



STRAWBERRY NUTRITION

California strawberries pack a powerful nutritional punch!

Strawberries are packed with essential vitamins, fiber, potassium and phytonutrients. One serving, about eight strawberries, is an excellent source of vitamin C. In fact, a serving of strawberries provides more vitamin C than an orange!

Fiber is considered by the American Heart Association to be important for heart health. Epidemiological studies report that people who eat higher amounts of fiber have a lower risk of heart disease.

Potassium is an important nutrient to balance electrolytes, aid muscle contractions and maintain a healthy blood pressure.

Antioxidants (including vitamin C) are key to warding off chronic diseases and promoting optimum health. Research shows that the antioxidants in strawberries are efficiently absorbed within one hour of being eaten. Once absorbed, antioxidants fight free radicals that can cause chronic illnesses.

Antioxidants are components in foods that may be responsible for improving and maintaining health. They are present in foods as vitamins, minerals, carotenoids and polyphenols, among others. The most well known components of food with antioxidant activity are vitamins A, C and E, betacarotene and lycopene. Many antioxidant rich foods are often identified by their distinctive colors such as the deep hue of blackberries and the bright reds of strawberries and cranberries.

One serving of California strawberries contains only eight grams of sugar. Being naturally low in sugar makes them the perfect indulgence for today's carb-conscious eaters.

In addition to traditional nutrients, strawberries are also rich in phytonutrients: phenolic compounds such as flavonoids and ellagic acid, which are the focus of intense study due to their antioxidant, anticancer and antimutagenic properties. The majority of flavonoids in strawberries are anthocyanins, the compounds responsible for the blue, red and purple colors of berries, grapes and other fruits.

Although traditional vitamins and minerals are important, nutrition scientists are looking to characterize and understand the actions of hundreds of other compounds in plant foods, as well as the protective power of the whole foods themselves.



Research about Strawberry Health Benefits

Strawberries are one of nature's healthiest "packages" of power nutrients. Moreover, they're one of the tastiest! In coming years, the completion of exciting new research should provide even more reasons to enjoy strawberries year-round.



The California Strawberry Commission has funded more than \$1.8 million in nutrition research since 2003.

Strawberries and Cognitive Function

Age-related declines in cognitive function have been related to both oxidative stress and inflammation. Because of their high antioxidant and anti-inflammatory activities, strawberries are being studied for their ability to slow or prevent such decline.

Researchers at the USDA Human Nutrition Research Center on Aging at Tufts University demonstrated that strawberries slowed age-related declines in cognitive and motor functions.

New studies are being conducted by the same research group to determine the effect of strawberry supplementation on: (1) behavioral aging; (2) the repair and regeneration of nerve cells in aging; and (3) resistance to oxidative stress or inflammation.

Strawberries and Cancer Prevention

Strawberries contain a multitude of cancer-fighting compounds, including vitamin C and folate, anthocyanins, quercetin, kaempferol and ellagic acid. Very few foods or their components have been shown to reduce the risk of some cancers. However, strawberries and their constituents have shown promise in both cell culture and epidemiological studies.

The California Strawberry Commission is supporting studies in esophageal cancer in cooperation with the Ohio State University Cancer Chemoprevention Program.

Strawberries and Heart Health

Research studies are also in progress to evaluate the impact of strawberry consumption on blood pressure, cholesterol levels and inflammatory markers that are drivers of heart disease. Clinical studies are underway at the University of California, Los Angeles; University of California, Davis; and the USDA Western Human Nutrition Research Center.

A recent study from the University of California, Davis and the Illinois Institute of Technology found that flavonoids, a compound found in strawberries, may reduce the risk of heart disease.

Recently, investigators at Harvard Medical School reported that women with higher strawberry intake had lower levels of an inflammatory marker in their blood.

California Strawberries

- Are America's favorite fruit
- Are available year-round
- Are enjoyed by 94% of Americans
- Have more vitamin C per serving than an orange
- Are naturally low in sugar - only eight grams per serving
- May help reduce the risk of heart disease, fight some types of cancer and lower blood pressure.