



Plant Seeds in Your Diet

Seeds are necessary for reproduction of plants, but they can also be a delicious and nutritious addition to your diet in and of themselves. Eating a variety of seeds is a great way to add more flavor, texture, and nutrition to your meals!

Seeds provide minerals, antioxidants, fiber, protein, and healthy fats. Some research suggests that consuming seeds may offer a variety of health benefits, such as reduced heart disease risk, improved blood sugar control, and more.

While seeds have an abundance of nutrients, they must also be resilient to grow and sustain a new plant, so the nutrients can be harder for our bodies to digest and absorb. There are ways to increase absorption, such as by grinding the seeds, however.

Seeds also contain a compound called phytate, which impedes the absorption of minerals such as iron, zinc, and calcium. However, this should not be a problem when seeds are eaten as part of a balanced diet. In fact, phytate may have beneficial effects as well, such as acting as an antioxidant. If you do rely on seeds as your primary source of minerals, you may want to explore methods such as eating seeds with foods that are high in vitamin C, or soaking and germinating seeds before eating, which may help with absorption of minerals.

Pepitas (Also called pumpkin seeds)

Pepitas are bright vibrant green in color and contain several minerals such as zinc, manganese, and magnesium. They are an excellent source of fiber and contain a wide variety of antioxidants. You can eat pepita seeds either raw or roasted. Try them as an addition to roasted vegetables, salads, hot cereal, on top of soup, or even experiment with adding them to baked goods like cookies.

Sunflower Seeds

Sunflower seeds can be found in a black and white stripped hull, but they also come hulled and ready to eat. They contain several important nutrients, including vitamin E and choline, which are both vital for healthy cell structure and brain health. Sunflower seeds are excellent on a salad, and are an easy snack. Sunflower seed butter is a great alternative to peanut butter.

Sesame Seeds

Sesame seeds have a rich, nutty flavor and can be purchased as whole seeds or as a ground paste—tahini—which is a classic ingredient in hummus or can be added as an ingredient to salad dressings. Like many other seeds, sesame seeds contain a variety of minerals, fiber, and phytonutrients.

Flaxseeds

Flaxseeds comes whole or ground into flaxseed meal. Ground flaxseed is easier to digest and absorb, allowing for greater nutrient absorption. To get the most from flaxseeds, purchase them ground or grind them yourself in a blender, food processor, or coffee grinder. Ground seeds last longer when stored in the refrigerator. Flaxseeds contain healthy ALA omega-3 fatty acids. They also contain soluble fiber, which can help lower cholesterol, improve digestion, and regulate blood sugar levels. Add ground flaxseeds to oatmeal, smoothies, cookies, or breads.

Chia seeds

Tiny and black, chia seeds are packed with fiber. Like flaxseeds, grinding chia seeds before eating increases absorption of ALA omega-3 fatty acids.

Chia and flax seeds are rich in fiber with gelling properties, meaning that when the seeds are added to water and left to sit for several minutes, the little seed will absorb a lot of liquid and release a clear gel. This property of chia seeds has led to its inclusion in some specialty beverages, such as kombucha or the Mexican citrus drink, chia fresca, creating a distinctive texture of small chewy bubbles in the beverage. The gelling stability of chia is much more pronounced when using the whole seed as opposed to using ground chia. Chia seed gel or ground flaxseed gel may be used as a [substitute for the binding properties of egg or functional properties of fats](#) in some baked goods. Seed gel is not to be used as a thickening agent when canning home preserved goods, such as jams or jellies. Gelling chia seeds can



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also be used to [make a pudding](#), much like tapioca. Addition of chocolate, fruit, and/or spices can help enhance the bland flavor of chia into a crowd-pleasing dessert.

More Tips on Seeds

- Add seeds to baked goods, salads, soups, cereals, yogurt, smoothies, and more!
- Look for unsalted or low-salt varieties to reduce sodium intake.
- Watch portions; a serving size of seeds is about one ounce.
- Store seeds in the refrigerator or freezer to preserve the healthy polyunsaturated oils and other nutrients and to extend shelf life.
- As with consuming any food high in fiber, be sure to also drink plenty of water to avoid potential bloating or gastrointestinal discomfort.
- Certain individuals may need to avoid chia and/or flax seeds, especially those with an allergy to the protein in the seed, or related seeds, or those at risk for certain cancers.
- Individuals following medical advice to avoid foods with blood thinning affects or those with blood pressure lowering capabilities should also avoid consuming chia or flax seeds without medical approval.

Eating a variety of seeds is a great way to add new flavors and textures to your meals, while also getting a great assortment of nutrients. Explore the many options out there to find your new favorites!

Sources:

Austria JA, Richard MN, Chahine MN, Edel AL, Malcolmson LJ, Dupasquier CM, Pierce GN. Bioavailability of alpha-linolenic acid in subjects after ingestion of three different forms of flaxseed. *J Am Coll Nutr.* 2008 Apr;27(2):214-21. Accessed from:

<https://www.ncbi.nlm.nih.gov/pubmed/18689552>

Borneo, R., Aguirre, A., & León, A. E. (2010). Chia (*Salvia hispanica* L) Gel Can Be Used as Egg or Oil Replacer in Cake Formulations. *Journal of the American Dietetic Association*, 110(6), 946-949. doi:<https://doi.org/10.1016/j.jada.2010.03.011>

Cording, J. (2016, August). The Role of Flax in the Diet — Learn About Its Nutritional Content and Potential to Help Prevent and Manage Various Medical Conditions. *Today's Dietitian*, 18(8), 48. Retrieved from

<http://www.todaysdietitian.com/newarchives/0816p48.shtml>

Kajla P, Sharma A, Sood DR. Flaxseed—a potential functional food source. *Journal of Food Science and Technology.*

2015;52(4):1857-1871. doi:10.1007/s13197-014-1293-y.

Nieman DC, Gillitt N, Jin F, Henson DA, Kennerly K, Shanely RA, Ore B, Su M, Schwartz S. Chia seed supplementation and disease risk factors in overweight women: a metabolomics investigation. *J Altern Complement Med.* 2012 Jul;18(7):700-8. doi:

10.1089/acm.2011.0443.

Quagliani, Diane. Sunflower Seeds: These Kernels Pack a Big Nutritional Punch. Food & Nutrition. 2013. Accessed from:

<https://foodandnutrition.org/may-2013/sunflower-seeds-kernels-pack-big-nutritional-punch/>

Schlemmer, Ulrich, et al. Phytate in foods and significance for humans: Food sources, intake, processing, bioavailability, protective role and analysis. *Mol. Nutr. Food Res.* 2009. 53, S330 – S37

Zimmerman, J. S. (2017, January). Health Benefits of Chia — Learn About Its History, Nutrient Composition, and Current Research Regarding Its Health Benefits. *Today's Dietitian*, 19(1), 44. Retrieved from

<http://www.todaysdietitian.com/newarchives/0117p44.shtml>