

Body Balance: Protect Your Body from Pollution with a Healthy Lifestyle

Nutritious Nuts and Seeds

It is no secret that good nutrition can have a positive impact on health. A healthy, balanced diet, which includes whole grains, fruits, vegetables, legumes, nuts, and seeds can protect against chronic illnesses, such as type 2 diabetes, cardiovascular disease, and certain cancers.

Eating plant foods such as nuts and seeds makes a diet

more nutritious and may help reduce the risk of chronic diseases. It is especially helpful if you encounter pollutants in the environment. Pollution is something we are exposed to and cannot always avoid, often from our local environment including air, water, soil and food. Plant foods, including nuts and seeds, contain nutritious compounds called phytonutrients.

Unlike vitamins and minerals, there is no recommended dietary allowance (RDA) for phytonutrients.

Eating Right for a Healthier You

Why are nuts and seeds considered a healthy part of my diet?

Nutritionally, most nuts and seeds are low in saturated fat, yet high in fiber, vitamin E, magnesium, phytonutrients, and polyunsaturated and monounsaturated fats. Because they are of plant origin, nuts and seeds do not contain cholesterol. Unless salted, nuts and seeds are naturally low in sodium.

Vitamin E protects our immune system by acting as one of the body's most important antioxidants. Magnesium, a required mineral, is involved in many important bodily processes. Research has shown that a diet low in magnesium may



lead to hypertension, diabetes, heart disease, and depression. Since many of the environmental pollutants can increase oxidative stress, adequate vitamin E and magnesium, especially from eating whole foods, are important.

Nuts and seeds can contain a lot of fat. Is that a good thing?

Although nuts yield the same amount of calories ounce for ounce, all fats are not created equal. Saturated fats raise cholesterol levels. Monounsaturated and polyunsaturated fats are



Nuts and Seeds Nutritional Information								
	Serving Size	Calories	Fat (g)	Protein (g)	Fiber (g)	Saturated Fatty Acids (g)	MUFA (g)	PUFA (g)
Nuts:								
Almonds	1 oz ≈ 20-23 whole almonds	160	14	6	3.5	1.0	8.9	3.5
Hazelnuts	1 oz ≈ 21 nuts	180	17	4	2.7	1.3	12.9	2.2
Pecans	1 oz ≈ 19 halves	195	20	2.6	2.7	1.8	11.6	6.1
Pine Nuts	1 oz ≈ 167 kernels	178	17.3	3.3	3.0	2.7	6.5	7.3
Pistachios	1 oz. ≈ 49 nuts	160	13	5.75	2.9	1.5	6.6	3.8
Walnuts	1 oz ≈ 14 halves	185	18.5	4.3	1.9	1.7	2.5	13.4
Brazil nuts	1 oz ≈ 6-7 nuts	185	18.8	4	2.1	4.3	7.0	5.8
Cashews	1 oz ≈ 16 nuts	160	12.4	5.2	0.9	2.4	7.3	2.4
Macadamia nuts	1 oz ≈ 10-12 nuts (raw)	205	21.5	2.2	2.4	3.4	16.7	0.4
Seeds:								
Flaxseeds	1 Tbsp (raw)	55	4.3	1.9	2.8	0.3	0.5	2.0
Pumpkin seeds	1 oz	160	13.9	8.6	1.7	2.3	3.7	5.4
Sesame seeds	1 Tbsp	50	4.5	1.6	1.1	2.6	6.8	7.2
Sunflower seeds	1 oz	175	16.1	4.9	3.3	1.7	3.1	10.6
Source: Nutrient data were collected and analyzed using Nutrition Data System for Research software version 2009, developed by the Nutrition Coordinating Center (NCC), University of Minnesota.								

healthier fats. Monounsaturated fats are being studied because they may help lower cholesterol. Polyunsaturated fats are essential to health and must be provided in small amounts in the foods we eat.

Most of the fats present in nuts and seeds are monounsaturated and polyunsaturated. Research has found nuts and seeds to be good for heart health and protective against the damage caused by oxidative stress. Some nuts, however, contain more saturated fats than other nuts and should be consumed in smaller amounts (e.g.

Brazil nuts, macadamia nuts, and cashews). And, yes, calories do count! Limiting intake to one serving per day is advised. Including nuts and seeds as part of a healthy diet may help the body defend itself against the harmful effects of environmental pollutants.

How many nuts and seeds should I eat in a day for health benefits?

According to the Federal Drug Administration (FDA), a serving of 1½ ounces (42 grams) of nuts and seeds per day is considered part of a healthy diet.

This 1½-ounce portion does not refer to a fluid-ounce cup measure but to weight. (If you do not have a food scale that weighs in ounces or grams, 1½ ounces is approximately ⅓ cup.)

The FDA's 1½-ounce daily serving of nuts and seeds applies to almonds, hazelnuts, peanuts, pecans, pine nuts, pistachios, and walnuts. The health claim is not intended to increase the overall amount of food or calories consumed in a day. It is recommended to substitute nuts and seeds for a fat or protein serving in your diet. Brazil nuts, cashews, and maca-

What information is important when selecting and storing nuts and seeds?			
All Nuts	Selection	Storage	Freezer
Almonds	Avoid salted, oil-roasted nuts. Choose raw or plain varieties.	Shelled nuts should be stored in the refrigerator in an airtight container. Store up to 4 months.	Nuts can be frozen up to about 8 months in an airtight container.
Type of Seed	Selection	Storage	
Flaxseed	Flaxseeds need to be ground before eating to get the most nutrients from the seeds. To extend shelf-life, buy whole seeds and grind them at home in a coffee grinder. Consider using a separate coffee grinder for flaxseeds and spices to prevent flavor contamination of your coffee.	Store in an airtight container in the refrigerator. Whole seeds last the longest; grind when needed for adding to baked goods.	
Poppy	Poppy seeds are sold whole and can be ground for added versatility. The seeds are very hard and require a special grinder or mortar and pestle. Roasting enhances flavor. When using for pastries, soak in water for 1 to 3 hours prior to grinding.	Store in an airtight container in the refrigerator.	
Pumpkin	Choose unsalted varieties from the grocery. In autumn, seeds from fresh pumpkins can be roasted at home.	Store in an airtight container in the refrigerator.	
Sesame	Buy from grocery and toast at home for a nutty addition to breads, spinach, noodle dishes, and vegetable stir-fries.	Store in an airtight container in the refrigerator to prevent seeds from becoming rancid.	

damia nuts are not included in this health claim because they contain more saturated fat.

The University of Kentucky is a participant in the Superfund Research Center (SRC), which conducts ongoing research on the effects of pollutants and hazardous chemicals on the environment and on the body. Good nutrition is one of our best defenses for staying healthy, even in the presence of environmental pollutants. For more information, see Inter-Program (IP) publications 76 and 77.

References

- Association, A. D. (2010). Standards of medical care in diabetes 2010. *Diabetes Care*, 33 Supp 1, 1-51.
- Griel, A., & Kris-Etherton, P. (2006). Tree nuts and the lipid profile: a review of clinical studies. *Br J Nutr*, 96 Supp 2, S68-78.
- National Heart Lung and Blood Institute. (2006). Your Guide to Lowering your Blood Pressure with DASH. Retrieved from https://www.nhlbi.nih.gov/files/docs/public/heart/hbp_low.pdf
- Phung, O., Makanji, S., White, C., & Coleman, C. (2009). Almonds have a neutral effect on serum lipid profiles: a meta-analysis of randomized trials. *J Am Diet Assoc*, 109 (5), 865-73.
- U.S. Environmental Protection Agency. (2010). Superfund. Retrieved from <https://www.epa.gov/superfund/what-superfund>
- United States Department of Agriculture. (2010). Choosemyplate.gov. Retrieved from: <https://www.choosemyplate.gov/protein-foods-nutrients-health>
- University of Kentucky Superfund Research Program. (2009). Core D: Community Outreach Core. Retrieved from: <http://www.uky.edu/superfund/about-us>

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