

GRAIN LEGUME

FABACEAE PLANT FAMILY

A legume is plant/fruit In the Fabaceae family. It is a dry fruit that develops from a simple carpel (seed producing reproductive organ in flowering plants) and dehiscence (splitting of plant structure along seam to release contents) on two sides. Also known as a pod.

Snow Pea
Species: *Pisum sativum*
Genus: *Pisum*



Grain Legumes such as peas, beans, lentils, or peanuts, otherwise known by their seeds are called pulses, and are used for human and animal consumption. They are also used to help the production of oils for industrial uses.

Green Bean
Species: *Phaseolus Vulgaris*
Genus: *Phaseolus*



NUTRITION

Legumes provide fiber, vitamins, minerals, and high in protein. Most often, they are considered to be the best source of protein. They are very common among vegetarians and considered to be an excellent alternative to meat. Many vegetarian practices prefer to serve legumes along with grains to balance out the amino acid levels provided by the legume plants.

Lentil
Species: *Lens culinaris*
Genus: *Lens*



Many legumes contain a bacterium called Rhizobia in its root nodules of their root system that have a nitrogen fixation system creating rich plant proteins. These proteins contain nitrogenous amino acids that release back into the soil as the legume plant dies. The soil converts the amino acids into nitrate (NO₃) serving as fertilizer for future plants. Crop rotation involving legumes is an important farming practice for organic plants, thus allowing the field to receive sufficient amounts of nitrogenous compounds for the surrounding crops.

Peanut
Species: *Arachis hypogaea*
Genus: *Arachis*



SEEDS

The seed is the most important part of the legume plant/fruit that we eat. It stores carbohydrates that produce a large amount of energy for us, which can be used as fuel for the human metabolism.

Snap Peas Provide vitamin K, B, and C.



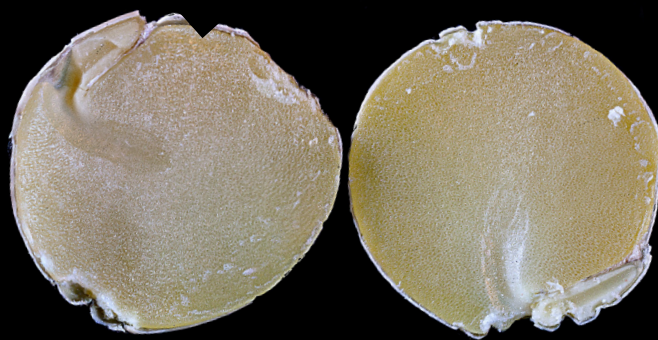
Snow Peas provide vitamins A and C, iron and potassium



Green Bean provide vitamin A and C, starch and protein



Lentils provide fiber, folate, vitamin B₁, and minerals and have the third-highest level of protein by weight



Peanuts provide niacin, folate, fiber, magnesium, vitamin E, manganese and phosphorus



EQUIPMENT USED

All of these common grain legumes were purchased at a local Wegmans, photographed with a 35mm Canon 5D Mark II camera body, a 65mm lens and a 24-70mm lens, with two Canon 580EX external flashes.

Sources:

<http://www.sugarsnapvt.com/>
<http://waynesword.palomar.edu/ecoph33.htm>
<http://www.mayoclinic.com/health/legumes/NU00260>
<http://whole9life.com/2012/09/the-legume-manifesto/>
<http://aggie-horticulture.tamu.edu/archives/parsons/vegetables/snowpeas.html>
<http://en.wikipedia.org/>