



# Nutritive value of Pulses, Seeds and Nuts

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Pulses, seeds and nuts are all valuable sources of protein as well as being low in saturated fat, sodium and also cholesterol free. They are also good sources of fibre, complex carbohydrates, vitamins and minerals including thiamine (B1) riboflavin (B2), niacin (B3), folate, calcium, potassium, iron and phosphorus.

The term “pulses” includes a range of grams and peas. They are important foods and have the advantage over animal proteins of being both inexpensive and versatile in how they are cooked, as well as being packed with nutrients. Due to their high soluble-fibre content, legumes are believed to help reduce blood cholesterol. They also have a very low glycemic index, which means they are absorbed relatively slowly into the blood stream and do not cause sudden increases in glucose blood levels. This makes this group of foods particularly beneficial for anyone who has diabetes and those at risk of developing this disease, such as people who are over weight or have a family history of diabetes.

Seeds are the embryo and food supply of new plants, whereas nuts are dried tree fruits, which are contained within hard shells. Both seeds and nuts contain 10-25 percent protein and they are high in mono and polyunsaturated fat. They are good sources of fibre, vitamins; thiamine (B1), riboflavin (B2) and E and the minerals; calcium, phosphorus, potassium and iron.

Research shows that people who regularly eat nuts have a decreased risk of developing cardiovascular disease and diabetes. There are a number of possible explanations, in addition to the known benefits of unsaturated fat on cholesterol levels. For example, nuts are rich in arginine, an amino acid that boosts nitric oxide. This compound relaxes the blood vessels and eases blood flow as well as making blood less likely to form clots.

## Seeds

### Flax seeds

Flax seeds come in two basic varieties - brown and yellow or golden (also known as golden linseeds). Most types have similar nutritional characteristics and equal numbers of short-chain omega-3 fatty acids. The exception is a type of yellow flax called solin (trade name Linola), which has a completely different oil profile and is very low in omega-3 Fatty Acids.

Although brown flax can be consumed as readily as yellow, and has been for thousands of years, it is better known as an ingredient in paints, fiber and cattle feed. Flax seeds produce a vegetable oil known as flaxseed or linseed oil, which is one of the oldest commercial oils. Solvent-processed flax seed oil has been used for centuries as a drying oil in painting and varnishing.

One hundred grams of ground flax seed supplies about 450 calories, 41 grams of fat, 28 grams of fiber, and 20 grams of protein.

## Pulses

### Horse Gram

Horse gram is rich in dietary iron and calcium. It is also one of the richest vegetarian sources of protein. However, the calcium and iron are combined into certain chemical compounds, rendering them un-absorbable by the body. Germination of the horsegram is a simple method of food processing that increases the availability of iron and calcium, resulting in increased nutritive value. Sprouted horsegram is also digested much more easily. Horsegram is frequently consumed during winters and cold weather in India and is used to tide over coughs and colds because it tends to increase the level of heat in the body. However, when the sun is up, if the horsegram is heating the body up, it must be balanced by eating sprouted green gram.

100gms of horse gram supplies 321 calories, 22gms of protein, 287mg of Calcium, 311 mg of Phosphorus and 7mg of Iron.

## Related Resources

1. [Pulses And Legumes As Functional Foods](#) 
2. [Nutritional benefit of pulses](#) 
3. [Nutrition and Health](#) 

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**Source:** <https://data.vikaspedia.in/short/lc?k=34uLv5p-wbRxpABh072EjA>

