



“Peanuts Are What Now?” That’s the Truth Episode # 5 Backgrounder

Science Myth: Peanuts are nuts (Nope! Legumes)

CURRICULUM CONNECTIONS

Kindergarten: Environment and Community Awareness

Grade 1 Science Topic E: Needs of Plants and Animals

Grade 4 Science Topic E: Plant Growth and Changes

Grade 6 Science Topic E: Trees and Forests

Quick Facts

- While they sport the "nut" name, peanuts are actually a legume, making them a member of the family of plant-based items that includes lentils, beans and soybeans.
- True to the legume family, a peanut is composed of an edible seed that grows inside a pod.
- Another difference lies in where the nuts grow. You won't find a peanut growing on a tree, as you would with almonds or cashews.
- Botanically speaking, most of the “nuts” we eat are actually fruit seeds (most culinary nuts are not botanical nuts).
- Culinary nuts that are botanically fruit seeds include the almond, which is related to the apricot, and the peanut, which is part of the legume or bean family

- Culinarily a wide array of dried seeds are called “nuts.” Most culinary nuts can be described as “an edible fruit composed of a hard shell and a seed.” Botanically for a “nut” to be a “true nut.” the shell must not open to release the seed; the shell must be indehiscent.
- Besides being rich in protein, nuts offer a host of other nutrients, such as folate, phosphorus, magnesium, copper, zinc, and selenium. Another bonus -- nuts are so dense with nutrients that they quell hunger pangs with fewer calories compared with other snack foods that often provide calories with minimal nutrition.

Discussion Questions

- Are peanuts nuts?
- What is a legume?
- How/where do peanuts and other legumes grow?
- Is an almond a nut? Cashew? Coconut?

Source Articles & Links

Why Aren't Peanuts Classified as Nuts?

If a tasty bag of [peanuts](#) is one of your favorite go-to items for a [healthier snack](#), take note: That's actually not a nut you're munching on. While they sport the "nut" name, **peanuts are actually a legume, making them a member of the family of plant-based items that includes lentils, beans and soybeans.**

True to the legume family, **a peanut is composed of an edible seed that grows inside a pod.** One reason you may not readily associate peanuts with those more familiar legumes is that you don't eat the peanut's dry and brittle pod, like you do with many legumes -- the green bean, for instance.

Another difference lies in where the nuts grow. You won't find a peanut growing on a tree, as you would with almonds or cashews. Called forage legumes, peanut pods grow under the soil, originating from a bush-like, creeping plant. When they're ripe and ready to harvest, they're

pulled up, similar to a carrot or potato. Perhaps the nickname "ground nut" is a more descriptive title for this tasty legume [source: [Asef](#)].

Because peanuts grow underground, they can become contaminated with a strain of mold called aflatoxin, which can cause illness. In the United States, the Department of Agriculture carefully monitors peanut production and halts the process for any peanuts with unsafe levels of aflatoxin [source: [Grunert](#)].

Already familiar to those who follow a vegetarian diet, items in the legume family provide a good source of concentrated, nonanimal protein. Peanuts contain more protein than most true nuts, packing in 7.3 grams per ounce. They're also rich in a wide array of nutrients, including folate, vitamins E and B6, zinc, calcium, iron and more [source: [The Peanut Institute](#)].

Regardless of what they're called or where they grow, peanuts have become an American staple. According to [The Peanut Institute](#), peanuts and peanut butter compose 67 percent of all U.S. nut consumption. The peanut's versatility helps explain this overwhelming popularity -- it can be roasted and eaten as a snack, pureed into peanut butter, tossed into stir-fries or added to baked goods.

So next time you're munching on some peanuts and want to share knowledge about your favorite legume ... hey, go nuts.

<https://recipes.howstuffworks.com/peanuts-not-classified-as-nuts.htm>

Are “Nuts” Actually Nuts?

Botanically speaking, most of the “nuts” we eat are actually fruit seeds (most culinary nuts are not botanical nuts).

True botanical nuts include the acorn, chestnut, and hazelnut. All other common “nuts” are drupe, gymnosperm, or angiosperm seeds (fruit seeds). Culinary nuts that are botanically fruit seeds include the almond, which is related to the apricot, and the peanut, which is part of the legume or bean family.[1][2]

FACT: If it makes you feel better, botanically: [all fruits come from flowers](#), [a banana is a berry](#), and [a tomato is a fruit](#).

What Makes a Nut a Nut?

Culinarily a wide array of dried seeds are called “nuts.” Most culinary nuts can be described as **“an edible fruit composed of a hard shell and a seed.” Botanically for a “nut” to be a “true nut.” the shell must not open to release the seed; the shell must be indehiscent.**

The dictionary version of Nut: “a fruit consisting of a hard or tough shell around an edible kernel.” [1]

Difference Between Botanical Nuts and Culinary Nuts?

- **Botanical Nut:** Botanically a nut is a fruit. The fleshy part of the fruit, it’s seed, the shell of the seed, and everything that isn’t woody or green is [“fruit”](#) (including most of what we call beans and nuts in the kitchen).
- **Culinary Nut:** Any nut or fruit seed used as a nut in the kitchen.

FACT: Of all the common nuts only acorn, chestnut, kola, and hazelnut are botanically nuts, the rest are seeds surrounded by fruit. Despite this, they are all “culinary nuts.” In other words: If you are in the kitchen, it’s a nut; if you are in the lab, it’s either a true nut or a type of seed. It is almost always a fruit seed. Pine nuts, for example, don’t have “a carpel” or a fleshy fruit component.

The Types of Nuts (Types of Culinary Nuts)

Below we cover each type of nut and discuss its botanical order.

Culinary Nuts are Divided into Four Categories:

- **True, or botanical nuts** are dry, hard-shelled, uncompartmented fruit that does not split on maturity to release seeds. Including the **acorn, chestnut, and hazelnut**. True nuts are the ones we think of squirrels as eating. The **Kola** nut is a true nut, which provides the “cola” flavor for popular soft drinks.
- **Drupes Seeds** are fleshy fruit surrounding the stone or pit, which contains a seed; these are sometimes used as culinary nuts. Drupes include coffee, mango, olive, most palms (including date, **coconut** and oil palms), **pistachio**, and all members of the genus Prunus, including the **almond**, prune, apricot, cherry, damson, nectarine, peach, and plum. These nuts are the enclosed seed of fruit. They include coffee, apricots, and almonds.
- **Gymnosperm Seeds** are naked seeds, with no enclosure. Including **pine** nuts and ginkgo nuts. These nuts grow on trees and are seeds.

- **Angiosperm Seeds** are unenclosed seeds within a larger fruit. These include the **peanut**, soybean, **macadamia**, and **Brazil nut**. Seeds in this family are often related to beans. Soybeans and peanuts are legumes belonging to the bean or pea family.

Common Culinary Nuts and their Properties:

- **Almond:** The almond is the seed of a fruit that grows on a tree from the genus Prunus. It's related to the prune and apricot.
- **Cashew:** The cashew is the seed of an accessory fruit, which makes it a relative of the strawberry and in the same family as poison ivy (Anacardiaceae).
- **Chestnut:** A Chestnut is a nut. Sweet chestnuts, unlike most nuts, are high in starch and sugar but not fat. Perhaps this is why they work well roasted on an open fire.
- **Coconut:** Coconuts are not botanical nuts, but they are culinary nuts. The fleshy edible part is inside the shell.
- **Hazelnut:** A hazelnut seed that grows into a large shrub. With some culinary magic, it turns into Nutella.
- **Macadamia:** These are angiosperm seeds, high in omega three, but toxic to dogs.
- **Peanut:** The peanut is a legume from the bean family. Its fruit grows underground where it produces a natural fertilizer for the plant. Yes, that right, beans are fruit; the musical fruit song wasn't lying.
- **Pecan:** A Pecan is a type of drupe seed from a hickory tree. It is the only major nut tree native to North America.
- **Pine nut:** A Pine nut is a type of gymnosperm seed that grows on a pine tree and isn't surrounded by fruit.
- **Pistachio:** Another drupe seed is the Pistachio. It's notable for being part of the Anacardiaceae family, which includes poison ivy, sumac, mango, and cashew.
- **Walnut:** A walnut is the nut of any tree of the genus Juglans. There are many types of Walnuts. Like other tree nuts, they spoil quickly.
- **Acorn:** The tree nut that squirrels eat is a true nut. Squirrels likely appreciate the fact they don't have to dig through layers of fleshy fruit to get to it.
- **Beechnut:** They grow on beeches, which are a large family of trees. Squirrels love this nut. It is seldom used as a food source except by indigenous people.
- **Kola nut:** That is where "kola," the soft drink flavor, comes from. Coffee, chocolate, and kola all grow as fruit seeds.

Conclusion:

You know what is nuts? Fruit seeds! Well culinarily at least. To be considered a nut botanically typically means there is no outside fleshy ovary fruit and the shell doesn't open to release the seed.

<http://factmyth.com/factoids/most-of-the-nuts-we-eat-arent-actually-nuts/>