

## Sugar and Cancer Is there a connection?

After a cancer diagnosis, you pay close attention to what you eat. One of many concerns related to nutrition and cancer is whether sugar increases cancer risk or promotes the growth of existing cancers. More research is needed to fully understand this topic. Research that proves sugar can cause cancer or make cancer grow does not exist at this time.

### Carbohydrates

Carbohydrates or “carbs” are a type of nutrient found in foods. Foods with carbs include:

- Fruits
- Vegetables
- Grains
- Dairy and dairy products (e.g. milk, cheese, yogurt)
- Sweets, including sodas, candy, desserts and fruit drinks



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Fruits and vegetables are rich in healthy carbohydrates.

Your body breaks down carbs into sugar, which is your body’s main source of energy. This sugar, called glucose, is your body’s fuel.

To use this fuel, your body needs insulin. Insulin is a hormone, which is a chemical made by your body. Insulin helps your body move glucose from the bloodstream to the cells, where the energy is used.

### Sugar and Cancer Cells

All cells, including cancer cells, grow and get energy from carbs. Your first thought may be to stop eating carbs. However, even if you do this, your body converts other nutrients into sugar to be used as energy. This is hard on your body and can cause muscle breakdown. You cannot “starve” cancer cells without starving healthy cells.

The types of carbs you eat may affect the growth of the cancer cells. Different carbs have different effects on your blood sugar level.

## Healthy Carbs

Carbohydrates are a necessary part of your diet. Therefore choose healthier carbs in the right portions.

Use the chart below for examples of healthier carbs. Limit the amount of foods you eat in the column on the left, as it lists less healthy carbs. Choose foods from the column on the right which lists healthy, high fiber carbs. The correct serving size is also provided.

<b>Less Healthy Carbs</b>	<b>Healthier Carbs</b>
Table sugar	Dried fruits (without added sugar) (1-2 tablespoons)
Sugar sweetened beverages (sodas, lemonade, fruit drinks)	Low-fat/nonfat milk or soymilk (1 cup)
Desserts, candy	Fresh fruit (1 medium fruit)
Chips	Raw vegetables (1 cup) or cooked vegetables (1/2 cup)
Unbleached wheat flour (“white” flour)	Whole grain flours
White rice	Brown or wild rice
White pasta	Whole grain pasta

Eat healthier carbs with a healthy protein and/or fat. This combination slows the digestion of carbs and the entrance of glucose into cells. The foods below are examples of healthy foods that are good sources of proteins and fats. In addition to the carbs, include these foods at meals and snacks.

- Beans, lentils
- Soy nuts
- Avocado
- Nuts, nut butters
- Healthy oils (olive, canola, flaxseed)
- High fat coldwater fish (salmon, mackerel, tuna)
- Protein powders derived from whey, soy or brown rice
- Plain low-fat/nonfat yogurt



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Beans are high in protein  
and fiber