



Is a Tomato a Fruit or a Vegetable and Why?

Last Updated : 04 March 2020

Many of us can easily distinguish the differences between most fruit and vegetables but when it comes to the age-old question of, is a tomato a fruit or a vegetable, we are not really sure what to answer!

Look no further, because the answer is, tomatoes are technically both! While fruits and vegetables both count as part of our [recommended 5-a-day](#), fruits and vegetables have distinct differences. However, these can depend on whether you're talking to a botanist, who uses the botanical definition or a nutritionist or chef, who will most likely use the culinary definition.

The botanical classification: Tomatoes are fruits.

A botanist would use the botanical classification, which is based on the plant's physiological characteristics, like the structure, function and organisation of the plant. ¹Therefore, botanically speaking, a 'fruit' is the seed-bearing product that grows from the ovary of a flowering plant or, in other words, a fruit is the plants' way of spreading its' seeds. ² A botanical fruit would have at least one seed and grow from the flower of the plant. ¹ With this definition in mind, tomatoes are classified as fruit because they contain seeds and grow from the flower of the tomato plant.

A 'vegetable' in botanical terms on the other hand, does not have a set definition but is more of a general term encompassing all other edible aspects of the plant; the roots, stems and leaves. ¹ So putting our botany caps on, we would classify foods like apples, strawberries and peaches as fruits including tomatoes!

The Culinary Classification: Tomatoes are vegetables.

A nutritionist, chef or even your grandma, would use the culinary classification system, that defines fruits and vegetables in a slightly different manner, basing it on the way the plants are used and their flavour profiles. ¹ Culinary speaking, a 'vegetable' usually has a tougher texture, tastes blander and

often requires cooking in dishes like stews, soups or stir-fries. ^{1,2} Whereas, a 'fruit' has a soft texture, tends to be either sweet or tart and is often enjoyed raw or in desserts or jams. ^{1,2}

Tomatoes can be juicy, sweet and enjoyed raw. Yet, we also prepare tomatoes in savoury dishes, which is why we usually classify tomatoes as vegetables.

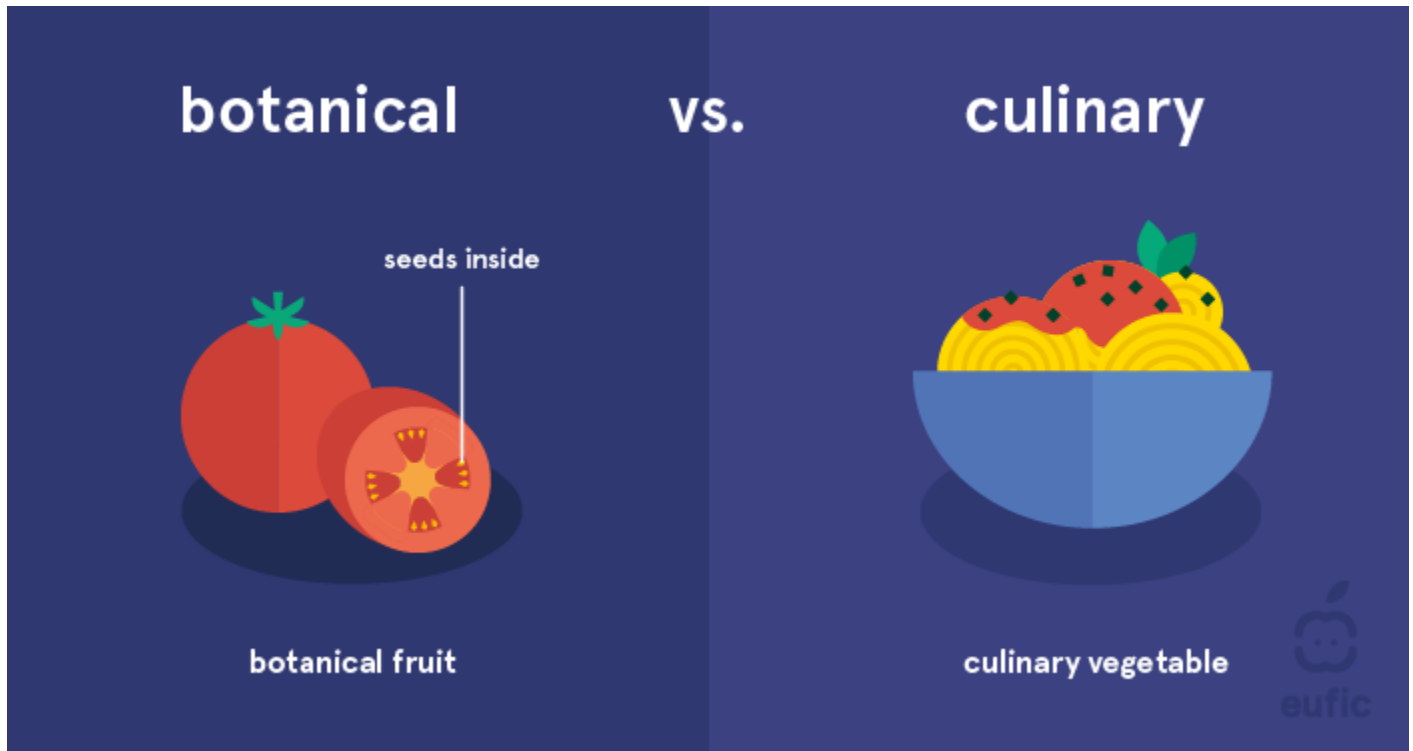


Figure 1. Botanical vs culinary definition of tomatoes

Botanical vs Culinary Classification

So why can we classify tomatoes in two different ways, when it confuses us all? These definitions have their own purposes. For example, the botanical classification is useful for a botanist when they want to discover the origins of tomatoes, help them identify different varieties of tomatoes, or understand how to grow and harvest various tomatoes. ¹

The culinary definition may be more useful for the general public, nutritionists and chefs because the foods that are from the same botanical family, may not have the same nutritional compositions. For example, cantaloupe melons, watermelons, butternut squash, cucumbers and pumpkins all belong to the same botanical family but have different nutritional compositions. ¹

Other botanical fruit that are culinarily considered vegetables are: avocado, olives, pumpkin, tomato, sweetcorn, courgette, cucumber, green peas, chili, aubergine.

botanical fruit that are culinary vegetables



Figure 2. Botanical fruit that are culinary vegetables

Tomatoes are part of your 5-a-day

For the 5-a-day recommendations, tomatoes are classified as a vegetable, which is the culinary definition, because that is how most people learn about fruit and vegetables. One adult portion of a tomato is a medium sized tomato or 7 cherry tomatoes, remember to eat a wide variety of fruit and vegetables so you can reach your daily 5-a-day. ³

tomatoes are part of your 5-a-day



an adult portion
= 1 medium size tomato



or 7 cherry
tomatoes



Figure 3. Portion size of tomatoes

Summary - Tomatoes are both fruits and vegetables!

To summarise, tomatoes are usually prepared in savoury dishes despite botanically being a fruit, which is why they are often described as a vegetable from a culinary perspective. Who cares, though, when tomatoes taste as good as they do! We can all agree tomatoes are easy snacks, delicious in stews and are a healthy option in our diets, providing us with fibre, vitamins and minerals.

When do you think the best season for tomatoes is? Want to know the best time to buy fruits and vegetables? Check out our article on seasonal fruits and vegetables by month in Europe!

References

1. [Pennington JAT & Fisher RA \(2009\). Classification of fruits and vegetables. Journal of Food Composition and Analysis 22S:S23-S31.](#)
2. [Lexico website, Fruit. Accessed 13 Sep. 2019.](#)
3. [NHS \(2020\). Rough guide - Fruit & vegetable portion size. Accessed 17 February 2020.](#)