Blueberries and Heart Health

Graba boost of blue

Heart disease, also known as cardiovascular disease, is a major public health concern in the United States and is currently the leading cause of death among both men and women ("Heart Disease Facts," 2022). Pre-existing conditions that increase an individual's risk for developing cardiovascular disease include high blood sugar, high blood pressure, obesity and high blood-lipid levels.

According to the **American Heart Association**, an overall healthy dietary pattern and lifestyle are the best weapons to help combat heart disease. This entails getting the right amount of calories and physical activity for your personal needs, engaging in beneficial lifestyle practices such as ensuring quality sleep and discovering healthy ways to cope with stress and more ("The American Heart Association Diet and Lifestyle Recommendations," 2021).

Eat an overall healthy dietary pattern that emphasizes:

 A variety of colorful fruits and vegetables, including blueberries

Whole grains

Low-fat dairy products

Skinless poultry and fish

Nuts and legumes

Non-tropical vegetable oils

Get the scoop on blueberry nutrition

One serving (a handful or a cup) of blueberries:



Is considered one serving of fruit.



Contains just 80 calories and is a good source of fiber

Contributes essential nutrients including vitamin C, vitamin K, manganese and phytonutrients called polyphenols.



Contains anthocyanins, which are compounds that give blueberries their blue color.





Love what's on your plate: Blueberry tips

You never need an excuse to eat fresh or frozen blueberries. They're a deliciously healthy, everyday treat. Instead of hauling out the cutting board and special gadgets, all you need to enjoy blueberries is a quick rinse. Fresh, frozen or even dried, blueberries are great by themselves, but they're also primed to play a starring role in simple, tasty recipes. Look for the Heart-Check mark to find foods, like blueberries, that have been certified by the AHA as heart-healthy.²

HERE ARE SOME TIPS TO GET HEART-HEALTHY BLUEBERRIES IN TO YOUR DIET:

- Mix up a satisfying smoothie. You can even use frozen instead of ice.
- In a hurry? Grab a handful of blueberries to enjoy. They make a quick, packable snack.
- Try a handful with nuts, yogurt, granola, peanut or almond butter toast, cheese or a protein bar for a robust snack or mini-meal.
- Toss a handful into a refreshing salad.

CHECK OUT THESE RECIPE FAVORITES TO GET HEART-HEALTHY BLUEBERRIES INTO YOUR DIET:



Recent blueberry heart health research

A new research study published in *Clinical Nutrition* found that the equivalent of one cup of fresh blueberries, consumed as 26 g of freeze-dried blueberries, may reduce the acute cardiometabolic burden of energy-dense meals.

This emerging study finds that adding anthocyaninrich blueberries (364 mg anthocyanin and 879 mg phenolics) to a high calorie, high-fat/high-sugar meal (969 kcal, 64.5g fat, 84 g carbohydrate) results in reduced insulin and glucose levels, lower total cholesterol, and improved good cholesterol (HDL-C) and its related lipoproteins (fractions of HDL-P and Apo-A1) in the 24 hours following the meal. These findings are noteworthy because elevated post-meal glucose and impaired glucose tolerance are associated with increased heart disease risk, which is already elevated in people with metabolic syndrome, and given the high rate of consumption of energy-dense, high-fat/high-sugar meals.

While the conclusions drawn from a single study cannot be generalized to all populations, the results suggest that adding just a single cup serving of anthocyanin-rich foods like blueberries to highfat/high-sugar and energy dense meals should be advocated to reduce the acute postprandial increases in risk markers like glucose, insulin and cholesterol (Curtis, 2021).



References

- 1. Heart Disease Facts. (2022, July 15). Retrieved from https://www.cdc.gov/heartdisease/facts.htm
- 2. The American Heart Association Diet and Lifestyle Recommendations. (2021, November 1). Retrieved from <u>https://www.heart.org/en/healthy-living/healthy-</u>eating/eat-smart/nutrition-basics/aha-diet-and-lifestyle-recommendations
- Curtis PJ, Berends L, van der Velpen V, et al. Blueberry anthocyanin intake attenuates the postprandial cardiometabolic effect of an energy-dense food challenge: Results from a double blind, randomized controlled trial in metabolic syndrome participants. Clin Nutr. 2022;41(1):165-176. doi:10.1016/j.clnu.2021.11.030

