

Facts about sugar and cancer

What is sugar?

Sugar is a natural ingredient that has been part of our diet for thousands of years. Sugars are carbohydrates that provide energy for the body. The most common sugar in the body is glucose which your brain, major organs and muscles need to function properly.

Some sugars are found naturally in foods (e.g. fruit, vegetables and milk) while others are added during processing and cooking. The body does not distinguish between the different types of sugar and breaks them down in exactly the same way. For example, the sucrose in an apple is broken down in exactly the same way as the sucrose in your sugar bowl.

The most common kinds of sugars you may read on food labels are: sucrose, fructose and glucose, maltose and lactose.

What are 'free' sugars?

Free sugars are simple sugars added to foods by the manufacturer or consumer. They are also sugars that are naturally present in honey, syrups and fruit juices. These are different to those found naturally in foods such as the milk sugar lactose found naturally in milks/milk products and fructose the fruit sugar found naturally present in whole fruits.

What should we be aiming for?

The Scientific Advisory Committee on Nutrition, the government agency, recommends that free sugar intake in the UK should account for no more than 5% of daily energy intake. Based on average population diets, this equates to:

Children 4-6 years – 19g (5 sugar cubes)

Children 7-10 years – 24g (6 sugar cubes)

Children 11 years + and adults – 30g (7 sugar cubes).

Does sugar feed cancer?

There is a lot of conflicting evidence about sugar and cancer, especially in the media and on the internet. It can be very confusing at times.

Many people are concerned about the effect of particular nutrients on their cancer. Sugar and cancer have a complicated relationship.

It is true that there is an indirect link between sugars causing cancer.

If we eat too much sugar it can cause weight gain and being overweight/obese increases our risk of getting cancer. However, there is no strong evidence to say that sugar causes cancer to spread/grow.

A common myth is the belief that sugar ‘feeds’ cancer. This is an oversimplification of a complex process.

All carbohydrates found in cereals and grains, starchy vegetables, fruits, milk and table sugar get broken down by digestion in to simple sugars, such as glucose.

All of our body cells, whether cancerous or not, then use this glucose for energy. Giving more sugar to your body won't speed up the growth of cancer cells, and depriving yourself of carbohydrates won't slow their growth either.

If you eliminate all simple sugars and other sources of carbohydrates from your diet, your body will adapt and create glucose from your body's fat and protein stores. This is not the ideal situation for your body, as it can cause your body to go into a stressful state. Our bodies require a certain amount of carbohydrate for healthy cell function. Cancer cells use sugar for energy just like the rest of our body. But there's nothing about the cancer that 'feeds' on sugar more than any other cell in our body.

What do we suggest?

When you are living with a cancer and based on the above information, restricting sugars in the diet has not been proven to be effective in slowing down the growth of cancer cells. Sugar is an easy and readily available source of energy and makes food tasty, which can help if you have a poor appetite and have as a consequence lost weight. It is therefore reasonable that you include some of these sugars in your diet.

It is worth noting that sugar only provides calories and no other valuable nutrients like vitamins, minerals and fibre, so better sources of energy would be from foods which contain natural sugar such as fruit and vegetables as well as starchy carbohydrates like potatoes, rice, bread, cereals and pasta. These will add interest and variety into your daily diet.

Some people may choose an alternative to table sugar in the form of: agave syrup, honey, molasses, rice and/or barley malt syrup, coconut sugar, real fruit jam, date sugar, fruit juices and xylitol. These are all sugars in different forms except for Xylitol which is a type of sweetener called a sugar alcohol and is found in some plants. It looks and tastes like sugar, but has 40% fewer calories.

If you are trying to lose weight after your treatment, sugars should not exceed the recommended amount of 5% of your total calories in a day.

Bottom Line

There are insufficient studies and insufficient clinical data to support the statement 'sugar feeds cancer'BUT, glucose does feed the rest of your body.

For those who are going through treatment, remember that your healthy cells need energy especially during this time. There is no evidence or insufficient evidence that avoiding carbohydrates completely helps treatment, but it could leave your healthy cells low on energy.

The key is moderation and we encourage personal choice if you decide to include or reduce the amount of sugars in your diet.

Contact your dietitian for further advice support and advice .

Sussex Oncology Dietitians at :-

Sussex Cancer Centre 01273 696955 Ext. 64208 / 64290

Western Hospitals NHS Trust 01903 205111 Ext. 4549

East Sussex Health Care Trust 01424 755255 Ext. 5236 / 8177

Further Resources

Accurate information in all aspects of cancer including diet is available from Macmillan Cancer Support . Booklets include

- Eating problems and cancer
- Healthy Eating and Cancer
- The Building up diet

To order a booklet, visit be.macmillan.org.uk or call **0808 8080 0000**

© Brighton and Sussex University Hospitals NHS Trust

Disclaimer

The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.

Ref number: 800

Publication Date: July 2017

Review Date: July 2019

