Chia seeds have become one of the most popular <u>superfoods</u> in the health community. They are easy to digest when prepared properly, and are a very versatile ingredient that adds easily to recipes. The chia seed is nutrient dense and packs a punch of energy boosting power. Not only that, but recent research has found that the chia seed benefits are even greater than we realized. Now they have even been linked to healing diabetes.

Originally grown in Mexico, the seeds were highly valued for their medicinal properties and nutritional value. In fact, they were even used as currency!

Aztec warriors ate chia seeds to give them high energy and endurance. They said just 1 spoonful of chia could sustain them for 24 hours. Chia means "strength" in the Mayan language, and they were known as "runners food" because runners and warriors would use them as fuel while running long distances or during battle.

Chia Seed Nutrition Profile

The reason Chia seeds are so beneficial is due to them being rich in fiber, omega-3 fats, protein, vitamins and minerals such as $(\underline{1})$:

Dietary fiber (11g – 42% recommended daily value)

- Protein (4.4g 9% RDV)
- Omega-3 fatty acids (4915 mg)
- Omega-6 fatty acids (1620 mg)
- Calcium (77 mg 18% RDV)
- Copper (0.1 mg 3% RDV)
- Phosphorus (265 mg 27% RDV)
- Potassium (44.8 mg 1% RDV)
- Zinc (1.0 mg 7% RDV)

Chia also contains essential fatty acids alpha-linolenic and linoleic acid, mucin, strontium, Vitamins A, B, E, and D, and minerals including sulphur, iron, iodine,

magnesium, manganese, niacin, thiamine, and they are a rich source of anti-oxidants.

CHIA CONTAINS:



Top 9 Chia Seeds Benefits

Being rich in so many key nutrients, research has uncovered that regularly eating chia seed can improve your health in numerous ways. Some of the top chia seed benefits are:

1. Skin & Aging

This past July, researchers from Mexico uncovered that chia seeds had a total natural phenolic (antioxidants) concentration nearly two times higher than previously reported, and the antioxidant activity was shown to stop up to 70% of free radical activity. ($\underline{2}$)

Essentially proving that chia seeds are one of nature's riches antioxidants. Antioxidants speed up the skin's repair systems, and prevent further damage. Taking chia seeds can prevent premature skin aging due to inflammation free radical damage.

2. Digestive Health

Chia is super-high in fiber, providing nearly 11 grams per ounce. **One serving can provide the recommended fiber intake for the day, according to the American Dietetic Association.**

Fiber is essential for your body's ability to balance insulin levels. According to the National Institute of Health, seeds like flax and chia can be a natural blood sugar balancer due to it's high fiber content and healthy fats.

Being high in dietary fiber, chia helps promote bowel regularity and healthy stool. The rich fiber content in chia seeds also helps people feel more full quicker because it absorbs a considerable amount of water and immediately expands in the stomach when eaten. (3) This may explain why clinical studies have proven that chia curbs hunger and suppresses appetite, which can also lead to weight loss. (4)

Also when consumed, chia seeds create a gelatin-like substance in the stomach. This gel-forming action is due to the soluble fiber in chia seeds and it can work as a prebiotic supporting the growth of probiotics in the gut.

3. Heart Health

Chia seeds' ability to reverse inflammation, regulate cholesterol and lower blood pressure make it extremely beneficial to consume for heart health. (5) Also, by reversing oxidative stress, someone is less likely to develop atherosclerosis when they're regularly consuming chia seeds.

In a nutshell, according to an article published in the journal Reviews on Recent Clinical Trials:

"The available human and non-human studies show possible effectiveness for allergies, angina, athletic performance enhancement, cancer, coronary heart disease (CHD), heart attack, hormonal/endocrine disorders, hyperlipidemia, hypertension, stroke, and vasodilatation. Some evidence also suggests possible anticoagulant, antioxidant, and antiviral effects of Salvia hispanics."

And Chia seeds are high in linoleic, a fatty acid which helps the body absorb fat-soluble vitamins A, D, E and K. For such a tiny seed, chia is quite high in healthy fats boasting more Omega-3 fatty acids than salmon. Omega-3's work to protect the heart by lowering blood pressure, bad cholesterol, and inflammation.

Inflammation can put strain on blood vessels and cause heart disease. So by eating chia seeds you can boost and protect your heart!

4. Help Treat Diabetes

Because chia seeds are rich in alpha-linolenic acid and fiber, researchers from the *University of Litoral* in Argentina set out to determine how chia seeds can help prevent metabolic disorders like dyslipidemia (excessive fat in the blood) and insulin resistance – which are two factors in the development of diabetes. Published in the *British Journal of Nutrition*, I find this article extremely fascinating because

these scientists conducted two studies at the same time and uncovered some profound data. $(\underline{6})$

• The first test evaluated how healthy Wistar rats responded to 3 weeks of a sucrose-rich diet (SRD) in which chia seeds made up theprimary dietary source of fats.

• The second test took healthy rats and fed them a SRD for 3 months so that they developed dyslipidemia and insulin resistance. Then, they fed these newly diseased rats SRD + chia seeds for an additional 2 months.

The results were astounding:

• During the first examination, eating *chia seeds completely prevented the onset of dyslipidemia and insulin resistance.* In fact, the blood levels in these rats didn't change at all in spite of having 65% of their diet comprised of sugar for 3 weeks!

• During the second examination, after the dyslipidemic and diabetic rats were fed chia seeds + SRD for two months, they completely recovered from their conditions. The researchers also discovered that the dietary addition of chia seeds also reduced visceral adipose tissue, a "belly fat" tissue that effects the metabolism of the body and is a component of obesity!

In a nutshell, chia seeds was proven to halt diabetes and reverse it!

5. Boost Your Energy & Metabolism

A recent study published in the *Journal of Strength and Conditioning* concluded that consuming chia seeds enhanced exercise performance for workouts that lasted 90 minutes the same way a sugar-laden sports drink would, but without all the sugar.

In the study, half of the athletes drank 100 percent Gatorade, while the others consumed half Gatorade and half chia drink. Their runners time were matched and the half-chia group consumed far less sugar. • By adding a serving of chia seeds a day you can help boost your metabolism and burn belly fat as well! Studies show that the addition of chia seeds to your diet also reduces visceral adipose tissue, a "belly fat" tissue that effects the metabolism of the body and is a component of obesity!

6. Stronger Bones

Just one ounce of chia seeds has 18% of the recommended daily amount of calcium.

Calcium is fundamental in bone health and helps maintain bone strength and mass. Chia also contains boron which is another essential nutrient for bone health.

Boron helps metabolize calcium, magnesium, manganese, and phosphorus for healthy growth of bones and muscles.

7. Build Muscle & Lose Weight

Chia seeds also rank among the top plant based sources of <u>protein</u>. This is another reason this super seed is great to consume for those trying to put on lean muscle, burn fat, and balance blood sugar levels.

Chia seeds pack a powerful antioxidant punch to help replace some of those nutrients lost when exercising.

They're high in essential minerals like calcium,

phosphorus, magnesium, manganese, copper,

zinc, iron and niacin.

One of the characteristics that make chia so unique is that it can absorb up to 10X its own weight in water. Because of this, chia seeds can prolong hydration and improve nutrient absorption of electrolytes. This also slows digestion and keeps you feeling fuller longer reducing sugar cravings.

And because chia seeds are also high in zinc, they help your body increase leptin. Leptin is a key hormone that regulates your bodies appetite, how your body spends energy and regulates how your energy levels! It also improves stamina and endurance, making chia a great source of nutrition if you are looking to get in shape.

8. Fight Breast and Cervical Cancer

Chia seeds are rich in alpha lineic acid (or ALA) which is an Omega-3 fatty acid. Recently in 2013, the Journal of Molecular Biochemistry found that ALA limited the growth of cancer cells in both breast and cervical cancers.

They also found that it caused cell death of the cancer cells without harming the normal healthy cells. While more research still needs to be done to find out the deeper implications of ALA on other types of cancer, this is a great discovery for women struggling with these increasingly common types of cancer. ($\underline{7}$)

9. Dental Health

With chia seeds being packed with calcium, phosphorus, Vitamin A and zinc, it's no wonder that they are a top food to help your teeth! Calcium is the building block of your teeth and necessary for tooth health.

Zinc prevents tarter by keeping plaque from mineralizing onto your teeth and has an antibacterial effect that keeps bad breath germs away. Vitamin A and phosphorus are also important for strong teeth and a healthy mouth.