

NUTRITION TO NOURISH



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Whole Foods and Plant-Based is Best, but do Sugar Substitutes Really Cause Cancer?

Hi Friends,

We're steadily making our way through summer, and I hope yours has been a mix of trying new recipes, enjoying food from your own garden or purchasing it from others (or being the recipient of extras from the garden of a friend or neighbor), and increasing your movement throughout the day as you seek to maintain or improve your own health.

You'll see blackberries as the produce item of the month along with some delicious recipes (if you need something to do with the ones you don't eat fresh), but I feel the "Ask the RD" section is a bit of a continuation from last month. The news headlines spouting aspartame being listed as a carcinogen since the end of June has been added to the mix of

information coming from the media, so I felt like it needed to be addressed. Because I believe it's important to research the reasons



be-

hind recommendations and be able to form opinions for yourself, I'm including the research behind this classification in this month's "Ask the RD" section. Hopefully it leads you with a better understanding of the those recommendations and reminds you to not believe everything you read. :)

Happy and Healthy Eating,

Mary Beth

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Special points of interest:

- Should you be avoiding sugar substitutes? See "Ask the RD."



Research Reminders to Keep you Rooted

Do you get tired of trying to eat healthy foods when you just want to kick back and eat whatever you want? It's okay to enjoy red or processed meats or sweets occasionally for special events or cookouts, but remember why plant-based eating is so important for life-long health. If you need a reminder, see below for what we know is true about healthy eating and cancer.

- ◆ According to AICR research, an estimated 364 cancer cases a day could be prevented if everyone in the U.S. was lean (had a BMI of less than 25).
 - ◇ *AICR Website, accessed 4/21/23: <https://www.aicr.org/news/updated-cancer-estimates-preventing-hundreds-of-cases-daily/>*
- ◆ According to the World Health Organization (WHO), a 30-40% cancer burden can be attributed to life-style risk factors such as tobacco smoking, alcohol consumption, a diet low in fruit and vegetables, overweight and obesity, and physical inactivity.
 - ◇ *Ullrich A. Cancer Control: Knowledge Into Action: WHO Guide for Effective Programmes. World Health Organization, 2007.*
- ◆ A joint report by the World Cancer Research Fund and the American Institute for Cancer Research found convincing evidence that a high fruit and vegetable diet would reduce cancers of the mouth and pharynx, esophagus, lung, stomach, and colon and rectum; evidence of probable risk reduction was found for cancers of the larynx, pancreas, breast, and bladder.
 - ◇ *WCRF/AICR. Food, nutrition and the prevention of cancer: a global perspective: World Cancer Research Fund / American Institute for Cancer Research. 1997.*
- ◆ Steinmetz and Potter reviewed the relationship between fruits, vegetables, and cancer in 206 human epidemiologic studies and 22 animal studies. They found "the evidence for a protective effect of greater vegetable and fruit consumption is consistent for cancers of the stomach, esophagus, lung, oral cavity and pharynx, endometrium, pancreas, and colon." Vegetables, and particularly raw vegetables, were found to be protective; 85% of the studies that queried raw vegetable consumption found a protective effect. Allium vegetables, carrots, green vegetables, cruciferous vegetables, and tomatoes also had a fairly consistent protective effect.
 - ◇ *Steinmetz KA, Potter JD. Vegetables, fruit, and cancer prevention: a review. J Am Diet Assoc. 1996;96:1027-1039.*
- ◆ Cruciferous vegetables (broccoli, cauliflower, cabbage, Brussels sprouts) contain sulforaphane, which has anti-cancer properties. In the Nurses' Health Study, a high intake of cruciferous vegetables (5 or more servings/week vs. less than two servings/week) was associated with a 33% lower risk of non-Hodgkin's lymphoma.
 - ◇ *Zhang SM, Hunter DJ, Rosner BA, Giovannucci EL, Colditz GA, Speizer FE, Willett WC. Intakes of fruits, vegetables, and related nutrients and the risk of non-Hodgkin's lymphoma among women. Cancer Epidemiol Biomarkers Prev. 2000;9:477-485.*
- ◆ Eat a diet rich in whole grains, vegetables, fruit, and beans. Make whole grains, vegetables, fruit, and pulses (legumes) such as beans and lentils a major part of your daily diet. There is strong evidence that eating whole grains protects against colorectal cancer, and that eating foods containing dietary fiber protects against colorectal cancer, weight gain, overweight, and obesity, which, increases the risk of many cancers.
 - ◇ *World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. "Diet, nutrition, physical activity and breast cancer survivors."*



Ask the RD

Question: I just read that I should stop eating foods with aspartame or using it as a sugar substitute because it causes cancer. Is that true?

Answer: There are a couple of things to know about this new decision before you make any changes to your eating habits. The first is the actual classification of aspartame. The International Agency for Research on Cancer (IARC) is responsible for making this classification, and their classifications can be 1 (the item causes cancer), 2a (the item probably causes cancer), 2b (the item possibly causes cancer), or 3 (the item carries no cancer risk). Aspartame has been classified as 2b, meaning there is no research to show it actually causes cancer (aloe vera has this same classification as a carcinogen). One of the primary research studies used to make this classification was not one that shows cause and effect, but only an increased cancer risk (and specifically for breast and obesity-related cancers) in people who consumed larger amounts of aspartame daily (but with no quantities of aspartame that has to be consumed to increase the risk identified). In addition, the study used a statistical test called a Hazard Ratio to show the risk of developing cancer based on the exposure (intake) to aspartame. If the Hazard Ratio is 1, it would indicate that groups of people with high and low intakes of aspartame would have the same risk of developing cancer. In the study referenced in the decision to classify aspartame as a 2b carcinogen, the Hazard Ratio was 1.15 for overall increased cancer risk, 1.22 for breast cancer, and 1.13 for obesity-related cancers. This means compared to those consuming no to low amounts of aspartame, there was 1.15 times the number of overall cancer, 1.22 times the number of breast cancers, and 1.13



the numbers of obesity-related cancers in those consuming high levels of aspartame. Because this was not a cause and effect study, there is no sure

way to tell that the increased cancer was due to aspartame and not another factor. The second important part to consider is the how much aspartame has to be consumed for it to increase cancer risk. There is not enough evidence to know the exact answer to that questions, however both the IARC and the Joint Expert Committee on Food Additives (JECFA) have affirmed that an acceptable daily intake of aspartame is 40 milligrams per kilogram of body weight, and the Food and Drug Administration has set the acceptable daily intake for aspartame as 50 milligrams per kilogram of body weight. Putting this into practical terms, a 150 pound person who drinks 17, 12-ounce cans of diet soda per day would still be within the acceptable daily intake guidelines. While I do not recommend drinking 17 cans of diet soda daily (or really any amount of that matter), it's important to keep the reports about aspartame in perspective by knowing what is behind the recommendations.



Overall, we know that a high added sugar diet can increase cancer risk as well as the risk for diabetes and heart disease. For that reason, I would still choose a diet soda over a regular soda if you absolutely have to have a soda. I, however, continue to advocate for a whole foods diets with at least 3/4ths of the plate coming from high-fiber and whole foods coming from plants – I'm sure you all know by know this means fresh or frozen fruits and vegetables, whole grains, starchy vegetables, beans, and nuts. No matter if you use sugar or sugar substitutes, weaning back on how much you use with a goal of cutting them out completely is the best way to a healthy nutrition intake and a healthier and more energetic you!!

* <https://www.today.com/health/diet-fitness/aspartame-carcinogen-diet-soda-rcna92376>

* <https://www.iarc.who.int/news-events/aspartame-hazard-and-risk-assessment-results-released/>

* PLOS Medicine; <https://doi.org/10.1371/journal.pmed.1003950> (Marcy 24, 2002)



Blueberries



Blueberries pack a healthy punch into a condensed space. They are another fruit that is a great source of anthocyanins – the phytochemical that gives blueberries their blue color.

While other berries have two or three anthocyanins, blueberries contain about 25 different anthocyanins. They have been shown to help lower your risk of developing coronary heart disease as well as providing the antioxidant vitamin C, natural sweetness (without added sugar or sugar substitutes!), fiber, and a variety of other nutrients that may also be cancer protective.

Ideas for adding blueberries to your daily menu:

- Grab a cup as a snack with some yogurt, nuts, or part-skim string cheese.
- Add blueberries to your morning oatmeal or quinoa.
- Add frozen blueberries to your morning smoothie.
- Make a fruit salad that includes blueberries as well as other seasonal fruits.
- Toss blueberries into your pancake or muffin batter.
- Add them to a lettuce-based salad and use raspberry vinaigrette dressing.



One last tip – blueberries that are frozen after picking retain high levels of their phytochemicals and other nutrients. Wild blueberries also have higher concentrations of those plant-based nutrients than cultivated ones, so look for wild frozen blueberries once blueberry season concludes to still reap the benefits!! According to the American Institute for Cancer Research and World Cancer Research Fund, there is research to support probable evidence that the foods with fiber decrease the risk of colorectal cancer as well as prevent weight gain and obesity. There is also probable evidence that non-starchy vegetables and fruits combine to decrease the risk of cancers of the mouth, pharynx, larynx, esophagus, lung, stomach, colon, and rectum.

Enjoy all the fun ways you can add blueberries to your diet this summer, and look for recipes at the end of this newsletter if you need more ideas!

AICR/WCRF. Diet, Nutrition, Physical Activity and Cancer: A Global Perspective, 2018.

<https://newsnetwork.mayoclinic.org/discussion/mayo-clinic-minute-benefits-of-blueberries/>

Blueberry Oatmeal Bars

From: Well Plated by Erin

<https://www.wellplated.com/blueberry-oatmeal-bars/>

Ingredients:

For the Blueberry Oatmeal Bars

- 1 cup old-fashioned rolled oats—gluten free, if needed
- 3/4 cup white whole wheat flour
- 1/3 cup light brown sugar
- 1/2 teaspoon ground cinnamon
- 1/4 teaspoon kosher salt
- 6 tablespoons unsalted butter, melted
- 2 cups fresh blueberries
- 1 teaspoon cornstarch
- 1 tablespoon freshly squeezed lemon juice—from about 1/2 small lemon
- 1 tablespoon granulated sugar, divided



For the Vanilla Glaze (optional)

- 1/2 cup powdered sugar, sifted
- 1/2 teaspoon pure vanilla extract
- 1 tablespoon milk—any kind you like

Instructions:

1. Place a rack in the center of your oven and preheat to 375 degrees F. Line an 8x8-inch baking pan with parchment paper so that the paper overhangs two sides like handles.
2. In a medium bowl, combine the oats, white whole wheat flour, brown sugar, cinnamon, and salt. Pour in the melted butter and stir until it forms clumps and the dry ingredients are evenly moistened. Set aside 1/2 cup of the crumble mixture, then press the rest into an even layer in the bottom of the prepared pan.
3. Scatter half of the strawberries over the crust. Sprinkle the cornstarch evenly over the top, then sprinkle on the lemon juice and 1/2 tablespoon of the granulated sugar. Scatter on the remaining berries, then the remaining 1/2 tablespoon sugar. Sprinkle the reserved crumbs evenly over the top. You will have some fruit showing through.
4. Bake the bars for 30-40 minutes, until the fruit is bubbly and the crumb topping smells toasty and looks golden. Place the pan on a wire rack to cool completely (you can speed this process along in the refrigerator).
5. While the bars cool, prepared the glaze: In a medium bowl, briskly whisk together the powdered sugar, vanilla, and milk until smooth. Feel free to add more milk if a thinner consistency is desired. Using the parchment-paper handles, lift the bars from the pan. Drizzle with glaze, slice, and serve.

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Blueberry Lemon Breakfast Quinoa

From the 'AllRecipes' website

<https://www.allrecipes.com/recipe/230830/blueberry-lemon-breakfast-quinoa/>

Prep Time: 5 minutes

Cook Time: 25 minutes

Total Time: 30 minutes

Ingredients:

- 1 cup quinoa
- 2 cups nonfat milk
- 1 pinch salt
- 3 tablespoons maple syrup
- 1/2 lemon, zested
- 1 cup blueberries
- 2 teaspoons flax seed



Instructions:

1. Rinse quinoa in a fine strainer with cold water to remove bitterness until water runs clear and is no longer frothy.
2. Heat milk in a saucepan over medium heat until warm, 2 to 3 minutes. Stir quinoa and salt into the milk; simmer over medium-low heat until much of the liquid has been absorbed, about 20 minutes. Remove saucepan from heat. Stir maple syrup and lemon zest into the quinoa mixture. Gently fold blueberries into the mixture.
3. Divide quinoa mixture between 2 bowls; top each with 1 teaspoon flax seed to serve.

Tip from Mary Beth—use a dairy alternative if you prefer or have a lactose intolerance.

You can also add any fruit you have on hand! The quinoa is a good source of fiber and protein to help this delicious breakfast stick with you as you start your day!