

Oliggo-Fiber® Chicory Root Fiber

Product Portfolio

Oliggo-Fiber® chicory root fiber is a naturally-sourced* fructan extracted from chicory root. It's a versatile ingredient that offers many functional and health benefits.

Oliggo-Fiber® chicory root fiber helps food and beverage manufacturers capitalize on key consumer trends, such as clean label and sugar reduction, without affecting taste and texture.

Oliggo-Fiber® is GRAS (Generally Recognized as Safe), KOSHER & HALAL. It does not contain GMOs or GMO-derived components; not produced using GMO-based technology.

Functional Benefits

- Fat mimetic
- Bulking agent
- Masking agent
- Body and mouthfeel enhancement
- Flavor and texture improvement
- Displacement of full calorie carbohydrates and sugars

Health Benefits

- Digestive Health
- Bone Health
- Weight Management
- Negligible Impact on Glycemic Index

Applications

- Bakery
- Beverages
- Confectionery
- Dairy
- Snacks





Ingredient		Fiber content, dry	Sweetness	Solubility at 20°C	Main purpose	Main applications
Liquid	L85 (liquid oligofructose)	85%	50%	>950g/L	Sugar reduction, fiber enrichment when high solubility required	Bakery & cereals Bars Beverages Confectionery Dairy drinks Fruit preparations
	L90 (liquid oligofructose)	90%	40%			
Powder	F97 (oligofructose powder)	95%	10%	350g/L	Strong sugar reduction, fat reduction, fiber enrichment when high solubity is required	Bakery Beverages Chocolate Confectionery Dairy drinks Fruit preparations
	S30 (native inulin with increased solubility)	90%	15%	300g/L	Sugar and/or fat reduction, increased solubility	
	Instant (native inulin)	90%	10%	100g/L	All-around product, fat mimetic effect	Bakery Beverages Dairy Meat Powder blends Tablets
	XL (long chain inulin)	98.5%	0%	0 (gel formation)	Fat replacement – strong fat mimetic effect	Dairy Meat Powder blends

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CONTACT

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 $^{^{\}star}\text{FDA}$ has not defined natural. Contact Cargill for source and processing information.

Oliggo-Fiber® Chicory Root Fiber

Frequently Asked Questions



What is Oliggo-Fiber® chicory root fiber?

Oliggo-Fiber® chicory root fiber is a naturally-sourced* fructan extracted from chicory root. It is a versatile ingredient that offers many functional and health benefits.

What are the functional benefits of Oliggo-Fiber® chicory root fiber?

- Fat mimetic
- Bulking
- Masking
- Body & mouthfeel enhancement
- Flavor & texture improvement
- Displacement of full calorie carbohydrates and sugars

What are the health benefits of Oliggo-Fiber® chicory root fiber?

- Digestive health
- Bone health
- Weight management
- Negligible impact on glycemic index

How is Oliggo-Fiber® chicory root fiber listed on the ingredient deck on final product packaging?

Oliggo-Fiber® chicory root fiber is labeled on the ingredient deck as any one of the following:

- Chicory root fiber (vegetable fiber)
- Fructooligosaccharide
- Oligosaccharide
- Chicory extract
- Chicory fiber
- Chicory root fiber
- Fructan

Do consumers view chicory root fiber as label-friendly?

Yes, Cargill has proprietary consumer research regarding the label appeal of chicory root fiber.

Can Oliggo-Fiber® chicory root fiber be used in formulating products with reduced sugar?

Yes, chicory root fiber can function as a bulking agent when removing sugar from a formulation. We generally recommend replacing sugar 1:1 with chicory root fiber. Native and shorter chain chicory root fiber ingredients will brown like sugar and also have a residual sweetness.

What are the caloric values of Oliggo-Fiber® chicory root fiber?

Oliggo-Fiber® chicory root fiber products have demonstrated caloric values ranging from 1.1 to 1.5 calories per gram.

Current US FDA labeling for all soluble dietary fiber is 2 kcal/g.

Carbohydrates in general have a value of 4 calories per gram.

How much chicory root fiber should be consumed each day?

Studies have shown prebiotic benefits from chicory root fiber with at least 5 grams per day. Benefits to calcium absorption have been observed with at least 8 grams per day. Dietary fiber in general should be consumed at 25-38 grams per day.

What is a prebiotic?

Prebiotics selectively stimulates growth of healthy bacteria in the colon such as Bifidobacteria and Lactobacilli, and may also promote healthy digestion. Oliggo-Fiber® chicory root fiber is fermented by these intestinal bacteria, and short chain fatty acids are produced. This can then cause a lowering of the pH in the large intestine which may enhance calcium absorption.



Chicory Root Fiber



How is chicory root fiber used in food products?

Native chicory root fiber, such as Oliggo-Fiber® Instant chicory root fiber, is an extremely versatile product for fiber fortification. As a soluble source of fiber, it can be easily incorporated into dairy products, including yogurt, ice cream and cheese. It also allows for fiber fortification into beverages, such as meal replacements, dairy-based beverages and dry mixes. A wide array of bakery products, including breads, cookies, cakes and crackers, can be developed with native chicory root fiber.

Longer chain chicory root fiber, such as Oliggo-Fiber® XL chicory root fiber, can improve the body and texture of various food products. It is capable of forming a gel and can be successfully used for fat replacement and calorie reduction. In spreadable cheeses and low calorie sauces and dressings, it functions as a fat replacer, imparting a desirable creamy mouthfeel. It can also be used to improve the texture and mouthfeel of low fat dairy products. In fillings and confectionery products, including coatings, sugar and calorie reduction can be achieved through the addition of chicory root fiber.

Chicory root fiber is also approved for use in meat applications. Longer chain chicory root fiber can help improve yields by retention of water through cook cycles, as well as functioning as a fat replacer in reduced or low fat meat applications.

Shorter chain chicory root fiber, such as Oliggo-Fiber® F97 oligofructose, with its higher solubility is ideal for invisibly delivering fiber into clear beverages. It imparts a slight sweetness, while synergistically rounding out flavors from high intensity sweetners. In health bar applications, such as high protein extruded bars, oligofructose can help maintain a soft texture, ultimately extending shelf life.

Is chicory root fiber stable in acidic food applications?

Chicory root fiber is susceptible to hydrolysis in acidic conditions around pH 3.5 and lower. The degree of hydrolysis will depend on the temperature and duration of exposure to the acidic environment. When hydrolysis occurs, the long chain oligosaccharide is broken down into shorter chains and simple sugars such as fructose.

Is chicory root fiber heat stable?

Yes. Chicory root fiber is extremely heat stable.

Where can I find products with Oliggo-Fiber® chicory root fiber?

Oliggo-Fiber® chicory root fiber appears in a variety of products on grocers' shelves. Currently chicory root fiber is used in yogurts, breads, salad dressings, beverages, sugar-free chocolate, ice cream, and nutrition bars. We expect to see many other products to come in the near future.

How can I further inquire or get a sample of Oliggo-Fiber® chicory root fiber?

Request further information or get a sample by clicking here.



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