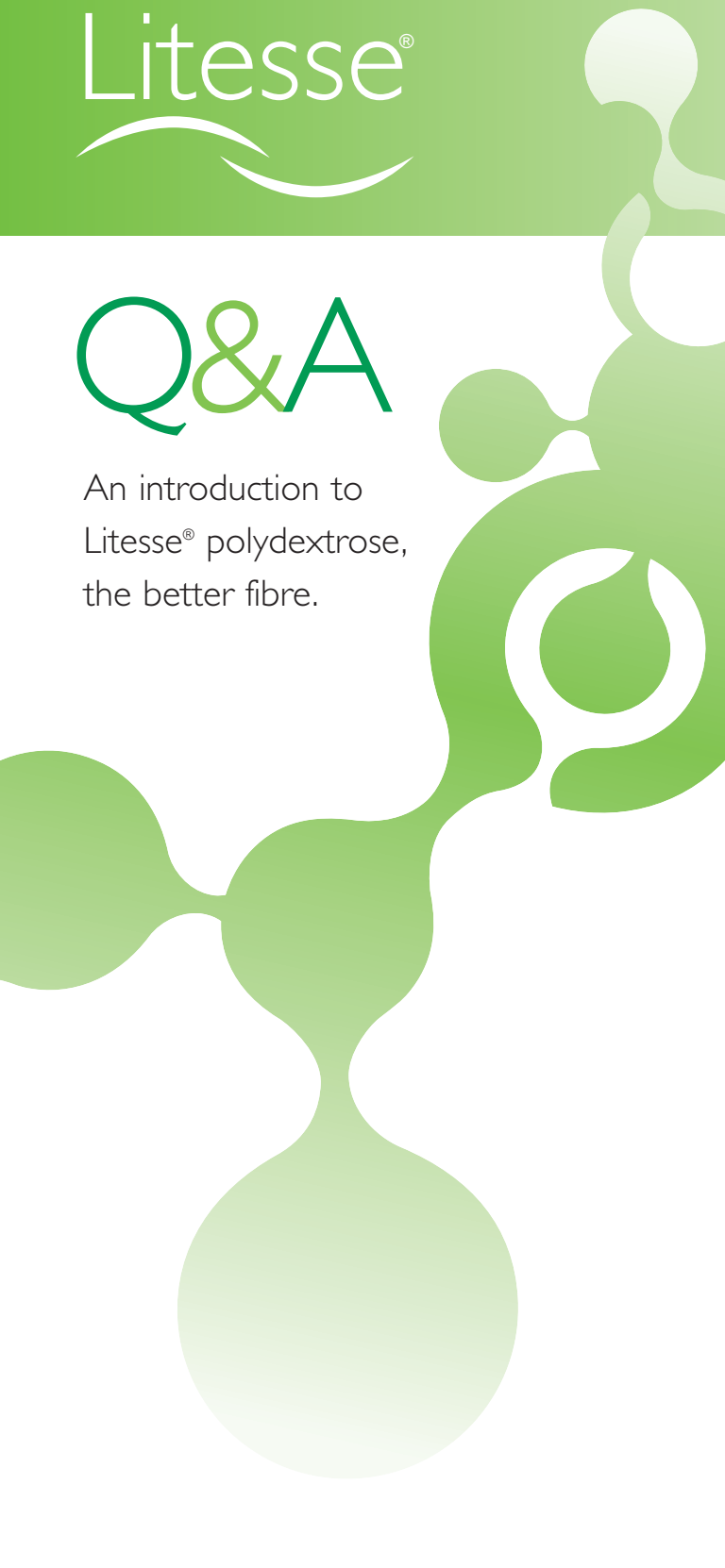


Litesse[®]



Q&A

An introduction to
Litesse[®] polydextrose,
the better fibre.



1) What is Litesse® polydextrose?

Litesse® polydextrose from Danisco is a low calorie, sugar free, low glycaemic speciality carbohydrate that has prebiotic properties and is widely recognised as soluble dietary fibre. Low glycaemic ingredients have minimal effect on blood glucose levels and a prebiotic is a non-digestible food ingredient that has been shown to have digestive health benefits.



2) What makes Litesse® unique?

Litesse® is only partially metabolised in the body and contributes only 1 calorie per gram to food and beverage products while sugar contributes 4 calories per gram and fat adds 9 calories per gram. As a prebiotic fibre, Litesse® is a nondigestible food ingredient that selectively stimulates the growth and/or activity of beneficial bacteria in



the colon. Studies show that a diet high in fibre is key to improving digestive health. The positive effects of Litesse® as a prebiotic fibre are apparent at doses as low as 4 grams per day in humans. Prebiotic ingredients are distinct from

probiotics — live micro-organisms that also improve the balance of intestinal microflora.

3) Where is Litesse® used?

Food manufacturers rely on Litesse® in the formulation of foods and beverages that are fibre enriched, reduced or low calorie, sugar free, reduced sugar, or reduced in fat. It is widely used in applications such as baked goods, ice cream and other dairy products, nutrition bars, cereals, beverages, confectionery, chocolate, yoghurt, and salad dressings, among many others.

4) What does Litesse® taste like?

Litesse® has virtually no taste and a low sweetness. Because of its neutral taste, Litesse® does not adversely impact the flavour of foods and beverages and can be used in both sweet and savoury products.

5) What are the nutritional benefits of Litesse®?

Litesse® is ideal for the formulation of products that target Weight Management and Digestive Health. A premium quality, 1 calorie per gram speciality carbohydrate, Litesse® offers a range of nutritional benefits.

Litesse® polydextrose:

- adds prebiotic fibre for improved digestive health.
- replaces sugar and fat while improving the flavour, texture and mouthfeel of many food products.
- assists in the formulation of reduced calorie foods and beverages.
- provides a satiating effect that can assist in weight management.
- is low glycaemic and metabolised independently of insulin.
- is suitable for consumers seeking to control carbohydrate intake, including diabetics.



6) Does the consumption of foods made with Litesse® add soluble fibre to one's diet?

In addition to eating whole grains, fruits and vegetables, consuming foods made with Litesse® is an incremental way to increase the fibre in one's diet. At a time when nutritionists report the average diet contains less than half the recommended fibre intake of 25-38 grams per day, the ability of Litesse® to boost the fibre content of food and beverage products is an important benefit to consumers.

7) Are there other reasons to use Litesse® in food products?

- While it has many of the properties of sugar, Litesse® has a low sweetness. It is compatible with sugars and high potency sweeteners allowing the sweetness level of finished products to be easily balanced.
- The clean, neutral taste of Litesse® helps to mask the off-flavours that can result from the addition of vitamins, soy, minerals and other supplements found in nutritional products.



- Litesse® contributes bulk/solids and enhances eating quality. Litesse® can restore the desirable mouthfeel and smooth, textural qualities that may be lost when replacing sugars and fats in food products.
- Litesse® also acts as a humectant to keep a food product moist and maintain freshness while improving shelf life. This is especially important for baked goods.
- When used in ice cream and frozen dairy products, the freezing point depression factor of Litesse® permits the texture of the finished product to be balanced to create a rich, creamy smoothness.

- Litesse® is highly soluble and stable. It has a higher water solubility than most carbohydrates and polyols, allowing up to 80% w/w solutions at 20°C (68°F). Litesse® exhibits excellent stability over a wide range of temperatures and pH conditions.



8) How many types of Litesse® are there?

The properties of Litesse® can be varied from a bland, neutral powder; to a granular form; to a colourless, mildly sweet liquid. Additionally, the Litesse® family of ingredients is available in three grades to meet the individual requirements of different applications and processing procedures – Litesse®, Litesse® Two and Litesse® Ultra.™



9) Is Litesse® natural?

Polydextrose is a polymer of glucose. While polydextrose is not found in nature, Litesse® is made from naturally occurring ingredients derived from corn: sorbitol, dextrose and citric acid.

10) How is Litesse® sold?

Danisco sells Litesse® as an ingredient to food and beverage companies. Litesse® is not sold directly to consumers but can be found in many well-known food and beverage brands that they enjoy everyday.

11) How is Litesse® listed in the ingredient statement and the nutrition facts panel?

Food products containing Litesse® will have the word “polydextrose” within the ingredient statement. In the nutritional information, Litesse® counts toward the amount of fibre listed.

12) Where is Litesse® made?

Litesse® is manufactured in Terre Haute, Indiana in the USA using a proprietary process. Danisco is committed to providing ingredients of very high purity and consistent quality.

13) How long has Litesse® been on the market?

Trusted by food companies and sold worldwide for over 30 years, Litesse® is approved for use in over sixty countries, and food manufacturers have come to rely on Litesse® in the formulation of fibre enriched, low calorie, sugar free, reduced sugar and low fat foods and beverages.

14) What are the regulatory and labelling guidelines for Litesse®?

Following a thorough review of the available data, no maximum usage levels for polydextrose were recommended by the FAO/WHO Joint Expert Committee on Food Additives (JECFA). Similarly, no maximum use levels have been established in legislation for polydextrose in the USA, EU and most other countries worldwide and, as such, usage levels are only restricted by good manufacturing practices (GMP) which limit the quantity used to the amount necessary to achieve the intended effect. In the USA, the Food and Drug Administration has approved the use of polydextrose in all foods with the exception of meat, poultry, baby food and infant formula. In the EU, polydextrose is approved under the Miscellaneous Additives Directive - Annex I, permitting the use of polydextrose in virtually all foodstuffs following the quantum satis principle. In general, Litesse® can be labelled as 'polydextrose' or 'E1200.' However, local legislation should always be consulted for specific labelling requirements.

15) Is Litesse® well tolerated?

Unlike some prebiotic fibres, Litesse® is well tolerated up to 90 grams per day and is less likely to cause the gas generation and lactic acid accumulation that can lead to gastric discomfort.

16) What are the research results associated with Litesse®?



Since its introduction in the 1980s, more than 60 research reports and clinical studies have found polydextrose to be safe and efficient as a low calorie, sugar free, low glycaemic functional food ingredient. Numerous studies into the functionality of polydextrose as a fibre

have concluded that the consumption of foods made with Litesse® polydextrose can improve gastrointestinal function without adverse effects. A complete listing of the research and clinical studies can be found at www.litesse.com

Litesse® has contributed to the success of numerous food products in the marketplace today. Litesse® is one of the most versatile ingredients available to the food and beverage industry and continues to present opportunities for healthy, innovative applications.



Litesse®
the better fibre

About Danisco

With a rich and innovative portfolio, Danisco is a world leader in food ingredients, enzymes and bio-based solutions. Using nature's own materials, science and the knowledge of our 6,800 people, we design and deliver bio-based ingredients that meet market demand for healthier and safer products. Danisco's ingredients are used globally in a wide range of industries – from bakery, dairy and beverages to animal feed, laundry detergents and bioethanol – to enable functional, economic and sustainable solutions. Headquartered in Denmark and operating from more than 80 locations, Danisco's key focus is to become our customers' First choice and a truly market-driven global business. Find out more at www.danisco.com

For more information about Litesse®,
email us at info@litesse.com
or visit www.litesse.com

 **DANISCO**
First you add knowledge...

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