

Almonds Are The Perfect Food For A Healthy Heart

Almonds contain several phytochemicals including beta-sisterol stigmasterol and campesterol which is thought to contribute to a healthy heart. A handful of almonds a day helps reduce the risk of heart disease by lowering low density lipoproteins (LDL), or 'bad' blood cholesterol by as much as ten percent.

Recent research associates inclusion of almonds in the diet with elevating the blood levels of high density lipoproteins (HDL) the 'good' cholesterol ('good' because HDL escorts LDL to the liver where it is broken down and excreted), and of lowering the levels of low density lipoproteins (LDL), or 'bad' blood cholesterol ('bad' because it clogs your arteries).

Almonds are rich source of folic acid; folic acid reduces the levels of homocysteine, which is an amino acid that can contribute to the buildup of plaque in the arteries.

Ongoing research hypothesizes that almonds may have a prebiotic effect that can provide benefits supportive of the GI tract in maintaining immunity and overall well-being. The human gut or gastrointestinal tract (GI) plays a key role in promoting overall health, with approximately 80% of immunity starting there. It's also where prebiotics come into play. Prebiotics are non-digestible food substances that act as food for "good" bacteria in the GI tract as the human body constantly tries to keep a perfect balance. And while more research is needed to prove the prebiotic effect of almonds, this is just one more reason to introduce them into your diet. Because when your body functions better so do you.

Their high monounsaturated fat content, a key fat found in many Mediterranean diets, gives them much greater benefits than simply being cholesterol-lowering. Nearly every research study shows those who eat a traditional Mediterranean diet not only have a lower risk of heart disease and cancer, they also live longer.

The Mediterranean diet emphasizes whole grains, root and green vegetables, daily intake of fruit, fish, poultry, olive oil, and raw nuts and seeds, along with little ingestion of red meat and not much use of butter and cream.

One of it's heart protection secrets is in it's healthy balance of Omega-3 fatty acids (found in fatty, cold water fish, flaxseeds, and chia seeds), Omega-6 fatty acids (found in raw almonds, raw walnuts, and raw seeds, and Omega-9 fatty acids (found in extra virgin olive oil, olives, avocados, raw seeds and raw almonds).

As almonds are high in protein (6 grams per one ounce), and contain virtually no carbohydrates, they are ideal for diabetics, pre-diabetics or anyone with blood sugar issues.

Almonds also contain more alkaline forming minerals than acid forming minerals, which makes them a rare protein-rich, bone protecting, alkalizing food.

Almonds are a great source of vitamin E, (one ounce — 28 grams — of almonds provides about 7.4 grams of alpha-tocopherol vitamin E, 50 percent of the recommended daily allowance). Of all the antioxidants, vitamin E not only reduces low density lipoproteins (LDL), but also increases high density lipoproteins (HDL), and it increases the breakdown of fibrin, a clot-forming protein.

Raw, whole almonds (with skins) provide the most heart healthy benefits. The flavonoids found in their skins team up with the vitamin E found in their meat to more than double the antioxidant punch. Twenty potent antioxidant flavonoids were identified in almond skins in studies, some of which are well known as major contributors to the health benefits derived from other foods, such as the catechins found in green tea, and naringenin, which is found in grapefruit.

Emerging research demonstrates that the combination of dietary fiber along with the protein in almonds contributes to overall satiety and therefore may play a role in controlling caloric intake. Most protein sources do not provide dietary fiber such as is found in almonds. Cheese and eggs, for example, are good sources of protein but do not supply dietary fiber.

Note from Bonnie: Almonds contain an incomplete protein. They are extremely short on methionine, which is one of the essential amino acids. They are also short on lysine, another essential amino acid. I feel better when I take capsules of methionine and lysine before I eat almonds or drink almond milk-puree. I take one Twinlab L. Methionine, 500 mg in each capsule, and two Twinlab L-Lysine, 500 mg in each capsule to complete the protein in three ounces of almonds.

Another Note from Bonnie: Almonds have a tremendous amount of arginine, which is a nonessential amino acid that competes with lysine in crossing the blood-brain-barrier. Arginine is a powerful immune stimulant and wound healing agent, so there is nothing wrong with it. However, because lysine causes an immediate loss of arginine from tissue, you can bring the lysine and arginine in almonds into balance by taking one or two capsules of lysine before eating almonds.

Warning: If you suffer with cold sores (HSV Type 1) or genital herpes (HSV Type 2) you should be aware that Lysine has been found to be active against the herpes virus in vitro, due to its ability to inhibit the metabolism of arginine, an amino acid required by the herpes virus for replication. Arginine is in essence the food source for the virus, without it it cannot grow, replicate or cause symptoms. Increasing the

availability of Lysine inhibits the utilization of Arginine and slows virus replication. Arginine levels have an effect on results as well, so if you want to suppress herpes virus growth with Lysine supplements, it may be necessary to restrict Arginine (i.e. almonds, walnuts, and other nuts) in the diet as well to keep the lysine to arginine ration in a favorable range. For a list of foods and their ratios go to: <http://www.advance-health.com/lysineherpes.html>

Lysine, Arginine and Viral Infections

by J. C. Waterhouse, Ph.D in CISRA's Synergy Newsletter, 2007 <http://synergyhn.com/lysine/>

There is evidence that the ratio of the amino acid arginine to lysine in the diet affects the replication of Herpes simplex virus. One may find it helpful to minimize arginine-containing foods (nuts are particularly high in arginine) and/or balance out the arginine with lysine, particularly when under stress.

Some people have also found that being mindful of their lysine and arginine consumption is helpful in prevention and treatment of Shingles (also in the Herpes family). An article in the Saturday Evening Post has described potential benefits in chronic fatigue syndrome in cases where viruses in the Herpes family are involved (these include Epstein-Barr virus and Cytomegalovirus) based on the work of the late Dr. Richard Griffith of Indiana University. The main thing to remember is that nuts and plant based proteins (like rice protein powder) have the most arginine relative to lysine and dairy products have the lowest. Meats are in between and the higher protein foods will be the ones to pay the most attention to since they have the highest concentrations arginine and lysine. This article includes a list of arginine and lysine content of foods: <http://herpes.com/Nutrition.shtml>. If one prefers, the lysine can be taken in supplemental form. For cold sores, Dr. Griffith recommended 500 mg of lysine per 22 pounds of body weight daily.

Studies: Relation of arginine-lysine antagonism to Herpes simplex growth in tissue culture. Griffith RS , DeLong DC , Nelson JD. *Chemotherapy*, 27(3): 209-13 1981 Abstract excerpt: "In the studies conducted, arginine deficiency suppressed Herpes simplex virus replication in tissue culture. Lysine, an analog of arginine, as an antimetabolite, antagonized the viral growth-promoting action of arginine...."

A multicentered study of lysine therapy in Herpes simplex infection. Griffith RS, Norins AL, Kagan C. *Dermatologica*, 156(5): 257-67 1978 Abstract excerpt: "Lysine appears to suppress the clinical manifestations of Herpes virus infection. 45 patients with frequently recurring Herpes infection were given 312-1,200 mg of lysine daily in single or multiple doses. The clinical results demonstrated a beneficial effect from supplementary lysine in accelerating recovery from Herpes simplex infection and suppressing recurrence...."

Almond Milk

Merely soaking 6 ounces of almonds in a cup of distilled water in the refrigerator for 6-8 hours, then draining the water and discarding it (this removes the enzyme inhibitors in the skin), and blending the almonds with three cups distilled water in a blender, then straining the mixture using a cheesecloth or other strainer will make almond milk (save the strained bits — the fiber — to add to breakfast cereal).

By using a Vita-Mix you can make almond milk (as above) or almond milk-puree (for puree you blend the almond/water mixture longer and do not strain it).

By drinking Vita-Mix almond milk-puree you get all the nutrition in the almonds, including the skin (the Vita-Mix breaks it down more thoroughly than chewing does) and fiber.

Almond milk is indisputably nutritious with little to no saturated fat, unlike cow's milk, and no lactose, which many find indigestible.

Almonds contain more calcium than any other nut which makes them great for vegetarians who do not eat any dairy products.

Note: When weaning babies from breast milk or formula do not give them almond milk as doing so may cause them to develop an allergy to almonds. Wait until they are three years old, or older if there is a history of nut allergies in the family.

Bonnie's Vita-Mix Almond Milk-Puree

Place six ounces of organic raw almonds into a container with one cup of distilled water, put a lid on the container and store it in the refrigerator overnight (or at least six hours). In the morning drain the water off the almonds and rinse them well with distilled water. Place the almonds in the Vita-Mix cup and add three cups of distilled ice water (optional: add two figs, dates or prunes). Begin to blend slowly, work up to high gradually and blend on high for five minutes (if you do not use ice water the almonds will get hot, but not hot enough to damage the oil, protein, enzymes or phytonutrients. — you can substitute ice for the third cup of water to reduce heat, however limit the ice to one cup or you'll make an almond 'soft freeze'). Pour the puree into a glass jar, seal, cool and store in refrigerator. This makes a little more than four cups of almond milk-puree (some water is retained in the almonds after they are soaked, that's why you will have more than four cups when you're finished). Drink two cups (one first thing in the morning and one as an afternoon snack), which will add three ounces of almonds to your daily diet.

Dale did a presentation about getting more nutrition out of your food featuring the Vita-Mix. He had the Vita-Mix Question and Answer Guy join in to answer questions (it's a really neat video). To watch it go to: <http://tinyurl.com/l5pq7t>

If you don't have a Vita-Mix now and you decide to buy one, we make a small affiliate commission and you get free shipping when you buy through our link — just click on the picture of the Vita-Mix when you go to: <http://tinyurl.com/15pq7t>

Warning: Use only raw organic almonds. Do not use roasted or salted almonds as they have had their protein and phytochemicals destroyed and their beneficial oil turned carcinogenic during high heat processing (425 to 475 degrees Fahrenheit).

Regulate Your Weight With Almonds

From: Does the Nutrition Facts Label Tell the Whole Story? — An Almond Board of California Press Release, 9/18/2007

Scientists have noticed for many years that people who regularly eat almonds tend to weigh less than people who do not — even though they tend to eat more calories over the course of a day. Why? A new study published in the September 2007 issue of the *British Journal of Nutrition* sheds light on the mechanisms behind almonds' ability to provide valuable nutrition and help lower (low density lipoprotein) LDL cholesterol levels without contributing to weight gain.

In the study, women were instructed to eat 344 calories worth of almonds (slightly more than 2 ounces) every day for one 10-week period, and then eat their customary diet for another ten weeks. The women did not gain weight during the period they consumed almonds. In addition, because of the high vitamin E and magnesium content in almonds, they met the daily dietary recommendations for those two nutrients that most Americans don't consume in adequate amounts.

The researchers determined that the study participants felt satisfied, so they naturally compensated for most of the calories in almonds by replacing other foods in their normal daily diet with the almonds. They also noted a decrease in total carbohydrate intake, suggesting almonds may have replaced carbohydrate-rich foods.

Additionally, the researchers found that the fiber in almonds appears to block some of the fat they contain. So, in reality, almonds may provide fewer calories to the body than the amount the food label states. This raises broader questions about the availability of energy from foods, indicating that many may not actually deliver the amount listed on the nutrition facts label.

“Solid data has shown that eating one to three daily ounces of almonds can help lower (low density lipoprotein) LDL cholesterol levels,” said study co-author Rick Mattes, Ph.D., R.D. from Purdue University in West Lafayette, IN. “But many health care providers have been hesitant to recommend almonds as a daily snack because they're a relatively high-calorie food and could contribute to weight gain. This study challenges that assumption. The study indicates that the nutrition facts

label may overstate the amount of energy available to the body from eating almonds.”

Study Details

A research team at Purdue University in West Lafayette, Indiana conducted a study with 20 women, most of whom were overweight. One group was instructed to eat a normal diet for 10 weeks, but make one change — add 344 calories worth of almonds every day, slightly more than two ounces. The other group was instructed to eat their customary diet and no almonds. The groups then took a break for three weeks, and switched, so the second group ate almonds and the first group ate none. Researchers measured body weight, metabolic rates, and physical activity at various points during the study. Compliance to almond consumption was assessed through diet records, as well as by measuring blood levels of vitamin E; this was because eating almonds, among the leading sources of vitamin E, has been shown to increase vitamin E levels in the blood.

The researchers found that when people were eating the 344 calories worth of almonds every day, they were in total, only taking in an extra 77 calories each day. This is because the participants naturally compensated for the great majority of the calories in almonds, or about 74 percent, as they found the almonds satiating, or satisfying.

A further portion of these extra daily 77 calories was offset because the fiber structure of almonds blocked the fat in almonds from being fully absorbed. Also, although not statistically significant, the researchers noted an increase in energy expenditure through an increase in resting energy expenditure, or the number of calories used while participants were at rest. Based on the various measures in the study, the researchers concluded that the calories from almonds were compensated for by natural substitution of other foods, by some of the fat from the almonds passing through the body without being digested, and by an increase in resting energy expenditure.

Also notable, eating almonds led to significant increases in the intake of several important nutrients: polyunsaturated fat and monounsaturated fat, vitamin E, magnesium and copper. The Dietary Guidelines for Americans 2005 notes that Americans don't meet the recommendations for vitamin E and magnesium. But in this study when participants ate almonds, on average, they met the daily recommendations for both nutrients.

Similar studies have shown that subjects can consume up to 570 calories worth (3½ ounces) of almonds per day without leading to weight gain. Another benefit of the almond's nutrition is it may help reduce spikes in blood sugar when combined with high-carbohydrate meals.

Try introducing almonds into your diet for just two weeks. Every time you feel the urge to reach for chips or a bag of popcorn, grab a handful of almonds (or drink a glass of almond milk-puree made in your Vita-Mix — it's delicious and drinking almond milk-puree made in a Vita-Mix makes it extremely easy to add three ounces of almonds a day to your diet). Not only will almonds suppress your appetite, but over time, you will begin to develop a fondness for them — just like the fondness you may have now for less nutritious snacks.

Love,

Bonnie

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