



# Is a Cucumber a Fruit or a Vegetable and Why?

Last Updated : 04 March 2020

Most of us are familiar with cucumbers, they are one of the most popular produce items around the world, but when it comes down to it, is the humble cucumber a fruit or a vegetable?

Look no further, because the answer is, cucumbers are technically both! While fruit and vegetables both count as part of our [recommended 5-a-day](#), fruit 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: Cucumbers are fruit.**

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.<sup>1</sup> Therefore, 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.<sup>2</sup> A botanical fruit would have at least one seed and grow from the flower of the plant.<sup>1</sup> With this definition in mind, cucumbers are classified as fruit because they contain tiny seeds in the middle and grow from the flower of the cucumber 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.<sup>1</sup>

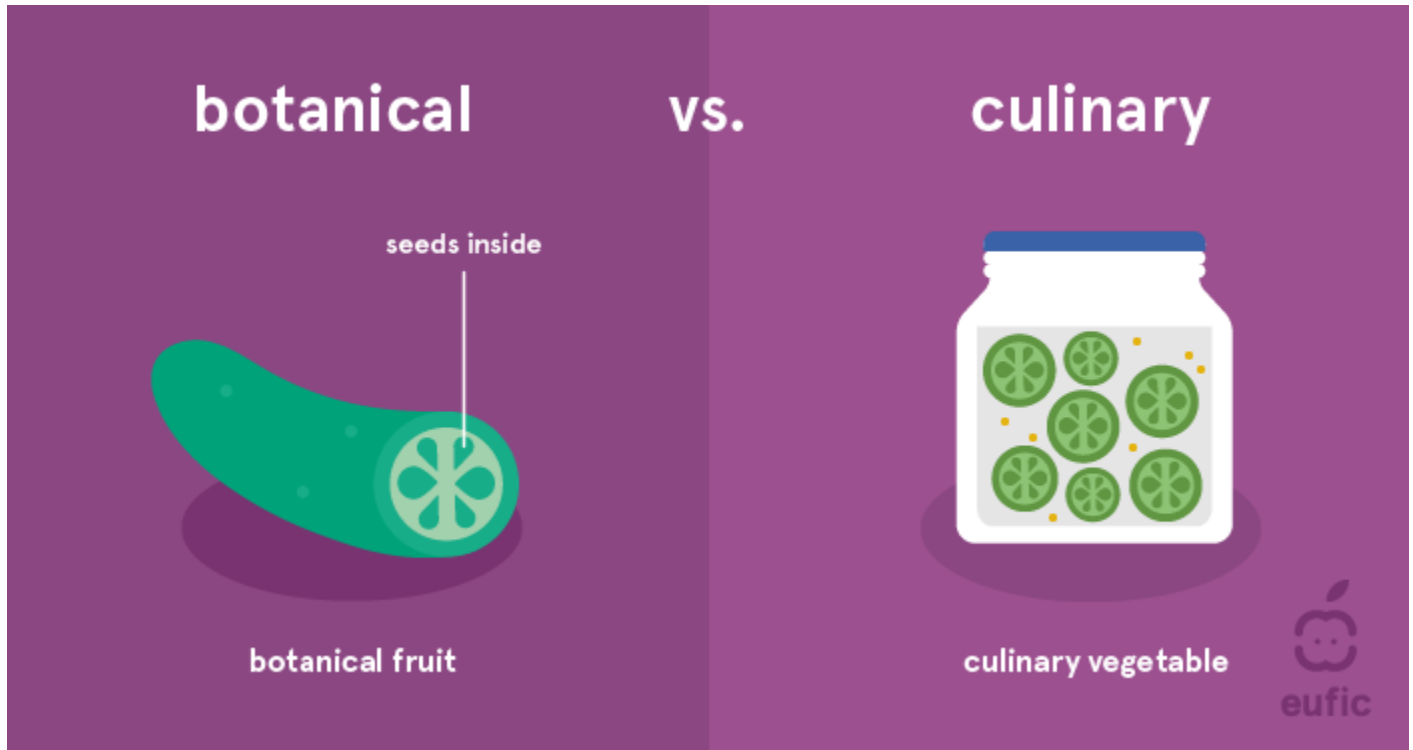
So, putting our botany caps on, we would classify foods like apples, strawberries and peaches as fruit including cucumbers!

## **The Culinary Classification: Cucumbers are vegetables.**

A nutritionist, chef or even your grandma, would use the culinary classification system, that defines fruit and vegetables in a slightly different manner, basing it on the way the plants are used and their

flavour profiles.<sup>1</sup> Culinary speaking, a 'vegetable' usually has a tougher texture, tastes blander and often requires cooking in dishes like stews, soups or stir-fries.<sup>1,2</sup> A 'fruit', however, has a soft texture, tends to be either sweet or tart and is often enjoyed raw or in desserts or jams.<sup>1,2</sup>

Cucumbers can be crunchy, refreshing and enjoyed raw. Yet, we also prepare cucumbers in savoury dishes like pickling, which is why we usually classify cucumbers as vegetables.



**Figure 1.** Botanical vs culinary definition

## Botanical vs Culinary Classification

So, why can we classify cucumbers 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 cucumbers, help them identify different varieties of cucumbers, or understand how to grow and harvest various cucumbers.<sup>1</sup>

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.<sup>1</sup>

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

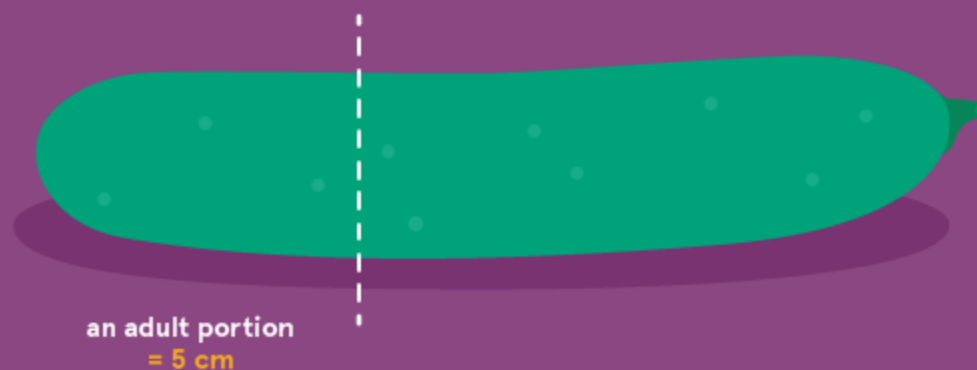


**Figure 2.** Botanical fruit that are culinary vegetables

## Cucumbers are part of your 5-a-day

For the 5-a-day recommendations, cucumbers are classified as salad vegetable, which is the culinary definition, because that is how most people learn about fruit and vegetables. One adult portion of a cucumber is 5 cm, remember to eat a wide variety of fruit and vegetables so you can reach your daily 5-a-day.<sup>3</sup>

## cucumbers are part of your 5-a-day



**Figure 3.** Portion of a cucumber

## **Summary - Cucumbers are both fruit and vegetables!**

To summarise, cucumbers are usually prepared in salads or pickled despite botanically being a fruit, which is why they are often described as a vegetable from a culinary perspective. Who cares, though, when cucumbers taste as good as they do! We can all agree cucumbers are easy snacks, can promote hydration because of their high-water content and are a healthy option for our diets, providing us with fibre, vitamins and minerals.

When do you think the best season for cucumbers is? Check out our article on seasonal fruit 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 11 February 2020.](#)
3. [NHS \(2020\). Rough guide – Fruit & vegetable portion size. Accessed 17 February 2020.](#)