

Information about Isomaltulose for Individuals with Disorders in Fructose and Sucrose Metabolism

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Food Standards Australia New Zealand (FSANZ) has recently approved the use of a sugar substitute called isomaltulose in food. Isomaltulose contains glucose and fructose and therefore has similar properties to traditional sugars. It provides the same amount of the energy as sucrose, but is digested more slowly, leading to lower and slower increases in blood glucose when compared to sucrose. Isomaltulose is suitable for use as a total or partial replacement for sucrose in certain foods.

Where does isomaltulose come from?

Isomaltulose is found naturally in very small quantities in honey and sugar cane juice. Commercial isomaltulose is manufactured from sucrose using enzymes.

Is isomaltulose safe?

Yes. We have thoroughly evaluated the safety of isomaltulose for human consumption and concluded that there are no public health and safety concerns for the general population associated with its use in foods.

However, our safety assessment also concluded that isomaltulose would not be suitable for people with disorders in fructose metabolism, such as hereditary fructose intolerance. As isomaltulose is broken down into fructose and glucose in the digestive tract, people with this condition are likely to experience severe adverse effects if they consume isomaltulose. Consumers with fructose malabsorption may also be affected. In addition to this, the safety assessment concluded that people who lack, or are deficient in, the enzyme sucrase-isomaltase and cannot digest sucrose, will not be able to digest isomaltulose either.

We therefore strongly recommend that people with these disorders should avoid foods containing isomaltulose.

What foods could potentially contain isomaltulose?

The types of foods that may contain isomaltulose are:

- beverages (soft drinks, instant drink preparations, teas, fruit or vegetable juices/drinks)

- breakfast cereals and cereal bars
- confectionery and chewing gum
- fondants and fillings
- jams and marmalades
- energy reduced foods and meal replacements.

How can I tell if a food contains added isomaltulose?

If the food contains added isomaltulose, it will be declared as 'isomaltulose' in the ingredient list.

Are there any other substances that are permitted in foods that are unsuitable for individuals with disorders in fructose metabolism?

Yes. Tagatose and sorbitol are sugar substitutes that are approved for use in certain foods in the *Australia New Zealand Food Standards Code*. These substances should also be avoided by people with disorders in fructose metabolism. Both tagatose and sorbitol can be readily identified in the ingredients list by the use of their common name, "tagatose" or "sorbitol".

We also recommend that people with disorders in fructose metabolism avoid foods containing fructose or sucrose (whether naturally present or added).

Source: Food Standards Australia New Zealand website, www.foodstandards.gov.au
[<http://www.foodstandards.gov.au/newsroom/factsheets/factsheets2007/informationaboutisom3627.cfm>]