Does Sugar Feed Cancer?

There are many rumors about sugar and its role in cancer risk, so let's separate facts from fiction. Sugar does not "feed" cancer cells any more than it feeds other cells in the body that need glucose for energy. All carbohydrates break down into some form of sugar or glucose, making it an important energy source. However, too much simple sugar in the diet can result in high insulin output, weight gain, and chronic inflammation, which correlate to increased cancer risk over time.

Natural vs. added sugars

It is important to distinguish between natural and added sugars.

- Natural sugars are found in many nutritious whole foods such as milk and plain yogurt, fruits and vegetables, whole grains, and beans.
- Added sugar includes refined sugars that are often added to processed foods such as sucrose, high-fructose corn syrup, and concentrated fruit juice. Added sugar also includes sweeteners such as table sugar, honey, and syrups.
- While it is a good idea to limit the amount of added sugar consumed, there is no need to avoid it completely. Focus instead on eating more complex carbohydrates from whole foods, which digest more slowly and are part of a healthy diet.

The role of obesity and cancer risk

- A diet high in sugar and highly processed foods may lead to weight gain. The American Cancer Society estimates one out of every three cancer deaths in the United States is linked to excess weight, poor nutrition, and/or lack of physical activity.
- Being overweight or obese raises the risk for recurrence and reduces the odds of survival for many cancers. Excess body fat may also impact cancer risk by affecting hormone regulation and promoting chronic inflammation.

The role of sugar and insulin in the body

- Insulin must be present in order for sugar to be taken up into cells and used for energy. When you eat a lot of simple sugar, your body produces excess insulin. While insulin is necessary for survival, it is a "growth factor," and higher insulin levels are associated with increased cancer risk.
- Being overweight or obese may lead to insulin resistance with diabetes, resulting in elevated insulin levels associated with cancer risk.



Being overweight/obese clearly increases risk for cancer of the:

- Breast (post-menopause)
- Colon and rectum
- Endometrium (lining of the uterus)
- Esophagus
- Kidney
- Liver
- Pancreas

Being overweight/obese *likely* increases risk for cancer of the:

- Cervix
- Gallbladder
- Mouth, pharynx, larynx
- Ovaries
- Prostate (aggressive forms)
- Stomach

How much sugar can I eat?

The American Heart Association recommends limiting daily added sugar to no more than:

- 100 calories per day for women (6 teaspoons or 24 grams)
- 150 calories per day for men (9 teaspoons or 36 grams)

Check Nutrition Facts labels for Added Sugars and note the serving size for that amount.

Tips for using sugar in moderation

- Drink more water. Avoid soda, sweet tea, coffee syrups, sports or energy drinks, and fruit-flavored drinks that do not contain 100% real juice.
 Nearly half of all added sugar in the American diet comes from beverages.
- Enjoy dessert as an occasional treat with a modest serving size. Try
 individually wrapped small chocolate pieces. Seasonal fruits and berries
 are a naturally sweet treat.
- Read Nutrition Facts labels and compare brands. Packaged foods such as bread, cereal, flavored yogurt, and sauces can contain more added sugar than you might suspect, and amounts can vary widely by brand.
- Consuming sugar with some protein, fat, and/or fiber slows absorption, lowering spikes in insulin levels.
- Added sugar is added sugar. Don't be fooled into thinking that brown sugar, honey, molasses, nectars, raw cane sugar, or juice count differently than plain white sugar (sucrose).

Look for reduced-sugar recipes for favorite foods at resources such as:

- Oldways Mediterranean, oldwayspt.org/recipes
- The American Institute for Cancer Research, AICR.org/cancer-prevention/recipes
- Cooking Light, cookinglight.com; or Eating Well, eatingwell.com/recipes
- The American Diabetes Association, diabetesfoodhub.org

In summary, consuming more than the recommended amount of added sugar can result in unwanted weight gain, high insulin levels, and increased inflammation, all of which are detrimental to overall health. Focus on eating a more plant-based diet that includes complex carbohydrate sources such as fruits and vegetables, whole grains, beans, and low-fat dairy products – as well as getting regular exercise and maintaining a healthy weight – to improve overall cancer risk and outcomes. If you're doing those things, an occasional sweet treat can still be enjoyed!

