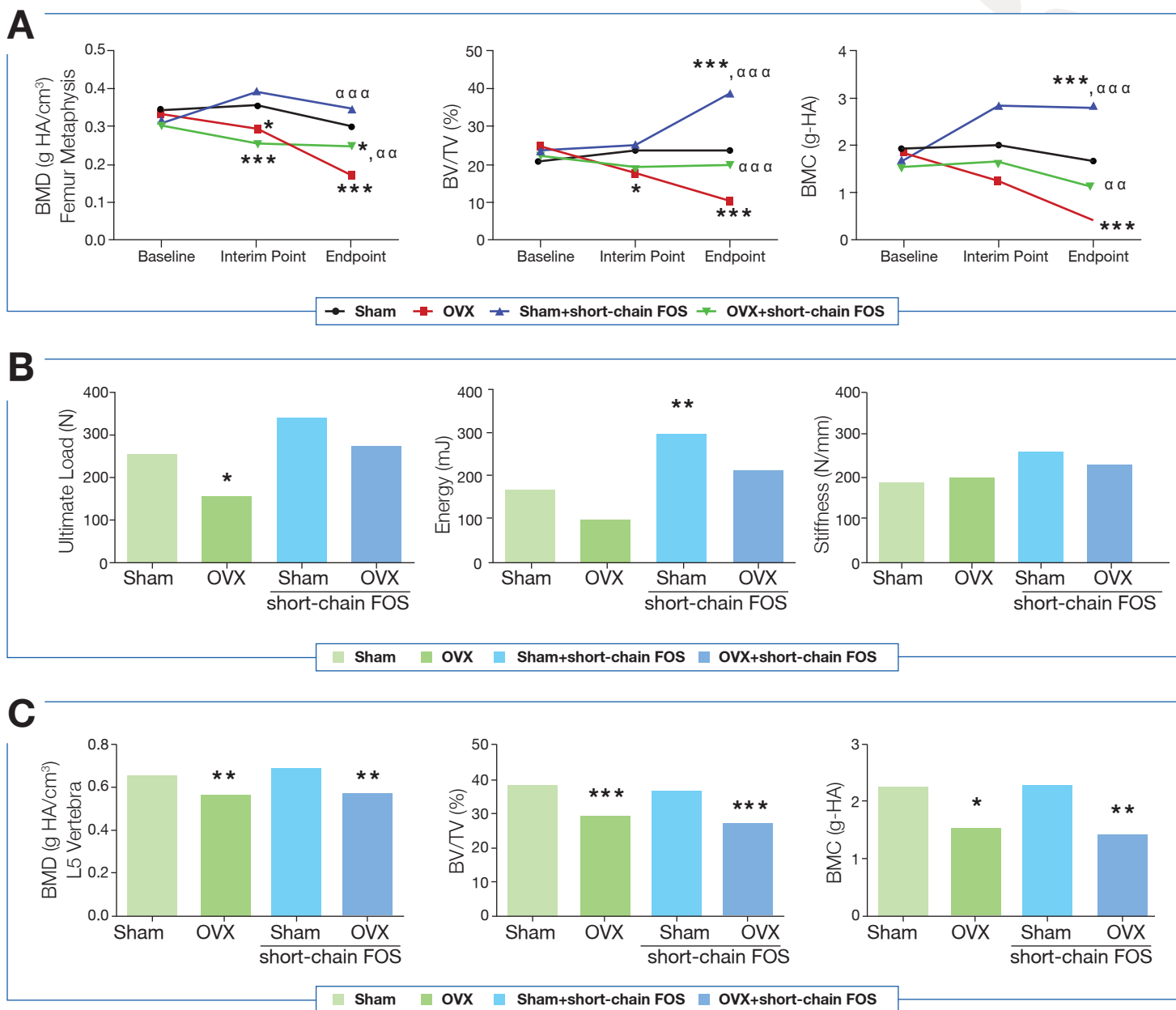


Figure: Short-chain FOS increases bone mass and bone strength in Sham and OVX rats. (A) Time-course of bone mass (BMD and BMC) and bone volume (BV/TV) in femur metaphysis in various treatment groups as indicated. (B) The femur head compression at the end-point was measured through the Bone Strength Tester in various groups. (C) End-point L5 bone mass and bone volume in various treatment groups. Values are expressed as mean $\pm$ SEM (n=6); *p < 0.05, **p < 0.01 and ***p < 0.001 vs. Sham; α p < 0.01 and αα p < 0.001 vs. OVX+veh (shown as OVX).

FOSSENCE®, (at a dose equivalent in humans, when used in rats), can improve the PBM and have protective effects against bone loss induced due to estrogen deficiency by elective enhancement of new bone development.

- Fructo oligosaccharide is a potent prebiotic fiber, and 10 -15g intake per day is recommended. 20g is the upper tolerable limit. This is naturally available in ripe bananas, however to get the daily recommended dose, one will need to consume 35-40 bananas daily ! Adding **FOSSENCE®** as food ingredient helps easily reaching your daily requirements for prebiotics.



Health Benefits of short-chain FOS

Short-chain FOS such as **FOSSENCE®** are prebiotic fibres that have been studied for various health benefits.^{7,8}

Short-chain FOS is resistant to hydrolysis by human digestive enzymes

Escapes digestion in the small-intestine and enters the colon

FOS is digested by colonic "good" bacteria

Increases beneficial colonic bacteria, decreases pathogenic bacteria

Increases the production of colonic short-chain fatty acids (SCFA)

Helps in glycemic control⁹

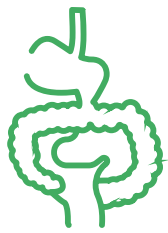
Helps in mineral absorption¹⁰

Beneficial action in non-alcoholic fatty liver disease¹¹

Reduces blood lipids¹²

Clinical Evidences highlighting Health benefits of FOS

The beneficial effects of FOS on various aspects of health have been highlighted in several studies in the scientific literature.



Effect of short-chain FOS on Bowel Movements and Digestive Health¹³

32 healthy adults aged between 18 to 60 years included

Increased number of bowel movements ($p = 0.0006$) and softer stools ($p = 0.0045$) for the first 24 hours

Fibre Mixtures containing FOS improves bowel movements and digestive health



Effect of FOS on constipation in Pregnant Women¹⁴

Randomized, double-blind placebo-controlled trial including 84 pregnant women given 8 g/day of FOS vs 8 g/day sucrose

Stool frequency in the FOS group was found slightly higher vs placebo group two weeks after the intervention (1.0 vs 0.8 times/day)

FOS alleviates constipation in pregnant women



Effect of 10g/day short-chain FOS on intestinal bacteria¹⁵

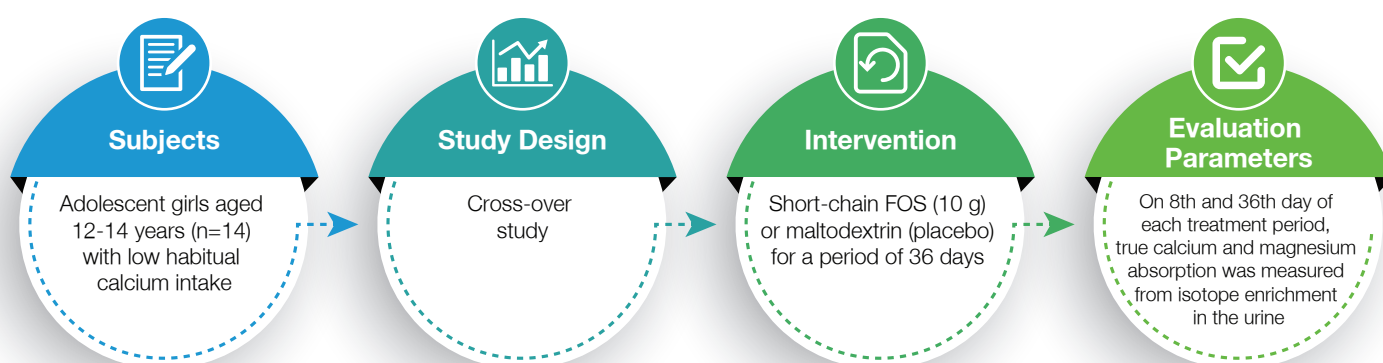
40 healthy volunteers, divided into five subgroups were given FOS (0g, 2.5g, 5g, 10g, 20g) with saccharose, with each dose totalling 20g

Bifidobacteria counts were significantly greater in groups with 10g and 20g than in the groups consuming 0g and 2.5g ($p < 0.05$)

An Optimal Dose of 10g/day of FOS significantly increases faecal *Bifidobacteria* in healthy adults

Effect of short-chain FOS on mineral absorption¹⁶

This study evaluated the effect of short-chain FOS on calcium and magnesium absorption in girls with a low habitual intake of calcium. The study methodology is summarized below.



- After the initial 8 days, no significant ($p=0.56$) change was observed in magnesium absorption
- After 36 days, short-chain FOS increased magnesium absorption significantly by 18% ($p=0.04$)

Table 4: Short-chain FOS on calcium and magnesium absorption - long-term (day 36) effects

Parameter	Placebo	sc-FOS	p-value
	Mean $\pm$ SD (n)	Mean $\pm$ SD (n)	
Mg absorption (%)	30.1 $\pm$ 9.1* (12)	35.4 $\pm$ 12.8* (10)	0.04
Mg excretion (mg/46 h)	205.3 $\pm$ 80.5 (12)	208.4 $\pm$ 65.5 (10)	0.39

short-chain FOS; SD, standard deviation; n, number of observations; Mg, magnesium *significantly different ($p<0.05$)

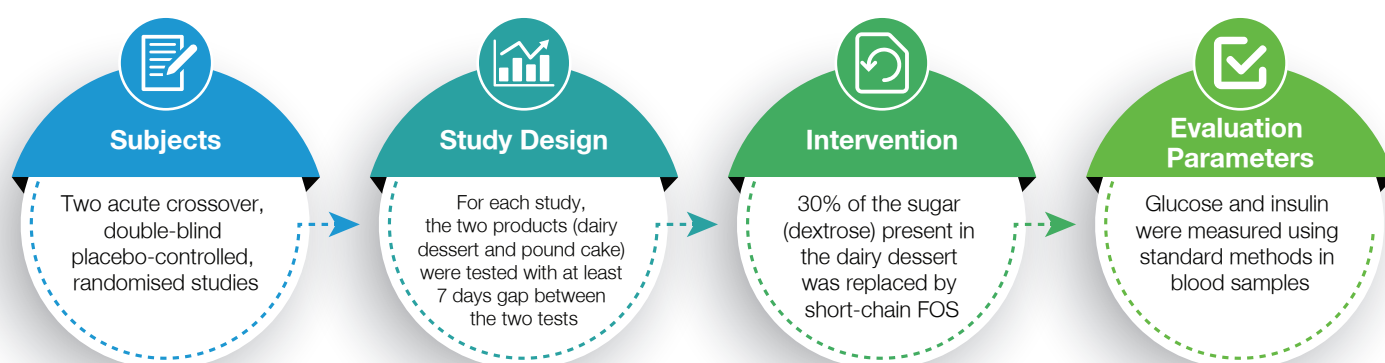
In girls with a low habitual calcium intake, short- and long-term consumption of short-chain FOS improves calcium and magnesium absorption.

Short-chain FOS improves calcium and magnesium absorption
in adolescent girls with low calcium intakes.

Clinical Evidences highlighting Health benefits of FOS

Effects of Short-chain FOS on Glycaemic and Insulinemic Responses in Healthy Adults

The present study was performed to evaluate short-chain FOS impact on glycaemic and insulinemic responses in healthy adults. The study methodology is summarized below.¹⁷



Significantly lower postprandial blood glucose and insulin response were found in the short-chain FOS dairy dessert than the dextrose containing dessert (Table 1).

Table 1: AUC0–120 minimum and maximum concentration (Cmax) of plasma glucose and insulin for 2 hours after consumption of dairy dessert with standard or reduced sugar content

Dairy Dessert (n=24)			
	Control	Reduced in sugars	Dessert Effect: p
	Mean	Mean	
Glucose AUC (mmol x min/l)	92.8 ± 90.6	69.3 ± 56.0	0.02
Cmax (mmol/l)	7.3 ± 1.4	6.9 ± 1.2	0.184
Insulin AUC (mU × min/l)*	2867 ± 1190	2232.4 ± 1121	0.003
Cmax (mU/l)*	64.8 ± 25.4	57.5 ± 25.0	0.003

* To convert insulin in mU/l to pmol/l, multiply by 6.945.

Short-chain FOS may help to reduce the postprandial glycaemic and insulinemic responses to foods when used in place of sugars (w/w) for partial replacement.

Effect of Short-chain FOS Supplemented Formula on Immune System

To evaluate the effects of short-chain FOS fortified infant formula on anti-polio virus-specific immune response, the Anti-poliomyelitis vaccine (used for various virus infections) was chosen.

Study details

Full term formula-fed infants (0 – 7 days; n= 61) were included in this randomized, double-blind, placebo-controlled trial

Intervention

Infants received either the short-chain FOS supplemented formula (4 g/L sc-FOS) or the placebo-supplemented formula (4 g/L maltodextrin) until the age of 4 months

Outcome

At 4 months of infant age faecal levels of anti-polio virus specific IgA were higher in short-chain FOS fortified formula fed infants as compared to the controls (short-chain FOS group: $7,852 \pm 12,107$ vs control: $2,334 \pm 3,896$ ng/mg in humid faeces; $p = 0.08$) (Figure).

In the short-chain FOS formula-fed infants, there was a significant increase in the Bifidobacteria count, which was associated with a trend towards a relative increase in the specific immune response.¹⁸

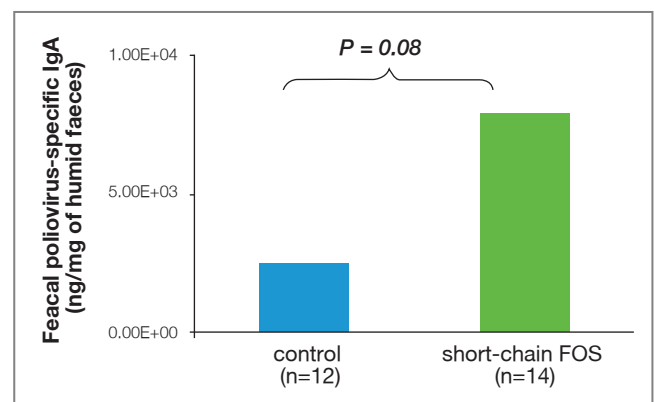


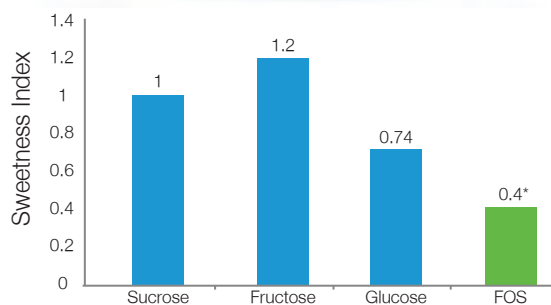
Figure: Fecal levels (Mean $\pm$ SD) of anti-polio virus IgA in the short-chain FOS formula fed and control formula fed infants

Short-chain FOS Supplemented Formula has a beneficial effect on the Immune System of Infants.

Physicochemical Properties of FOSSENCE®

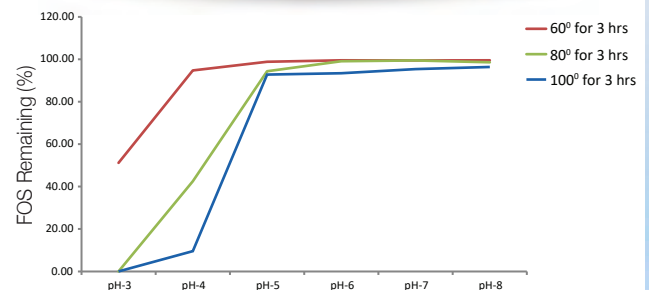
Physicochemical properties of FOS are summarized below.¹⁹

Sweetness Index



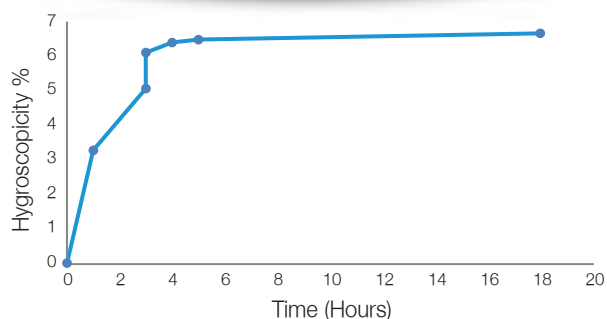
FOSSENCE® is 40% as sweet as sucrose

Temperature and pH Stability*



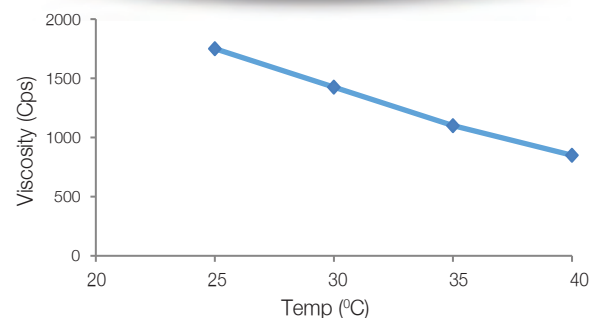
FOSSENCE® has high thermostability in the normal pH (4-7) range for food

Hygroscopicity*



FOSSENCE® conserves right amount of moisture in Food matrix for longer duration

Viscosity***



High Viscosity of **FOSSENCE®** results in improved body and mouthfeel



Solubility and dispersibility*

FOSSENCE® is completely soluble in less than 60 seconds at a concentration of 75% and the dispersibility rate of a 10% solution in water was observed to be around 40 seconds.

High solubility and dispersibility rate makes it easier to handle in various food, beverages and nutraceutical applications.

Water Activity*

Low water activity of **FOSSENCE®** in the range of 0.1 - 0.4 aw**

Flowability*

Excellent flow property makes **FOSSENCE®** easier to handle

*For **FOSSENCE®** P95; **Determined using AquaLab Dew Point Water Activity Meter; ***Determined for **FOSSENCE®** L95

Physicochemical Properties of short-chain FOS compared with other dietary fibers

Properties of **FOSSENCE®** vs other fibres are tabulated below.²⁰

Functional Properties	short-chain FOS	Inulin	Lc FOS	IMO	Maltodextrin
Chemical Structure	GFn ($2 \leq n \leq 5$)	GFn ($10 \leq n \leq 60$)	GFn or Fn	Glucose oligomers with α -D-(1,6)-linkages	$C_6H_{10}O_5)_nH_2O$
Degree of polymerization	3-5	> 10, usually 25	2-10	2-10	>5
Calorific value	2 kcal/g	1.4	1.5	2 kcal/g	4 kcal/g
Solubility	>75% (w/v)	2.5% (w/v)	350-850g/L	>99%	40-70%
Viscosity	<1mPa.s (5% in water at 10°C)	2-4 mPa.s(5% in water at 10°C)	<1 mPa.s (5% in water at 10°C)	<1.61mPa.s	3-6 cm ³ g ⁻¹
Sweetness vs Sucrose	~ 35 - 40% that of sucrose (higher grade)	Bland	30-40% that of sucrose	~50% that of sucrose	0%-5% sweetness of sucrose
Functionality in foods	Sugar replacer	Fat replacer	Sugar replacer/reducer	Sugar replacer	Sugar and fat replacer
Safe dose	15 g/day	5-10 g/day	10g/day	30g/day	
Prebiotic effect (as index)	High	Moderate	Yes	Yes	Considered digestible in humans, Yes in <i>in-vitro</i>
Flavour enhancement	Yes	No	Yes	Yes	Yes

Recommended Application standard

Bakery

Concept	Recommended additional level	Functional benefits	Sugar reduction potential using FOSSENCE®	Potential Products
Cookies	5-15%	• Higher spread • Greater humectancy • Softer texture • Better taste profile	5-35%	• Protein Cookie • Sugar-free Cookie • Diabetic-friendly Cookie • High fibre digestive Cookie • Multigrain Cookies • Oats Cookies
Bread	2.5-7.5%	• Softer texture • Greater humectancy • Better taste profile • Keeps bread soft for a longer period	25-100%	• Sandwich Bread • Ragi Bread • Multigrain Bread • Sweet Bread
Cake & Muffin	1.5-15%	• Softer texture • Greater humectancy • Keep cake moist • Better taste profile	5-35%	• Chocolate Cake Premix • Vanilla Cake Premix • Muffins/Cup Cake • No added sugar Cake Premix
Rusk	2.5-10%	• Better taste profile • Does not get dried	5-35%	• Prebiotic Sugar reduced Rusk

Bakery

Recommended Application standard

Cereal based products

Concept	Recommended additional level	Functional benefits	Sugar reduction potential using FOSSENCE®	Potential Products
Cornflakes	1-10 %	- Better taste profile - Intact crispiness for a longer period	Not Applicable	- Prebiotic Cornflakes - Prebiotic Multigrain Flakes
Museli	1-10 %	- Better taste profile - Crunchy texture - Intact crispiness for a longer period	20-50%	- Prebiotic Muesli - No added sugar Muesli
Nutribar	3-10 %	- Acts as a binder - Improve texture - Greater humectancy - Does not get dried	5-30%	- Prebiotic protein Nutribar - No added sugar Granola bar - Multigrain Cereal Nutribar
Granola	1-10 %	- Better taste profile - Intact crispiness for a longer period	Not Applicable	- Prebiotic Granola - No added sugar Granola

**Cereal
based
products**



Dairy & Beverages

Concept	Recommended additional level	Functional benefits	Sugar reduction potential using FOSSENCE®	Potential Products
Flavoured milk	2-10%	- Improves mouthfeel - Better taste profile - Reduce gum usage	5-50%	- Strawberry Flavored Milk - Chocolate Flavored Milk - Prebiotic Breakfast Milk - Protein Milkshake
Flavoured milk Premix	5-25%	- Improves mouthfeel - Better taste profile	5-50%	- Protein-rich Malt drink Premix - Prebiotic Flavoured Milk Premix - Protein-rich Flavoured drink Premix
Yoghurt	3-10%	- Improves mouthfeel - Better syneresis - Better taste profile	5-20%	- Prebiotic plain Yoghurt - Flavored Yoghurt
Ice cream	2-10%	- Improves mouthfeel - Better texture - Better taste profile	5-40%	- Prebiotic Ice Cream - No added sugar Ice Cream
Tea premix	2-15%	- Improves mouthfeel - Better taste profile	5-15%	Prebiotic Tea Premix
Coffee premix	2-15%	- Improves mouthfeel - Better taste profile	5-15%	Prebiotic Coffee Premix

Dairy & Beverages

Recommended Application standard

Confectionary

Concept	Recommended additional level	Functional benefits	Sugar reduction potential using FOSSENCE®	Products
Chocolate	5-15 %	• Improves mouthfeel • Better taste profile	5-20%	• Prebiotic Milk Chocolate • Prebiotic Dark Chocolate • No added sugar Chocolate
Gummies	5-10%	• Better soft texture • Better taste profile	5-20%	• Prebiotic Gummies • No added sugar Gummies
Hard-boiled candies	5-10%	• Texture stays the same over a longer period	5-20%	• Prebiotic Candies • No added Candies • Herbal Candies

Confectionary

Herbal and health supplements

Concept	Recommended additional level	Functional benefits	Sugar reduction potential using FOSSENCE®	Products
Herbal syrup	20-70%	Mask off-notes of herbal	25-100%	Herbal Immunity Syrup
Herbal drink	3-10%	- Mask off-notes of herbal - Better mouthfeel & taste profile	5-30%	Prebiotic Turmeric Latte
Herbal snack	3-10%	- Mask off-notes of herbal - Better taste profile	5-30%	- Herbal NutriBar - Herbal Cookies
Herbal soup premix	5-15%	- Mask off-notes of herbal - Better taste profile	5-25%	Herbal Hot & Sour Soup

Herbal and health supplements



Recommended Application standard

Indian Sweets

Concept	Recommended additional level	Functional benefits	Sugar reduction potential using FOSSSENCE®	Potential Products
Kaju Katli	2-10%	• Texture and taste same	5-15%	• <i>Prebiotic Kaju Katli</i>
Peda	2-10%	• Texture and taste same	5-15%	• <i>Prebiotic Peda</i>
Ladoo	2-10%	• Texture and taste same	5-15%	• <i>Prebiotic Ladoo</i>

Indian Sweets



Features of **FOSSENCE®**



Highly stable

- Highly stable at refrigerated temperatures over one year
- Highly stable in the normal pH range for food (4.0 -7.0)
- Controls browning due to maillard reactions in heat - processed foods

Low calorific value and glycemic response

- Energy contribution to food of about 2 kcal/g
- Can be utilized in low calorie diet, sweets, diabetic food

Dietary fiber and Prebiotic effect

Easily fermented by the colon micro flora resulting in a healthy gut

Safe for consumption

Infant nutrition GRAS dossier filed

Product Specifications

Liquid Variants



FOS Content : 95 $\pm$ 2%
Solid content : $\geq$ 75° Bx
Fiber content : 70-73%



FOS Content : 92 $\pm$ 2%
Solid content : $\geq$ 75° Bx
Fiber content : 68-71%



FOS Content : 87 $\pm$ 2%
Solid content : $\geq$ 75° Bx
Fiber content : 64-67%



High Sweetness mix
FOS Content : $\geq$ 55 %
Solid content : $\geq$ 75° Bx
Fiber content : $\geq$ 41%



FOS Content : $\geq$ 55 %
Solid content : $\geq$ 75° Bx
Fiber content : $\geq$ 41%

Powder Variants



FOS Content : $\geq$ 95 %
Moisture content : $\leq$ 5%
Fiber content : $\geq$ 90%



Granulated powder
FOS Content : $\geq$ 95 %
Moisture content : $\leq$ 5%
Fiber content : $\geq$ 90%



FOS Content : $\geq$ 90%
Moisture content : $\leq$ 5%
Fiber content : $\geq$ 85%



FOS Content : $\geq$ 85 %
Moisture content : $\leq$ 5%
Fiber content : $\geq$ 80%

*Refer Technical Datasheet for more details

Global distribution capabilities

FOSSENCE® has a wide distribution network
all over the world.



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