

Nutritional POWER of SUNFLOWER Seeds



VOLUME 1.1

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Good things come in small packages.

Nutrition scientists are realizing that we should pay more attention to our daily intake of complex plant foods like seeds, nuts and whole grains. A move towards whole foods, like sunflower seeds, will add nutrients to your diet in a flash.

Mother Nature has created a nutritional power pack that is hard to beat in sunflower seeds. Healthy unsaturated fats, protein and fiber, plus important nutrients like vitamin E, selenium, copper, zinc, folate, iron and phytochemicals come wrapped up in this small and perhaps unsuspected package – a sunflower seed. Just one ounce of these seeds every day can improve the nutritional quality of your diet.

Sunflower seeds are power packed with healthy fats, protein, fiber, minerals, vitamin E and phytochemicals.



Finding foods that are full of nutrients and fitting them into your daily eating plan isn't always easy. While most of us get enough calories everyday (and sometimes too many), many of us fall short on important nutrients. Calorie for calorie, nutrient-dense foods like sunflower seeds will give you more bang for the buck when it comes to nutrition. (See our ounce-by-ounce nutrient report card in this issue.)

New nutrient data shows that sunflower seeds also contain a good amount of beneficial plant chemicals, or phytochemicals, thought to be advantageous to health.

Let the Sun Shine In!

Sunflower seeds and oil contain both **monounsaturated** and **polyunsaturated** fat – the types of fat that may protect the heart. Clinical studies show that higher unsaturated fat diets may be preferable even to low-fat diets because they lower total cholesterol, low density lipoprotein (LDL) or bad cholesterol, and triglycerides, while maintaining beneficial high density lipoprotein (HDL) cholesterol, which is needed to carry the “bad” cholesterol away.⁽¹⁻²⁾

- Almost **90%** of the fat in sunflower seeds is good, unsaturated fat.

Protein supplies amino acids, the building blocks that build, maintain and repair body tissues.

- Sunflower seeds are a good source of plant protein, providing 6 grams or **12% of the Daily Value** per ounce.

Vitamin E is an antioxidant that may protect against heart disease by getting rid of harmful molecules called free radicals that can lead to atherosclerosis. **Sunflower seeds are the best whole food source of vitamin E.**⁽³⁾

- Sunflower seeds are an excellent source of vitamin E. Just one ounce of sunflower seeds provides **76% of the Recommended Dietary Allowance** for vitamin E.⁽⁴⁾

Selenium works with vitamin E as an antioxidant and protects cells from damage that may lead to cancer, heart disease, and other health problems. Although there is no Daily Value for selenium, nutrition scientists recognize its importance to health and a Recommended Dietary Allowance (RDA) has been established.

- The selenium in one ounce of sunflower seeds provides about **24% of the RDA for men and 31% of the RDA for women.**

Copper helps your body carry oxygen to red blood cells and produce energy in the cells. Copper is also a vital part of some antioxidant enzymes in the body, thus protecting you from oxidative stress. While a copper deficiency is rare, this trace mineral is essential to an energy-rich life.

- You'll find about **25% of the Daily Value** for copper in one ounce of sunflower seeds.

Folate, a B vitamin, plays an essential role in making new body cells by helping to form the DNA and RNA that contain each cell's “master plan” for reproduction. This is why folate is so important for pregnant women and the development of babies. Folate also pairs with vitamin B-12 to help form hemoglobin in red blood cells, which allows them to carry optimal amounts of oxygen.

Folate is involved in the removal of homocysteine, an amino acid thought to promote heart disease, from the blood. A large population study from Harvard University shows an association between higher intakes of folate and lower risk of heart disease.⁽⁵⁾

- Sunflower seeds are a good source of folate, supplying **17% of the Daily Value** in a one-ounce serving.

Other **B vitamins** are essential for producing energy from food.

- A one-ounce serving of sunflower seeds contains **20% of the Daily Value** for pantothenic acid, **11%** for vitamin B6, **6%** for thiamin and **6%** for niacin.

Brighten the Nutritional Quality of Your Diet with a Daily Dose of Sunflower Seeds...

Zinc is a mineral that is vital for keeping your immune system strong, fending off infections and healing wounds.

- A one-ounce serving of sunflower seeds is a good source of zinc, providing **10% of the Daily Value**.

Iron is essential in carrying oxygen from your lungs, through your blood, and to every body cell. Iron deficiency, which can lead to anemia, fatigue and infection, is more common among women who experience regular menstrual loss.

- One ounce of sunflower seeds is a good source of iron, providing **10% of the Daily Value**.

Fiber – the indigestible part of plant foods – promotes good health by helping to lower blood cholesterol, manage blood glucose and prevent constipation. While the American Cancer Society recommends consuming 20 to

35 grams daily, most Americans fall short on fiber, averaging only 11 grams per day.

- Sunflower seeds are fiber-filled foods with **2 grams of fiber** per one-ounce serving, putting you well on your way to your daily fiber goal.

Phytochemicals, or beneficial plant chemicals, may inhibit cancer growth, protect against heart disease, and offer protection from colon, prostate and breast cancer. Research from Virginia Polytechnic Institute and State University suggests that sunflower seeds are high in many phytochemicals like choline, lignan, phenolic acids, and betaine, as well as the amino acid arginine.⁽⁶⁾

Currently there is no set Daily Value for phytochemicals, but nutrition scientists recommend eating more whole foods, like sunflower seeds, that are abundant in these beneficial plant chemicals.

Glossary of Terms:

DVs (Daily Values): A dietary reference term developed by the Food and Drug Administration (FDA) that appears on all food labels. It is made up of two sets of references, DRVs and RDIs.

DRVs (Daily Reference Values): A set of dietary references that applies to fat, saturated fat, cholesterol, carbohydrate, protein, fiber, sodium, and potassium.

RDIs (Reference Daily Intakes): A set of dietary references based on the Recommended Dietary Allowances for essential vitamins and minerals, and protein.

RDAs (Recommended Dietary Allowances): A set of estimated nutrient allowances established by the Food and Nutrition Board of the National Academy of Sciences. It provides as specific nutrient advice as possible based on age and sex for different vitamins and minerals and is updated periodically to reflect current scientific knowledge.

References:

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3. USDA Nutrient Database for Standard Reference, Release 14: Vitamin E Content of Selected Foods per Common Measure, sorted by nutrient content. <http://www.nal.usda.gov/fnic/foodcomp/Data/SR14/wtrank/sr14w394.pdf>
4. Dietary Reference Intakes (DRIs) for vitamins C and E, selenium and carotenoids. <http://www4.nationalacademies.org/IOM/iomhome.nsf/18ace18eb695f74c85256691007102f5/edccae87e479d741852568bd00781695?OpenDocument>
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6. Holliday, R, and Phillips, K. Health Benefits of the Sunflower Kernel. *Cereal Foods World*. 2001;46(5):205-8.
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Tips for Everyday Living

For big nutrition, use a small amount of sunflower seeds throughout the day:

Combine sunflower seeds, golden raisins, peanuts, and granola or crunchy cereal for a tasty trail mix.

Sprinkle sunflower seeds on your salad for extra nutrition and crunch.

Snack on a handful of sunflower seeds as an afternoon snack.

Add some sunflower seeds to your hot or cold cereal.

Mix sunflower seeds into your favorite stir-fry or vegetable dish.

Use sunflower seeds in baking breads, snacks, and desserts – visit www.sunflowernsa.com for recipes!

Nutrient Report Card for *Sunflower Seeds* (oil-roasted with added salt)



Nutrient	% Daily Value in One-ounce Serving
Vitamin E (RDA)	76**
Copper	25**
Pantothenic Acid	20**
Folate	17*
Protein	12*
Vitamin B6	11*
Iron	10*
Zinc	10*
Fiber	8
Sodium	7

According to the Food and Drug Administration,⁽⁷⁾ **20% or more** of the Daily Value for a nutrient in one serving of a food is considered an **EXCELLENT**** source, and 10-19% of the Daily Value is considered a **GOOD*** source.

“A Salad’s Sunny Superstar”

Nutrients per 0.5-ounce serving	sunflower seeds	croutons	grated cheese
Calories	87	66	62
Protein (grams)	3	1.5	5.5
Vitamin E (milligrams ATE)	5.7	0.3	N/A
Folate (micrograms)	33.2	12.5	1.2
Copper (milligrams)	0.25	0.13	0
Zinc (milligrams)	0.74	0.02	0.08
Iron (milligrams)	1.0	0.4	0.1
Selenium (micrograms)	11.1	4.1	3.6
Fiber (grams)	1.0	0.7	0
Sodium (milligrams)	86	176	254

Ref: USDA Nutrient Database for Standard Reference, Release 14.

The sodium here comes from added salt in oil-roasted, salted sunflower seeds. If you are limiting your sodium intake, opt for unsalted sunflower seeds, which are naturally very low in sodium (0.9 milligrams per ounce).

For more information on sunflower seeds or NuSun™ oil, contact:



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