Fruit or Vegetable? It’s Complicated

By Kathy Wolfe
February 7, 2020

Good for our health

One would think that the distinction between a fruit and a vegetable would be pretty straightforward. However, there are three primary classifications that can be used to determine into which category the plant falls:

Culinary/Traditional: The method in which a plant is prepared and its traditional use determines classification as a vegetable or a fruit. Extension.org describes a vegetable as “any herbaceous (non-woody) plant or plant part that is eaten with the main course rather than as a dessert.” Traditionally, fruits are classified as being sweet or tart and vegetables as having a savory taste. Included in this vegetable category with squash, avocados and tomatoes are plants with stems, roots, flowers, bulbs and seeds such as lettuce, garlic, cauliflower, peas and pumpkins.

Legal: Tax status historically determined the legal description of fruits or vegetables. The case of Nix v. Hedden was brought before the Supreme Court in 1893 to determine the status of a tomato. At that time import duties were imposed on vegetables but not fruits. Even though botanically a tomato is a fruit, the court unanimously classified it as a vegetable. Rhubarb has also been subject to legal scrutiny and has been classified as a fruit due to its culinary use in desserts.

Biological: Biologists who study plant life (botanists) focus on the molecular and structural aspects of plants to determine their status. Botanically, a fruit is an ovary of a flowering plant that develops after its seeds are fertilized (or sometimes even without fertilization). This definition would not only include cantaloupe, peaches and watermelons but also olives, avocados, peppers, cucumbers and tomatoes. You might think broccoli or cauliflower would fall under this category, but they are technically unopened flower buds which have not developed so are classified as vegetables.

The botanical definition of a vegetable is anything that is the root, stem or leaf of a plant. Rhubarb, which some call a fruit because it is used like one, is technically a vegetable, but corn (often classified as a grain), zucchini and spring beans are fruits.

To confound us further is the berry, a subcategory of the fruit family. Berries are defined as fruits that come from a single ovary but have multiple seeds. Grapes, bananas and Capiscums (peppers) are all different types of berries. And strawberries? They are not a fruit at all but belong to a special plant structure known as fleshy receptacles. Doesn’t that sound delicious spread over your morning toast? The only fruit part of a strawberry is its seeds.
“What about nuts?” you ask. “Are they seeds, legumes or fruits?” In the culinary world, we could say all three. Botanically, however, a true nut is a hard-shelled pod growing on a tree that contains both fruit and seed of the plant where the fruit does not open to release the seed. True nuts include hazelnuts, chestnuts and acorns. Although we often consider a peanut to be in the nut family, it grows underground in pods so is classified as a legume along with peas, lentils and beans. Even almonds, pistachios and cashews are considered drupes, not nuts. A drupe is a type of fruit in which the outer fleshy part surrounds a shell (sometimes called a pit) with a seed inside. Peaches, plums and cherries are drupes whose outside fleshy parts are eaten. In almonds, pistachios and cashews, the seed inside the pit is what is consumed. Are you going nuts yet?

Despite the confusion in classification, we know these foods are good for our health. Nutritionists tell us that fruits are higher in sugar and calories than vegetables, but both fruits and vegetables are rich in fiber, vitamins, minerals, antioxidants and plant compounds. Current guidelines recommend at least five servings of fruits and vegetables daily, preferably three cups of vegetables and two cups of fruit.

Regardless of what you choose to call them, enjoy a large variety of these savory and sweet delights in your daily diet to promote good health and add enjoyment to your eating experience.
RESOURCES:


- “What’s the Difference Between Fruits and Vegetables”, Rachel Link, MS, RD, Healthline blog, April 5, 2017. [https://www.healthline.com/nutrition/fruits-vs-vegetables](https://www.healthline.com/nutrition/fruits-vs-vegetables)


- What’s the Difference Between a Fruit and a Vegetable?”, Laurie L. Dove, How Stuff Works blog [https://recipes.howstuffworks.com/difference-between-fruit-and-vegetable.htm](https://recipes.howstuffworks.com/difference-between-fruit-and-vegetable.htm)

- “Vegetable”, Science Daily blog. [https://www.sciencedaily.com/terms/vegetable.htm](https://www.sciencedaily.com/terms/vegetable.htm)