

## The Growing Role of Nuts and Seeds in Human Health

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### Article Info

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**Received:** December 01, 2021

**Accepted:** December 13, 2021

**Published:** December 17, 2021

**Citation:** Pal M, Molnar J. The Growing Role of Nuts and Seeds in Human Health. *Madridge J Food Technol.* 2021; 6(1): 187-188. doi: 10.18689/mjft-1000128

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Published by Madridge Publishers

### Abstract

Nutritionally good diet is imperative to maintain good health. Nuts and seeds have been recognized to reduce the development of many diseases, such as tumors, high cholesterol, type II diabetes, dementia in old age, fetal malformations) due to their content of vitamins (vitamins E and B), minerals (potassium, calcium, iron, zinc, selenium, magnesium, phosphorus), omega-3 fatty acids, protein, and fiber. Therefore, they can be well integrated into healthy eating and many nutritional trends like the Mediterranean diet, and can also be used for cooking. Due to these reasons, our manuscript focuses on the properties of almond, walnuts, cashew nuts, pumpkin seeds, flax seeds, and sunflower seeds.

**Keywords:** Almonds; Walnuts; Cashew nuts; Flax seeds; Healthy eating; Nuts; Pumpkin seeds; Seed; Sunflower seeds; Walnuts.

### Introduction

Nowadays, a healthy nutrition plays a significant role in healthy lifestyle, for which a number of recommendations have been made by earlier workers [1]. These recommendations also mention the consumption of seeds and nuts, which contribute to the maintenance of health with their useful content values [2]. These contents include fiber, antioxidants, proteins, omega-3 fatty acids, vitamins and minerals. Due to their useful active ingredients, they reduce the chances of developing many diseases like cardiovascular diseases, dementia in old age, gastrointestinal diseases or osteoporosis [3]. Furthermore, their consumption can be well integrated into special diets, such as the Mediterranean diet [4].

Among the nuts, almonds, hazelnuts, walnuts, pecans, pine nuts, cashew nuts are well known. Outstanding seeds include pumpkin seeds, flax seeds, sesame seeds, sunflower seeds, and chia seeds. Among these seeds and nuts, our manuscript summarizes the most important properties of almonds, walnuts, cashew nuts, pumpkin seeds, flax seeds, and sunflower seeds.

### Key characteristics and health effects of almonds, walnuts, cashew nuts, pumpkin seeds, flax seeds and sunflower seeds

**Almonds:** Fiber, amino acids, zinc, magnesium, potassium, phosphorus, iron, copper, selenium, as well as vitamins (vitamins E and B) and omega-3 fatty acids play a significant role in the prevention of cardiovascular disease, among others. Furthermore, these beneficial components also contribute to the fetal development or the prevention of dementia in old age [5].

**Walnuts:** Walnuts are also high in useful fatty acids, vitamins E and B, as well as manganese, zinc, magnesium, calcium, potassium and selenium. Thanks to its useful content, it has a good effect on the cardiovascular system and brain function, among other things [6]. Very recently, the nutritional and health benefits of consumption of walnut is described by [7].

**Cashew nuts:** Cashew nuts are an excellent source of vitamin K, magnesium, phosphorus and iron. Its protein content is also outstanding and it also contains antioxidant active ingredients. Cashew nuts play a role in protecting the immune system. In addition, it reduces the risk of developing tumours among others [8].

**Pumpkin seeds:** Pumpkin seeds are also high in vitamins B, E, K and C, as well as zinc, manganese, magnesium and iron. It also supports the immune system due to its phytosterol content, contributes to the prevention of high cholesterol, and prostate health [9].

**Flax seeds:** Flax seeds play a prominent role in the digestion. It contains significant amounts of  $\alpha$ -linolenic acid, fiber, manganese, magnesium, phosphorus, zinc and selenium. Flax seeds can contribute to a successful diet. In addition, it improves the cholesterol levels and also protects the cardiovascular system [10].

**Sunflower seeds:** Sunflower seeds are important in vitamin E, iron, selenium, zinc, copper and calcium, among others. It has a prominent role in the prevention of cardiovascular disease. It also helps in digestion due to its fiber content [11].

## Conclusion

The seeds and nuts can be useful parts of a healthy daily diet or various nutritional trends. Outstanding among these is the Mediterranean diet. Almonds, walnuts, cashew nuts, pumpkin seeds, flax seeds and sunflower seeds possess several properties that contribute to the prevention of many diseases, such as cardiovascular, gastrointestinal or nervous system diseases. As a result, they play a significant role in preventing high cholesterol, cancer or dementia in old age, among other things. Consumption of nuts and seeds as an ingredient in dishes is also recommended. We hope that our paper will certainly contribute to a healthier lifestyle.

## Acknowledgements

The authors are very grateful to Prof. Dr. R.K.Narayan for his suggestions during the preparation of manuscript and Anubha Priyabandhu for computer help.

## Conflict of interest

The authors declare that they have no conflict of interest.

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