Foods that spike a patient’s blood glucose are not what you think

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When providing nutrition advice to patients with prediabetes, the foods that can increase blood glucose levels are often not what you think. Identifying those foods are key to helping patients take the right step toward healthier eating.

The AMA Ed Hub™—your center for personalized learning from sources you trust—offers CME on a broad range of topics, including Nutrition Science for Health and Longevity: What Every Physician Needs to Know, to help physicians begin an effective nutrition conversation with patients. The four-hour, self-paced course is developed and hosted by the Gaples Institute for Integrative Cardiology, a nonprofit focused on enhancing the role of nutrition and lifestyle in health care, and is distributed in collaboration with the AMA Ed Hub.

Most people know that eating sugar-filled candies can cause blood glucose levels to rise, which for those predisposed, can create a greater risk for prediabetes. However, foods don’t have to taste sweet to spike blood sugar levels.

“It’s well understood that if you eat something sweet, like a brownie your blood glucose will bump, so no one is surprised when that happens,” said Stephen Devries, MD, a cardiologist and executive director of the Gaples Institute. “But many patients are unaware that starchy foods, many without a trace of sweetness, can bump blood glucose levels even more.”

Bagel vs. donut

Donuts are filled with added sugar and fat-no one mistakes them for a healthy food choice. But sometimes, well-meaning replacement foods can have unintended consequences.
“Patients with reason to be concerned about their blood sugar usually understand that sugary foods like donuts are poor choices,” said Dr. Devries. “In an effort to lower their sugar, they may swap a breakfast donut for something less sweet, like a bagel. But many patients don’t realize that starchy foods can cause blood sugar to soar even higher than sweet ones.”

The explanation is that starch is metabolized by the body into glucose. Because the bagel has a greater mass of carbohydrate than the donut, it leads to a higher release of glucose into the bloodstream referred to as the “glycemic load.”

However, the conclusion is definitely not to encourage patients to eat more donuts. Instead, “the importance of comparing glycemic loads is to demonstrate that patients need to take care to limit not only sugary foods like donuts, but to also reduce their intake of starchy foods that can also spike sugar levels,” said Dr. Devries.

“Skip the donuts and bagels for breakfast, better to opt for oatmeal and fruit for breakfast,” he added.

**Starchy potatoes**

“Potatoes are a vegetable, but the health value of all vegetables are not interchangeable. White potatoes in particular have a very high glycemic load. As a result, a baked white potato can also raise blood sugar even more than a glazed donut.”

Interestingly, potatoes chilled when eaten have a lower glycemic load than when served warm. A good alternative to potatoes as a side dish are beans or cauliflower rice, a popular culinary newcomer. The glycemic load is much lower, and cauliflower includes several key nutrients.

**Sticky white rice**

Even though it is not sweet, sticky white rice is another food that can deceptively bump blood sugar. Devoid of the fibrous outer bran and nutrient filled germ layers, white rice is mostly starch with a correspondingly high glycemic load.

A better choice is brown rice, a whole grain with more fiber than white rice and a lower glycemic load. Other whole grain alternatives to white rice are barley and farro.

“Whole grains are absolutely preferred over refined, but shouldn’t be consumed in unlimited quantities said Dr. Devries. “Large amounts of even whole grains, including brown rice can still spike blood glucose levels.”


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Fiber to the rescue

As described in the Gaples Institute nutrition course, dietary fiber, especially the soluble type, reduces the amount of sugar absorbed from the digestive tract. Good sources of dietary soluble fiber include oats, beans, apples, citrus fruits, and nuts.

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