

## Is there a link between sugar and cancer?

It sounds like a simple question but the answer is not so simple. Research does show that eating too much sugar over time can lead to more body fat which can put us at risk for many types of cancer. Sugary foods can also take the place of more nutritious foods with cancer fighting substances (phytochemicals, vitamins, minerals and fibre) in our diet.

## How does our body use sugar?

All cells in our body, including the cancer cells, prefer and use sugar for energy. Sugar in our body is often referred to as blood sugar or blood glucose. Our body tightly controls our blood sugar levels so that all cells get a constant supply of energy. When blood sugar levels are low, our body makes more sugar to keep the levels within the normal healthy range.

A diet high in sugar causes our bodies to produce more insulin to help keep our blood sugar within a normal range. Too much insulin can signal our cells to grow. It is not clear if it is the insulin or the sugar that is leading to cell growth. More human studies are needed to understand this process.

Eating foods that contain protein, fat and fibre along with the sugar containing foods will help to process the sugar slowly and help to prevent our body from producing a lot of insulin.

## Where does sugar come from?

Sugar, also called carbohydrates, is found **naturally** in foods such as fruits, vegetables, whole grains, beans, lentils and some dairy products.

Sugar is also **“added”** to foods such as sugar sweetened drinks, sugary cereals, candy, baked goods and desserts.

## Should we avoid all sugar in our diet?

The typical Western way of eating tends to include high amounts of sugary foods. It would be very hard to avoid all sugar including carbohydrates in our diet. Even if we did, our cells would break down our muscle and fat stores to make the sugar it needs. If this happened, we would lose muscle, weight, strength and energy. During cancer treatment, these losses can cause delays in treatment and slow recovery.

It is recommended to eat plenty of vegetables, fruits, whole grains, beans and lentils that contain natural sugar because they also contain cancer fighting substances such as vitamins, minerals and phytochemicals.

It is recommended to limit the amount of “**added sugar**” we eat.

## How can we limit “added sugar” in our diet?

**Read food labels to identify “added sugar”.** Look for these words: sugar, brown sugar, icing sugar, liquid sugar, cane or beet sugar, high fructose corn syrup, molasses, agave syrup, honey, maple syrup, maltodextrin, malt syrup, demerara, fruit juice concentrates and syrup. Other names for sugar are words ending in ‘ose’ – sucrose, fructose, glucose, glucose-fructose, maltose, dextrose, and galactose.

If these words are listed at the top of the ingredient list, it means they are one of the main ingredients in the product.

**Limit beverages with large amounts of “added sugar”.** Examples are soft-drinks, sugar –sweetened coffee and tea beverages and sugary energy drinks. Choose drinks that contain no “**added sugar**” when possible. Unsweetened coffee, tea, plain water and milk are good choices. If you need extra calories, try and choose a high calorie drink that includes whole fruit, protein and fiber such as a home-made smoothie.

**Limit processed foods.** Processed foods are often higher in “**added sugar**” and can take the place of healthier food choices.

**Enjoy desserts on special occasions and have smaller portions.** Naturally sweet whole fruit is a good every day choice.

For more detailed information on sugar and cancer, visit American Institute of Cancer Research website <http://www.aicr.org/enews/2016/01-january/enews-sugar-and-cancer.html>

Visit our website: [www.bccancer.bc.ca](http://www.bccancer.bc.ca)

Sources: Dietitians of Canada Sugary Drink Sense, Winter 2017; Dietitians of Canada Oncology Network Infoletter, Spring 2013 ; Academy of Nutrition and Dietetics Oncology Nutrition DPG, Summer 2014,

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Created April 2017