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ASIA

Tackling the silent killer with a low glycaemic diet

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More than 425 million people around the world currently live with diabetes, a figure that exceeds the combined populations of Indonesia, Thailand, Malaysia and Singapore. To put things into perspective, that means more than 425 million people currently live with a lethal precursor to serious health issues such as blindness, kidney failure, heart attacks and strokes.

The diabetes epidemic is especially rampant in Asia Pacific and governments in the region have ramped up efforts to promote healthier and more nutritious eating habits.

In 2016, for instance, the Singapore government launched a “war on diabetes” as the city-state had one of the highest incidences of diabetes among developed countries. In a country where one out of nine citizens suffered from diabetes, the Healthier Ingredient Development Scheme was devised to encourage manufacturers to produce healthier food products.

An effective way for food manufacturers to support the fight against diabetes is to produce healthier foods that contain carbohydrates with low glycaemic properties. This means they help to reduce the glycaemic response of food and drink products. The glycaemic index measures how a particular food raises one’s blood glucose. Eating foods with a low glycaemic response prevents large fluctuations in blood glucose levels, hence reducing one’s chances of contracting diabetes. There are two approaches to lowering the blood glucose response of finished food products.

The first is to modify the glucose supply with low glycaemic carbohydrates such as Palatinose (isomaltulose). This helps to ensure that carbohydrate energy enters the body in a slow and steady way.

The second is to reduce overall glucose supply by sugar replacement using partially-digestible carbohydrates such as the sugar replacer ISOMALT, or non-available carbohydrates such as the dietary fibres Orafti Inulin and Orafti Oligofructose.

Using Palatinose – the next generation sugar

BENEO's low glycaemic, fully yet slowly digestible carbohydrate Palatinose supplies the body with the same amount of energy as other common, fully available carbohydrates such as sucrose or maltodextrin, but in a more balanced way. This is due to Palatinose being digested by the human enzymes in the small intestine four to five times more slowly, which leads to a slow release of glucose into the blood, resulting in an overall low glycaemic response.

Derived from beet sugar, Palatinose has a natural sweet taste. It can be used to replace sucrose and other high glycaemic carbohydrates in many food and drink applications.

Incorporating ISOMALT – the ideal sugar replacer

An alternative method to generate a lower glycaemic response in foods is to reduce the amount of glucose it supplies. Substituting fully available carbohydrates with partially available ones such as BENEO's ISOMALT is an effective way to curb glucose supply. ISOMALT, the only sugar replacer from beet sugar, has a very low effect on blood sugar levels and does not trigger insulin release to any significant extent. With its sugar-like taste, this bulk sweetener can replace sugar in a 1:1 ratio in various applications. Aside from being the number one sugar replacer in sugar-free hard candies worldwide, it is also popular in products like baked goods and cereals.

Tapping onto the rich fibres of an ancient vegetable

BENEO's functional fibres inulin and oligofructose are also an additional, effective option when looking to reduce the glucose supply of foods. Both fibres are prebiotic with a mild sweet taste and are naturally derived from the chicory root. When used to partially replace high glycaemic sugars, these chicory fibres effectively reduce the glycaemic response of foods while still offering excellent taste and texture results. At the same time, inulin and oligofructose also enrich foods with fibre content, thus helping consumers to reach the recommended level of the daily dietary fibre intake.

The winning formula for food manufacturers

Efforts to promote healthier lifestyles in Asia Pacific is gathering pace and food manufacturers can play a key role in the fight against diabetes. By incorporating BENEO's functional food ingredients that do not exert strain on blood glucose levels such as Palatinose, ISOMALT and Orafti inulin and oligofructose, food manufacturers can cater to the growing demands for healthier products that can help reduce the risk of developing diabetes.

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