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

2



important to research the reasons behind 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 leaves you with a better understanding of how the classification was made and reminds you do your own research so you can make the best decisions for yourself.

Happy and Healthy Eating,

Mary Beth

Inside this issue:

Research Reminders to Keep you Rooted
Ask the RD
Produce Item of the Month: Blackberries
Blackberry Smoothie Recipe
Greek Yogurt Berry Parfaits Recipe

Special points of interest:

Does Aspartame Cause Cancer?
See "Ask the RD."



Page 2



Research Reminders to Keep you Rooted

I decided to include this table as we wind down with the monthly newsletters (August will be the final month!) in case you ever need a reminder about how even just a small amount of weight loss can make a big impact on your health. Keep working to improve the quality of your eating with plant-based foods, and keep looking for ways to move more and stay active. They will both combine to help you be at your best and also improve a variety of disease states listed below. Pick the next thing you'll change today as you seek to be at your best.

Condition	Amount of weight loss needed to effect improvement
Glycemic Improvement–Diabetes prevention in impaired glucose tolerance	2.5% weight loss or more; maximal impact at 10%
Glycemic improvement–Type 2 diabetes	2.5% to >15%; greater weight loss associated with greater glycemic improvement; true for all BMI classes
Triglyceride reduction	2.5% to >15%; greater weight loss associated with greater glycemic improvement; true for all BMI classes;
HDL increase	5% to >15%; greater weight loss associated with greater glycemic improvement; not true for BMI >40 kg/m ²
Apnea Hypopnea Index Improvement in Obstructive Sleep Apnea	10%+ weight loss required for significant improvement
Knee pain and function in persons with osteoarthritis	5–10% improves knee functionality, speed, walk distance and pain; 10%+ required to improve IL-6 and CRP levels; knee MRI and X-ray findings do not change
Emergent knee pain prevalence	5–10% weight loss, with persistent maintenance required to prevent knee pain in individuals with obesity
Hepatic steatosis reduction	5–15%+; greater weight loss associated with greater improvement
Non-alcoholic steatotic hepatitis activity score	10%+ weight loss required for significant improvement
Impact of Weight on Quality of Life score	5%–15%+; greater weight loss associated with greater improvement
Depression	5–10% may reduce risk for emergent depression; individuals with depression lose as much weight as non-depressed individuals.
Mobility	5–10% loss attenuates mobility decline with aging
Urinary Incontinence	5–10% improves symptoms in men and women
Sexual Function	5–10% improves erectile function in men and sexual dysfunction in women
Polycystic Ovarian Syndrome and infertility	Improvement in ovulatory cycles and subsequent pregnancy with 2–5% weight loss, with more weight loss producing more robust effect.
Health care costs	In persons with diabetes 5–10% weight loss associated with reduction in hospitalization and medication costs, but not outpatient costs.
Mortality	16% weight loss (vertical banded gastrectomy) associated with reduction in all cause and cardiovascular mortality. 5–10% weight loss with lifestyle intervention had no effect on major cardiovascular outcomes, but in those with 10%+ weight loss, there was a reduction in those outcomes.

Ryan, D.H. and Yockey, S.R., 2017. Weight Loss and Improvement in Comorbidity: Differences at 5%, 10%, 15%, and Over. Current obesity reports, 6(2): 187-194.

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 classification 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 rating options are 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 2b carcinogen). One of the primary research studies used to support this classification was not one that shows cause and effect, but only an increased cancer risk (and especially for breast and obesityrelated cancers) in people who consumed larger amounts of aspartame daily (but with no quantities of aspartame specified that would increase cancer risk). In addition, the study used a statistical test called a Hazard Ratio to show the risk of developing cancer based on the exposure (intake) of 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 supporting 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 were 1.15 times the number of overall cancers, 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 amount of aspartame



needed to be consumed for it to increase cancer risk. There is not enough evidence to know the exact answer to that question, 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 diet or regular soda), 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 now 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 healthier and more energetic you!!

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

^{*} https://www.today.com/health/diet-fitness/aspartamecarcinogen-diet-soda-rcna92376

^{*} https://www.iarc.who.int/news-events/aspartame-hazardand-risk-assessment-results-released/



If you've been to a Farmer's Market or maybe just taken a drive or walk in the country, it's likely you've seen some fresh blackberries. You may even have a plant or two in your own yard. No matter how you have access to them, eating them will offer a variety of benefits to your health because of the fiber, vitamins, minerals, and antioxidants they contain. Some of the benefits include:

Fundamental for Functioning

* The vitamin C in blackberries supports your immune system, aids in wound heal ing, and increases iron absorption of plant-based foods.

* Vitamin K in the blackberries is important for blood clotting and bone health.

* Manganese in the berries is needed for energy production, protecting cells from damage, improving immunity, bone growth, reproduction, and blood clotting.

Balances Blood Sugar and Improves Digestion

* Blackberries pack a fiber punch by containing a healthy dose of both soluble and insoluble fiber. As a result, they are helpful to

- * Prevent constipation and bloating
- * Lower LDL ("bad") cholesterol
- * Control blood sugar
- * Control weight
- Reduce Inflammation



* The antioxidants called polyphenols in blackberries help destroy free radicals that can damage cells and lead to disease. Anthocyanins, a specific polyphenol, may also be helpful in treating inflammation. As a result, a diet that

includes blackberries can prevent chronic inflammation in the body and, thus, reduce the risk of developing the diseases caused by chronic inflammation (e.g., cancer, heart disease, pulmonary disease, and type 2 diabetes).

Protect and Improve Brain Function

* Those same anthocyanins can also increase blood flow to your brain to improve and control speech, memory, and attention (and can't we all use that?).

With all of the benefits, look for ways to include more blackberries in your day. Keep reading for recipe ideas!

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Blackberry Smoothie From: Eating Well website

https://www.eatingwell.com/recipe/7899650/blackberry-smoothie/

Ingredients:

- 1 cup fresh blackberries (6 ounces)
- 1/2 medium banana
- 1/2 cup plain whole-milk Greek yogurt (can also use low fat or fat free)
- 1 tablespoon honey
- 1 1/2 teaspoons fresh lemon juice
- 1 teaspoon finely chopped fresh ginger

Instructions:

 Combine blackberries, banana, yogurt, honey, lemon juice, and ginger in a blender. Cover and process until completely smooth, about 2 minutes. Serve immediately.

Tip from Mary Beth:

* Add ground flax seed for added fiber and omega-3 fatty acids and/or some wheat germ for fiber and vitamin E, magnesium, and phosphorus!



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Greek Yogurt Berry Parfaits

From: The Foodie Physician Webite https://thefoodiephysician.com/greek-yogurt-berry-parfaits/

Prep Time: 5 minutes

Total Time: 5 minutes

Ingredients:

- 1 cup FAGE 2% plain Greek yogurt
- 1/2 cup mixed berries like strawberries, blueberries, blackberries, and raspberries

Option toppings:

 Sliced almonds, granola, dark chocolate shavings



Instructions:

1. Spoon the Greek yogurt into a bowl. Top with berries and your favorite toppings. Enjoy!

Tip from Mary Beth: Use a dairy alternative in place of the yogurt if you prefer or have a lactose intoler-ance.

You can also add any fruit you have on hand!