# WHAT WE'RE READING...



November 2015 | authoritynutrition.com | Joe Leech | Nutrition

#### 10 Proven Benefits of Blueberries

Blueberries are sweet, nutritious and wildly popular.

Often labelled a "superfood," they are low in calories and incredibly good for you.

They are so tasty and convenient that many people consider them to be their favorite fruit.

Here are 10 health benefits of blueberries that are supported by research.

1. Blueberries are Low in Calories, But High in Nutrients

The blueberry is a flowering shrub that produces berries that are colored blue to purple, also known as blueberries.

It is strongly related to similar shrubs, such as those that produce cranberries and huckleberries.

Blueberries are small, around 5-16 millimeters (0.2-0.6 inches) in diameter, and have a flared crown at the end.

They are green in color at first, then change to blue-purple as they ripen.

These are the two most common types:

·Highbush blueberries are the most commonly grown species in the US.

·Lowbush blueberries are often referred to as "wild" blueberries. They are typically smaller and richer in some antioxidants.

Blueberries are among the most nutrient dense berries. A 1 cup serving (148 grams) of blueberries contains:

Fiber: 4 grams.

Vitamin C: 24% of the RDA. Vitamin K: 36% of the RDA. Manganese: 25% of the RDA.

Then it contains small amounts of various other nutrients. They are also about

85% water, and an entire cup contains only 84 calories, with 15 grams of carbohydrates. Calorie for calorie, this makes them an excellent source of several important nutrients.

Bottom Line: The blueberry is a very popular berry. It is low in calories, but high in fiber, vitamin C and vitamin K.

2. Blueberries are the King of Antioxidant Foods

Antioxidants are important. They protect our bodies from damage by free radicals, unstable molecules that can damage cellular structures and contribute to aging and diseases like cancer. Blueberries are believed to contain the highest antioxidant capacity of ALL commonly consumed fruits and vegetables. The main antioxidant compounds in blueberries belong to a large family of polyphenols, called flavonoids. One group of flavonoids in particular, anthocyanins, is thought to be responsible for much of the

beneficial health effects. They have been shown to directly increase antioxidant levels inside the body.

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3. Blueberries Reduce DNA Damage. What May Hijp Process Against Aga





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NOTE: Some sentiments contained within "What We're Reading" articles may not strictly conform with Simple Again's nutritional outlook. We read articles containing opposing information all the time and derive our nutritional philosophies from the latest science, the opinions of experts worldwide and our anecdotal experiences in the field. We keep an open mind and a strong affinity for fact-based evidence to help make the world of nutrition "Simple Again" for you.

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3. Blueberries Reduce DNA Damage, Which May Help Protect Against Ageing and Cancer

Oxidative DNA damage is part of everyday life. It is said to occur tens of thousands of times per day, in every single cell in the body. DNA damage is part of the reason we grow older, and it also plays an important role in the development of diseases like cancer. Because blueberries are high in antioxidants, they can help neutralize some of the free radicals that cause damage to our DNA. In one 4-week study, 168 participants were instructed to drink 1 liter (34 ounces) of a mixture of blueberry and apple juice, every day. At the end of the study, oxidative DNA damage due to free radicals was reduced by 20%. These findings have also been supported by smaller studies using either fresh or powdered blueberries.

Bottom Line: Several studies have shown that blueberries and blueberry juice can protect against DNA damage, a leading driver of aging and cancer.

4. Blueberries Protect Cholesterol in The Blood From Becoming Damaged



Oxidative damage is not limited to our cells and DNA. It is also problematic when our circulating LDL lipoproteins (the "bad" cholesterol) are oxidized. In fact, oxidation of LDL is a crucial step in the heart disease process. Fortunately for us, the antioxidants in blueberries are strongly linked to reduced levels of oxidized LDL. A daily 50 gram serving of blueberries lowered LDL oxidation by 27% in obese participants, after a period of eight weeks. Another study showed that 75 grams of blueberries with a main meal significantly reduced the oxidation of LDL lipoproteins.

Bottom Line: The antioxidants in blueberries have been shown to protect LDL lipoproteins (the "bad" cholesterol) from oxidative damage, a crucial step in the pathway towards heart disease.

5. Blueberries May Lower Blood Pressure

Blueberries appear to have significant benefits for people with high blood pressure (hypertension), a major risk factor for some of the world's leading killers. In one study, obese individuals at a high risk for heart disease noted a 4-6% reduction in blood pressure, after consuming 50 grams (1.7 ounces) of blueberries per day, for eight weeks. Other studies have found similar effects, especially when looking at post-menopausal women. Given that high blood pressure is one of the leading drivers of heart attacks and strokes, the implications of this are potentially massive.

Bottom Line: Regular blueberry intake has been shown to lower blood pressure in numerous studies.

6. Blueberries May Help Prevent Heart Disease

Again, eating blueberries may lower blood pressure and oxidized LDL. However, it's important to realize that these are risk factors, not actual diseases. What we really want to know is whether blueberries help prevent hard end points like heart attacks, which are the world's biggest killer. In a 2013 study on 93,600 nurses, eating plenty of anthocyanins (the main antioxidants in blueberries) was linked to a 32% lower risk of heart attacks. This was an observational study, so it can not prove that the blueberries caused the reduction in risk, but it seems likely given the known beneficial effects on risk factors.

Bottom Line: There is some evidence that regular blueberry consumption can help prevent heart attacks.

7. Blueberries Can Help Maintain Brain Function and Improve Memory

Oxidative stress can accelerate the brain's aging process, having negative effects on brain function. According to animal studies, the antioxidants in blueberries tend to accumulate in areas of the brain that are essential for intelligence. They appear to directly interact with aging neurons, leading to improvements in cell signalling. Human studies have also shown promising results. In one of these studies, 9 elderly participants with mild cognitive impairment consumed blueberry juice every day. After 12 weeks, they had seen improvements in several markers of brain function. A six year study of 16,010 elderly participants found that blueberries and strawberries were linked to delays in cognitive aging by up to 2.5 years.

Bottom Line: The antioxidants in blueberries seem to have benefits for the brain, helping to improve brain function and delaying age-related decline.

8. Anthocyanins in Blueberries Can Have Anti-Diabetic Effects

Blueberries are moderate in sugar when compared to other fruits. One cup contains 15 grams, which is equivalent to a small apple or large orange. However, the bioactive compounds in blueberries appear to outweigh any negative impact of the sugar when it comes to blood sugar control. Research suggests that anthocyanins in blueberries can have beneficial effects on insulin sensitivity and glucose metabolism. These anti-diabetic effects have been shown with both blueberry juice and extract. In a study of 32 obese subjects with insulin resistance, a blueberry smoothie caused major improvements in insulin sensitivity. Improved insulin sensitivity should lower the risk of metabolic syndrome and type 2 diabetes, which are currently some of the world's biggest health problems. Bottom Line: Several studies have shown that blueberries have anti-diabetic effects, helping to improve insulin sensitivity and lower blood sugar levels.

9. Substances in Them May Help Fight Urinary Tract Infections

Urinary tract infections are a common problem in women. It is well known that cranberry juice can help prevent these types of infections. Blueberries are highly related to cranberries, and contain many of the same active substances as cranberry juice. These substances are called anti-adhesives, and help prevent bacteria like E. coli from binding to the wall of the bladder. Blueberries haven't been studied much for this purpose, but chances are that they have similar effects as cranberries.

Bottom Line: Like cranberries, blueberries contain substances that can prevent certain bacteria from binding to the wall of the urinary bladder. This may be useful in preventing urinary tract infections.

10. Blueberries May Help Reduce Muscle Damage After Strenuous Exercise

Strenuous exercise can lead to muscle soreness and fatigue. This is driven, in part, by local inflammation and oxidative stress in the muscle tissue. Blueberry supplementation may reduce the damage that occurs at the molecular level, minimizing soreness and reduction in muscle performance. In a small study of 10 female athletes, blueberries accelerated muscle recovery after strenuous leg exercises.

Take Home Message

It is clear that blueberries are incredibly healthy and nutritious. The fact that they are sweet, colorful, and can be enjoyed both fresh and frozen, is just a tasty bonus.

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