



Classifying Fruit

I. Definition of a Fruit

Forget everything you think you think you know about fruit! Much of it is incorrect. Many things we call vegetables are fruits. Many things we call berries are not berries at all. Nuts and grains are fruits as well, but not all the things we call nuts are true nuts!

The scientific definition of a fruit is any structure that develops from a **fertilized ovary** and contains seeds of the plant. All fruits come from the ovaries of a flower. Therefore, many things that we consider to be “vegetables” are actually fruits¹. For example tomatoes, cucumbers, beans (green beans as well as all other beans), peas, peppers, corn, eggplant and squash are all fruits.

II. Diversity of Fruit

Fruits can be fleshy like tomatoes or peaches, or they can be dry like coconuts or peanuts. They can have many seeds in them like tomatoes, papaya and watermelon, or they can have one single seed in them like avocados, almonds and cherries. They can be very large, like jackfruit, pineapples and pumpkins, or very small, like blueberries, raspberries and grapes.

Fruits can be simple, aggregate or multiple:

Simple fruits = one fruit that has developed from one single flower. Most fruits are simple fruits, for example apples, pears, tomatoes, peaches, and cherries.



Aggregate fruits = one flower that produces many tiny fruits clustered tightly together, like raspberries, blackberries and strawberries. (NOTE: in strawberries, the fruits are actually the seed-like things on the outside of the flesh, the flesh itself is not the ovary but swollen receptacle tissue).





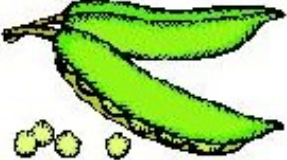



Multiple fruits = fruits from many different flowers which develop closely together to form one bigger fruit, like pineapples, breadfruit and mulberries.

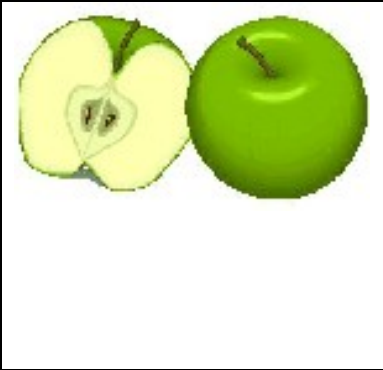


¹ Keep in mind that the term “vegetable” is a culinary term, used in cooking and common language, and is not a scientific term.

III. Here are some major fruit types that we eat:

Fruit Type	Description	Examples	Picture Example
Achene	A small, dry fruit with a thin, close-fitting wall around a single seed.	Sunflower seeds and strawberries (remember, the seed-like thing on the outside of the strawberry is the actual fruit!).	
Berry	A fleshy fruit with many seeds inside. The outside of the berry fruit may be soft or hard and leathery. (NOTE: a lot of fruits we call “berries” are not true berries – i.e. raspberries).	Tomatoes, oranges, kiwi, watermelon, cucumbers, grapes, blueberries, cranberries, passion fruit, papaya, peppers, even bananas!	
Caryopsis (grain)	A small dry fruit with a thin wall that is fused to a single seed.	Corn, rice, wheat, oats, barley, rye and most other grasses.	
Drupe	A fleshy fruit with a hard pit inside which contains the seed. The outside of the drupe is usually soft.	Peach, cherry, coconut, plum, olive, mango, blackberries/ raspberries (aggregate drupes), mulberries (multiple drupes).	
Legume	A dry fruit that is long and thin and has several seeds inside lined up in a row when opened.	All beans, also peas, peanuts, and tamarind.	
Nut	A dry fruit with a thick often wood-like shell surrounding a single seed. (NOTE: a lot of things we call “nuts” are not true nuts –some, like Brazil nuts, are actually seeds and some, like almonds, are the pit of a dry drupe) ²	Chestnuts, hazelnuts, acorns and bechnuts.	

² In addition to almonds - walnuts, pecans, dates, macadamia nuts, pistachio nuts, coconuts and kukui nuts are considered drupes because they have an outer, green, fleshy husk (which has usually been removed when you buy them in the store) and hard, seed-bearing endocarp or pit (which is the part we eat).

<p>Pome</p>	<p>A fleshy fruit with a thin skin and papery cartilaginous structures enclosing the seeds in the center, often in a star shape. The fleshy part is actually swollen receptacle tissue and not an ovary. The ovary is the “core” which contains the seeds.</p>	<p>Apples, pears, quince and loquat</p>	
<p>Capsule</p>	<p>A dry woody fruit with many seeds. Capsules open at maturity to release the seeds.</p>	<p>We do not normally eat capsules, but Brazil nuts are seeds from a capsule. Mahogany trees, poppies (pictured), lilies and irises all have fruits that are capsules.</p>	