University of Georgia Cooperative Extension

UNIVERSITY OF GEORGIA EXTENSION

Diabetes Life Lines

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Erythritol and heart health: what you need to know

What is it? Erythritol is a type of carbohydrate called a sugar alcohol (also called a polyol). Sugar alcohols taste about 70% as sweet as typical sweeteners — like table sugar — but provide far fewer calories. This is because our bodies digest sugar alcohols differently than sugar. Sugar alcohols are commonly used in sugar–free products like sugarless gum, cough drops, diet soft drinks, reduced sugar baked goods, and personal care products like mouthwash and toothpaste. While table sugar contains 4 four calories per gram, erythritol contains less than one calorie per gram. It comes in powder form.1

Where does it come from? Erythritol is naturally occurring in fruits and vegetables as well as fermented foods, like soy sauce and cheese. It is produced commercially through fermentation when yeast and glucose are combined. It can be used as a sweetening agent on its own or combined with other sweeteners to add volume and texture.2 If it is in a product, it is listed as an ingredient on the Nutrition Facts Panel.

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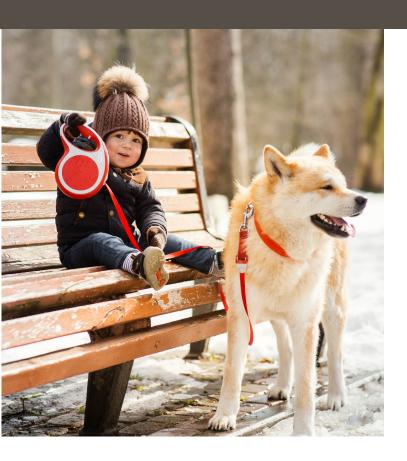
Why use it? The benefit of using a sugar alcohol like erythritol is that it provides sweet taste, but does not affect blood sugar or insulin levels. It has a glycemic index of zero. It can be used in place of sugar to reduce sugar intake and help manage diabetes. It is also helpful for dental health since oral bacteria cannot digest erythritol, so it doesn't contribute to cavities or tooth decay. This makes erythritol a popular ingredient in chewing gum. For similar reasons, it is often used as a pharmaceutical ingredient to improve the taste of medications. The Food and Drug Administration has granted erythritol Generally Recognized as Safe (GRAS) status for use as a sweetener and flavor enhancer.2

What's the latest research? Erythritol has been in the news in 2023. It has long been known that large doses of sugar alcohols can have a laxative effect, causing an upset stomach, gas, or diarrhea. This is most likely when consuming large amounts of the sweetener (50 grams or more). This year, concerns emerged regarding the link between erythritol and heart health. A study released in the journal Nature Medicine found that people with higher levels of erythritol in their blood had increased risk for cardiovascular events such as heart attack and stroke. Laboratory studies have shown increased blood clot formation in individuals consuming erythritol. The study did not directly examine how much erythritol participants were consuming. 3



Low calorie sweeteners like erythritol can be a useful tool for reducing sugar intake and managing blood glucose. Further studies are needed to determine long-term health effects of non-sugar sweeteners. Concerning weight management, the World Health Organization recommends reducing sugar intake by choosing foods with naturally occurring sugars, like fruit, or other unsweetened foods and beverages, stating, "[non-sugar sweeteners] are not essential dietary factors and have no nutritional value. People should reduce the sweetness of the diet altogether, starting early in life, to improve their health."4





Walkin' in a winter wonderland

It's an age-old dilemma; the weather outside is frightful and the fire is so delightful. Whether you're used to waking up to many feet of snow or your community shuts down for a few inches of wintery mix, winter weather can challenge our healthy routines. However, with the right gear and mindset, you can get your activity in year round. Keep in mind that some groups are at higher risk for cold related injuries during exercise. This includes adults over the age of 60 as well as children and individuals with certain health conditions.5

If you're gearing up for a winter of meeting your physical activity goals, here are a few tips to keep you moving safely.

Be visible. Shorter, darker days make it challenging for drivers to see pedestrians. Walk in well-lit areas with sidewalks or pedestrian paths whenever possible. Wear high visibility clothing and reflective gear. If you are outside during dark hours often, consider investing in a reflective vest or blinking, clip-on reflectors to catch the eye of drivers. Avoid dark colors. And don't forget a reflective leash or harness for your furry friend.

Dress for success. You will find that you warm up quickly even in cold weather. A general rule of thumb is to dress for temperatures about 15–20 degrees Fahrenheit warmer than the actual temperature. This allows for your body to warm up as you get moving. Dress in moisture wicking, close fitting, layers so you can remove extra clothing as you warm up. If you are out in icy or snowy conditions, be sure to choose appropriate footwear with large treads and extra grip. You can even buy cleats that attach to your normal running or walking shoes. These act like snow tires for your feet and provide better traction in slippery conditions.5

Make it fun. Being outdoors is a great way to feel connected to the season. Exercising outdoors has been shown to provide both physical and mental health benefits. While you're out, take time to notice the feel of brisk winter air as you breathe in. Take in the sights or sounds of winter. You can even make it a game to spot holiday décor and lights.

Keep it cozy. If the weather is too frightful, get your movement indoors. Pop on a holiday playlist or search YouTube for a walking workout that can be done indoors. Strength training is a great indoor option, too.



Make your food drive go the extra mile

Did you know that one in nine Georgians is food insecure? The United States Department of Agriculture defines food security as access by all people at all times to enough food for an active, healthy life.6, 7

This time of year, food banks experience an increase in demand for their services to feed adults and children who are food insecure. Area food banks accept monetary donations as well as food donations. They are able to use their bulk purchasing power to provide approximately three meals per dollar donated.

According to the Food Bank of Northeast Georgia, the most requested items include the following:8

Cereal (boxes & single-serve cups) Granola/breakfast/protein bars

Meal prep kits (soup mix, instant rice or noodle mixes)

Instant grits/oatmeal

Trail mix

Canned meals with pop-tops (soup, stew, pasta, ravioli)

Microwaveable cups (mac & cheese, ramen, noodles)

Canned meats (tuna, chicken, salmon)

Peanut butter (plastic jars or squeezable)

Jelly/Jam (plastic jars)

Applesauce pouches

Fruit snacks

Shelf-stable juices or milk (boxes)



Before you donate, make sure your nonperishable items have not expired.

Where possible, donate items that do not have added sugars or salt to allow the person receiving the food donation to meet their individual nutrition needs. People experiencing food insecurity are more likely to have dietrelated chronic diseases like diabetes and heart disease. Think about the foods that are best for meeting your nutrition needs and feeling your best, and try to share those with those who are less fortunate.

To find a list of food banks and agencies (food pantries) serving Georgians, visit https://www.feedingamerica.org/hunger-in-america/georgia.



Recipe corner: smothered greens

Yield: 5 servings

Ingredients:

3 cups water

1/4 pounds smoked turkey breast, skinless

1 tablespoon hot pepper, freshly chopped

1/4 teaspoon cayenne pepper

1/4 teaspoon cloves, ground

1/2 teaspoon thyme

1 stalk scallion, chopped

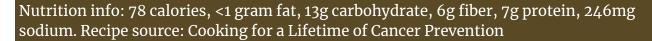
1 teaspoon ginger, ground

1/4 cup onion, chopped

2 pounds greens (mustard, turnip, collard, kale, or a mixture)

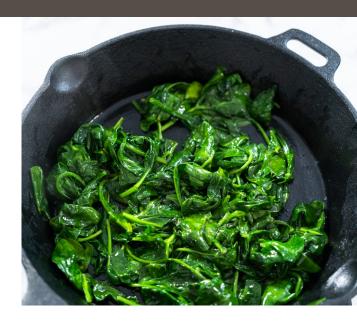


- 2. Place all ingredients except greens into a large saucepan and bring to a boil
- 3. Wash greens thoroughly and remove stems. Tear or slice leaves into bite-sized pieces.
- 4. Add greens to saucepan. Cook 20 to 30 minutes until tender.



References

- 1. Ellis, Esther L. Today's Dietitian. Natural sweeteners: erythritol. Today's Dietitian, Volume 21, number 8. Online: https://www.todaysdietitian.com/newarchives/0819p12.shtml (Accessed December 18, 2023)
- 2. Mazi TA, Stanhope KL. Erythritol: An In-Depth Discussion of Its Potential to Be a Beneficial Dietary Component. Nutrients. 2023 Jan 1;15(1):204. https://www.mdpi.com/2072-6643/15/1/204.
- 3. Witkowski, M., Nemet, I., Alamri, H. et al. The artificial sweetener erythritol and cardiovascular event risk. Nat Med 29, 710–718 (2023). https://doi.org/10.1038/s41591-023-02223-9
- 4. World Health Organization. WHO advises not to use non-sugar sweeteners for weight control in newly released guideline. 2023. Online: https://www.who.int/news/item/15-05-2023-who-advises-not-to-use-non-sugar-sweeteners-for-weight-control-in-newly-released-guideline (Accessed December 18, 2023)
- 5. Castellani, John W. Ph.D., FACSM (co-chair); Young, Andrew J. Ph.D., FACSM (co-chair); Ducharme, Michel B. Ph.D.; Giesbrecht, Gordon G. Ph.D.; Glickman, Ellen Ph.D.; Sallis, Robert E. M.D., FACSM. Prevention of Cold Injuries during Exercise. Medicine & Science in Sports & Exercise 38(11):p 2012-2029, November 2006. | DOI: 10.1249/01.mss.000041641.75101.64
- 6. Feeding America. Hunger in Georgia. 2023. Online: https://www.feedingamerica.org/hunger-in-america/georgia (Accessed December 18, 2023)
- 7. USDA Economic Research Service. Food security in the US. 2023. Online: https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/ (Accessed December 18, 2023)
- 8. Food Bank of Northeast Georgia. 2023. Online: https://foodbanknega.org/ (Accessed December 18, 2023)





Happy Holidays

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Dear Friend,

Diabetes Life Lines is a quarterly publication sent to you by your local county Extension Agent.

It is written by an Extension Nutrition and Health Specialist and other health professionals from the University of Georgia. This newsletter brings you timely information on diabetes self-management, nutritious recipes, and news about important diabetes-related events.

If you would like more information, please contact your local county Extension Office.

Yours Truly,

County Extension Agent

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