

Nutrition

Strawberries are an excellent example of a nutritious superfruit. They are nutrient dense but also low in sugar (only 8 grams) and have only 50 calories per serving (1 cup or approximately 8 medium strawberries).



Strawberries are SUPER!

Let Me Count the Ways

By David Grotto, RD, LDN, author of *101 Optimal Life Foods* and spokesperson for the California Strawberry Commission.

You may have seen the term “superfruit” associated with various fruits in the marketplace. It certainly has become a popular term tossed around quite a bit in the media lately. It prompted me to think, “What exactly qualifies a fruit to be ‘super’?”

When writing *101 Foods That Could Save Your Life*, I researched the term “superfruit” and found that there wasn’t a legal definition for it. But as a registered dietitian, I knew that certain fruits had unique qualities and health attributes that made them different from others. In deciding what fruits to include as worthy members of the *101 Foods* book, I looked for distinguishing factors such as nutrient density, which is a measure of how much nutrition is delivered in comparison

to the calories provided. Another important attribute was evaluating the health benefits of adding in a specific fruit into the diet. But as a consumer who also has an eye on taste and versatility, regardless of how healthy and nutritious a super fruit is, if it isn’t accessible, easy to prepare, and great tasting, then in my book, that fruit is less-than-stellar. Not surprisingly, strawberries are a perfect example of a superfruit that meets all “super” criteria!

Super Nutritious

And with such a low calorie and sugar profile they are a welcome addition for people who want to look and feel their best all year long – not just in the summer! Strawberries are packed with a variety of nutrients including vitamin C, folate, fiber and potassium. They also contain important plant nutrients called polyphenols such as anthocyanins, ellagic acid, ellagitannins, gallotannins, quercetin, kaempferol and phenolic acids.

Super Healthy

Being nutritious is great, but what about the effect of those nutrients on health? Scores of studies exist that evaluate the health benefits of the nutrients found in strawberries.

- Potassium helps control blood pressure and fight stroke.
- Fiber helps control weight and relieve constipation.
- Vitamin C helps repair damage in the body and is an important nutrient in promoting a healthy immune system. This is especially important during cold and flu season. Folate is a B vitamin that fights birth defects and helps control the inflammatory process associated with heart disease.

The plant nutrients found in strawberries, particularly polyphenols, have antioxidant capabilities that can reduce inflammation and oxidative stress. These two harmful processes have been linked to major challenges

to our health, including cancer, cardiovascular and neurological disease, arthritis, obesity, diabetes, autoimmune disorders and pulmonary disease. Polyphenols help protect and repair cells. Research on these and other nutrients found in strawberries have shown promise in various studies in:

- Improving cognitive decline.
- Reducing damage that leads to aging.
- Enhanced signaling between brain cells.
- Reducing total and LDL cholesterol and preventing the oxidation of LDL cholesterol.
- Reducing the requirement of insulin for glucose control.
- Protecting DNA from harmful mutations.

Super Accessible

Some superfruits are only available fresh at certain times of the year or not at all – not so super. Because California Strawberries are grown year round, you can find them fresh or frozen at your local grocery store whenever you want them.

Super Delicious

Perhaps this is the one “super” trait that trumps them all. Who cares if a fruit is good for you if it isn’t delicious? In fact, strawberries are ranked #1 as kids’ favorite fruit and adults love them, too! They are versatile as an ingredient in salads, soups, sweet and savory dishes... you name it. And best of all, they are pretty super tasting all by themselves.



Have a super day! - David Grotto

References

Willis LM, Shukitt-Hale B, Joseph JA. Recent advances in berry supplementation and age-related cognitive decline. *Curr Opin Clin Nutr Metab Care*. 2009 Jan;12(1):91-4. Review.

Shukitt-Hale B, Lau FC, Joseph JA. Berry Fruit Supplementation and the Aging Brain. *J Agric Food Chem*. 2008 Feb 13;56(3):636-41.

Basu A et al. Freeze-dried strawberry powder improves lipid profile and lipid peroxidation in women with metabolic syndrome: baseline and post intervention effects. *Nutr J*. 2009 Sep 28;8:43.

Jenkins DJ et al. The effect of strawberries in a cholesterol-lowering dietary portfolio. *Metabolism*. 2008 Dec;57(12):1636-44.

Zafra-Stone S. et al. Berry anthocyanins as novel antioxidants in human health and disease. *Mol Nutr Food Res*, 2007 Jun;51(6): 675-83.

Weaver J et al. Strawberry polyphenols are equally cytotoxic to tumorigenic and human breast and prostate cell lines. *Int J Oncol*. 2009 Mar;34(3): 777-86.

Cheplick S, Kwon YI, Bhowmik P, Shetty K. Phenolic-linked variation in strawberry cultivars for potential dietary management of hyperglycemia and related complications of hypertension. *Bioresour Technol*. 2010 Jan;101(1): 404-13.

