Nutrition Centre
By TATE & LYLE

Glycaemic Response

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Discover the impact of innovative ingredients on glycaemic response

As the incidence of diabetes increases globally, food and beverage manufacturers are thinking of ways to tackle the problem.

Tate & Lyle is no exception, as we continue to innovate with a range of ingredients that provide consumers with the health benefits they want in the products they love.

537 million people worldwide are affected by diabetes - a global impact

In 2021, diabetes affected 537 million people worldwide, and that number is rising [1].

Diabetes can have serious consequences for health, increasing the risk of heart disease and stroke [1].

However, the impact goes much further than that, draining healthcare budgets, overwhelming healthcare systems and impacting economic growth [1].

The good news is that we can reduce the risk of Type 2 diabetes or delay its onset by maintaining a healthy body weight (or losing weight if needed), exercising regularly and eating a healthy diet [2].

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The importance of diet and the glycaemic response

What is the glycaemic response?

The glycaemic response is the effect the food we eat has on our blood sugar levels.

The post-meal glycaemic response can be influenced by many factors, including overall diet patterns and food composition, exercise, medications and more [3].

Regularly occurring high glycaemic response increases the risk of developing Type 2 diabetes [4]. Therefore, as part of a healthy and well-balanced diet, we can consider how to help manage our blood glucose levels – eating sufficient fibre, moderating sugar intake, and avoiding excessive calorie intake are part of this [1, 2].

According to a series of systematic reviews and meta-analyses, it is recommended that adults target a daily dietary fibre intake ranging from 25 to 29g [5].

The World Health Organization (WHO) additionally suggests limiting the intake of saturated fats [6] and free sugars [7] to less than 10% of total energy intake each. Furthermore, WHO recommends reducing free sugars to less than 5% of total energy intake, which can offer additional health benefits.

Leading the solution to a global problem

For consumers, the time to consistently stick to a healthy diet is in short supply. As such, they're looking for products that will fit seamlessly into everyday life, as well as provide the health benefits they need, such as lowering the glycaemic response, supporting weight management and increasing fibre intake.

Tate & Lyle's portfolio of fibres and low and no calorie sweeteners can be added to a variety of food and drinks, without impacting taste, texture or customer enjoyment of your products.

Consumers are looking for products that:

Provide the health benefits they need

Fit seamlessly into everyday life

Don't compromise on taste and texture

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Our extraordinary portfolio

PROMITOR®
Soluble Fiber

A corn based soluble fibre that can be added to products to boost their fibre content. PROMITOR® Soluble Fibre provides between 70 – 90% dietary fibre*, contains less than 10% sugar, and has a calorie content of between 1.1 and 1.9 kcal/g**.

Studies have also shown that it can reduce the post-meal glycaemic response when added to food and beverages [8–10].

With only 20% of people around the world reporting daily fibre intake [11] and 22% of consumers stating that there aren't enough products that contain fibre on the market [11].

PROMITOR® Soluble Fibre offers a versatile solution to the fibre gap.

DOLCIA PRIMA®
Allulose

DOLCIA PRIMA® Allulose is a sweetening ingredient that's low in calories and has a similar taste and mouthfeel of sugar. It causes no increase in blood glucose or insulin levels in healthy adults or those with Type 2 diabetes [13].

Splenda®
SUCRALOSE

For over 40 years, SPLENDA® Sucralose has been regularly used in a wide range of food and beverage products. Its use has proven physiological benefits for reduction of post-meal glucose response. With 600 times the sweetness of sugar, it's perfect for manufacturers challenged with meeting demand for good-tasting, low-calorie products.

TASTEVA®
Stevia Sweetener

Consistently growing in popularity, Stevia is a plant-based sugar alternative, with zero calories and between 200 – 300 times the sweetness of sugar.

Several studies have indicated that stevia consumption doesn't raise blood glucose or insulin levels on post-meal sugar levels in healthy adults and those with Type 2 diabetes [14–16].

TASTEVA® Stevia Sweetener and TASTEVA® M Stevia Sweeteners, along with other options from our range of stevia portfolio, provide sweetness with negligible to zero calories while supporting a healthy glycaemic response.

STA-LITE®
Polydextrose

STA-LITE® Polydextrose is a soluble fibre shown to reduce the glycaemic response in healthy adults when consumed in food or beverages [9, 12] and is an ideal sugar replacement containing only 1 kcal per gram**.

PUREFRUIT™
Monk Fruit Extract

PURE FRUIT™ Monk Fruit Extract is 100–200 times sweeter than sugar with zero calories. Studies have shown that it doesn't increase daily energy intake, blood glucose or insulin [14], making it a great sugar replacement in many foods and beverages.

Our exceptional ingredients are here to help consumers meet their everyday wellness needs, as well as help businesses formulate and provide the products that help them to do just that.

* Labelling and claims may vary by country. Customers are advised to consult their own regulatory experts to determine appropriate labelling and claims for their products.** Caloric labelling varies based on country-specific regulations. *** Not all products are approved for use in all markets. Customers are advised to consult their own regulatory experts regarding all legal and regulatory aspects of our products.

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To learn more about Tate & Lyle ingredients and innovations as well as health benefits and relevant research, please visit www.tateandlyle.com/nutrition-centre

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