Nutritional Power of SUNFLOWER Seeds
VOLUME 4.1

Sunflower Seeds Reduce Risk of Heart Disease

Sunflower seeds are an excellent source of heart-healthy unsaturated fats.

With all the recent news about low-fat diets not reducing the risk of heart disease, let's make sure we don't let the good fats get lost in the shuffle.

It's true that an important study recently found that American women are having difficulty reducing the risk of heart disease with low-fat diets. But it's also still true that U.S. Dietary Guidelines recommend keeping "total fat intake between 20-35 percent of calories, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids", the "good" fats (1).

Unfortunately, most Americans – even those who try to keep to low-fat diets – are still eating too much saturated fat and partially hydrogenated, or trans fat. Such types of fats are not heart-healthy. Specifically, experts recommend that less than 10 percent of calories in the diet should come from saturated fat, and that trans fat intake should be kept as low as possible.

In fact, a landmark Nurses' Health Study at the Harvard School of Public Health (HSPH) showed that for every 5 percent increase in saturated fat, coronary heart disease (CHD) risk is increased by 17 percent (2). Researchers at HSPH also estimated that approximately 30,000 premature CHD deaths every year could be attributable to consumption of trans fatty acids (3). Together, both saturated and trans fats raise total and "bad" LDL cholesterol, and trans fats also decrease "good" HDL cholesterol.

Fat in Foods

Unfortunately, lots of food products contain saturated and/or trans fats. Snack foods, prepared foods, and fried foods contribute significant amounts of these "bad" fats to the American diet. It is important to recognize, however, that all fats in foods are not created equally, and that it is possible to make healthier choices.

There are healthy fats in foods too, which, when consumed, can improve CHD risk. As mentioned in the U.S. Dietary Guidelines, the "good" fats are polyunsaturated and monounsaturated fats. Contrary to the saturated fat intake data, the Nurses' Health Study at HSPH showed that every 5 percent increase in monounsaturated fat decreased CHD risk by 24 percent (2). HSPH estimated that replacing 2 percent of energy from trans fats with energy from poly- and monounsaturated fats would reduce the risk of CHD by 53 percent (4).

These changes are obtainable goals. Altering your diet to include more healthy fats and fewer "bad" fats can have significant impact on disease risk. Healthy unsaturated fats are also important because they supply essential fatty acids required by the body for numerous biological functions. Foods such as fish, nuts, and vegetable oils are great sources of healthy fats. Sunflower seeds are also an excellent source of heart-healthy unsaturated fats. In fact, almost 90% of the fat in sunflower seeds is the kind that can actually reduce the risk of heart disease. The U.S. Department of Agriculture (USDA) offers a food guidance system — called "MyPyramid Plan" — to help people make wise food choices. In this plan, the USDA encourages choosing seeds, such as sunflower seeds because they can boost the intake of healthy poly- and monounsaturated fats.

Sunflower Seeds Help Us Meet the RDA for Nutrients

Sunflower seeds are not only recommended for their low saturated, zero trans, and high poly- and monounsaturated fat content. The USDA MyPyramid Plan recognizes them as a nutrient-packed food that provides nutrients vital for health and maintenance of the body. Sunflower seeds provide protein, fiber, vitamins, minerals, and phytochemicals. The following table shows how just one ounce of sunflower seeds is an excellent source of the following

nutrients, providing 5% or more of the U.S. Percent Daily Value:

Nutrient	Function	Per Oz.	% Daily Value**
Protein	Supplies amino acids for building, maintaining and repairing body tissues	6 g	12%
Fiber	Indigestible part of plant foods; helps lower blood gcholesterol, manage blood glucose, prevent constipation	3 g	12%
Vitamin E	Antioxidant	11.3 mg	84%
Selenium	Antioxidant; works with vitamin E	22 mg	31%
Copper	Carries oxygen to red blood cells; part of some antioxiddant enzymes in body	0.5 mg	25%
Folate	B vitamin, forms NDA and RNA for new cells; pairs with vitamin B12 to help form hemoglobin in red blood cells; involved in removal of homocysteine, an amino acid thought to promote heart disease	66 ug	17%
Phosphorus	Required by every cell of the body; structural component of bone and cell membranes, involved in energy production and storage	323 mg	32%
Magnesium	Needed for more than 300 biochemical reactions; helps maintain muscle and nerve function; keeps heart rhythm steady; supports a healthy immune system; keeps bones strong; helps regulate blood sugar levels; promotes normal blood pressure; involved in energy metabolism and protein synthesis	36 mg	9%
Iron	Carries oxygen in blood	1.2 mg	6.4%
B Vitamins: 1) thiamin 2) riboflavin 3 niacin 4) pantothenic acid 5) B6	Produce energy from food; function in nervous systems; aid in formation of red blood cells; help build tissues	 1) 0.091 mg 2) 0.079 mg 3) 1.171 mg 4) 1.968 mg 5) 0.225 mg	 1) 6% 2) 5% 3) 6% 4) 20% 5) 11%
Zinc	Keeps immune system strong; heals wounds	1.5 mg	10%
Phytochemicals	Plant chemicals protective against disease	n/a	n/a

** Oil-roasted, salted sunflower seeds, USDA Nutrient Dataase for Standard Reference (5)*

*** Daily Values Based on 1989 RDAs*

According to the U.S. Dietary Guidelines, there are several nutrients that the American diet lacks. Sunflower seeds contain many of these hard-to-get nutrients. USDA states sunflower seeds are among "the richest source of vitamin E" and recommends making them a seed choice more often. Data from the Iowa Woman's Health Study showed that vitamin E-rich foods are associated with a lower risk of death from stroke, but that supplemental vitamin E was not (6).

Selenium and copper work with other antioxidants to protect cells from damage that may cause heart disease. Sunflower seeds contain 31% and 25% of the Daily Value for these nutrients, respectively. Magnesium is a hard-to-get nutrient found in sunflower seeds that may reduce the risk for developing type II diabetes (7) and heart disease (8).

With the increasing epidemic of obesity in the United States, type II diabetes and heart disease are increasing. Small changes in diet, such as incorporating sunflower seeds in a healthful way, can impact both fat and nutrient composition in the diet positively.

Sunflower seeds are an excellent snack and ingredient. The plant protein and fiber in a small amount of sunflower seeds can contribute to a healthy diet and may also contribute to weight loss. Protein and fiber have been shown to help with satiety, increasing satisfaction, thereby promoting weight loss (9).

Creative Ways to Include Nutrient-Packed Sunflower Seeds in the Diet

Since sunflower seeds are so rich in nutrients, it only takes a small portion to add the healthful benefits to your diet. Some simple ways to incorporate wholesome and healthful sunflower seeds into your diet are shown here:

Incorporating Sunflower Seeds:	Nutrition Gained With 1 Added Ounce:
• Add sunflower seeds to muffin, bread recipes, or desserts • Include sunflower seeds in trail mix with dried fruit and whole grain cereal • Sprinkle sunflower seeds and berries on low-fat yogurt • Coat fish or chicken with crushed sunflower seeds • Add sunflower seeds to a stir fry or vegetable dish • Sprinkle sunflower seeds into stuffing • Replace croutons in salads with 1/2 ounce of sunflower seeds • Eat a handful!	84% vitamin E! 32% phosphorus 31% selenium 25% copper 20% pantothenic acid 17% folate 12% protein 12% fiber 11% vitamin B6 10% zinc 9% magnesium 6.4% iron 6% thiamin 6% niacin 5% riboflavin

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