



Plantastic Discoveries

# WHAT DOES ORGANIC REALLY MEAN?

PT. 1



The term

# ORGANIC

in the context of food became popularised during the

**70s** and **80s**

A growing concern about the environment led to a growing interest in alternative agricultural methods



that emphasised more biological-based and environmentally friendly approaches.

And although the roots of the organic farming movement can be traced back earlier, the word 'organic' became very popular during those decades





## SO THEN, WHAT IS ORGANIC FOOD?

It is the food produced according to the organic farming principles



## AND WHAT EXACTLY IS ORGANIC FARMING?

Organic farming is an agricultural method that aims to produce food using biological substance and processes, according to a specific set of rules outlined by the EU Organic Legislation.

# SO IN PARTICULAR, IN THE EU, ORGANIC FARMING MEANS....

## RESTRICTIONS:



Prohibition to use synthetic fertilisers and pesticides.



Although there are some exceptions where chemical pesticides are allowed. For example, in organic viticulture, Copper-based fungicides are commonly used.



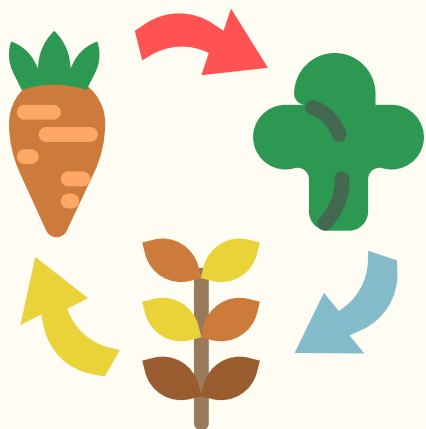
Crops can't be grown in hydroponics or vertical farming, as they need to be in "living soil"

Prohibition of the use of genetically modified organisms (GMOs)

AND...



# INSTEAD, THIS FARMING METHOD RELIES ON BIOLOGICAL ALTERNATIVES TO MANTAIN SOIL FERTILITY AND CONTROL PESTS AND WEEDS



Use of crop rotation, which involves planting different crops in succession on the same land. This helps prevent soil depletion, control pests and diseases, and improve soil structure and fertility.

Managing pests and weeds with biological methods, such as biological pesticides or biological pest control



Use organic seeds - whenever possible



Soil management, using techniques like cover cropping, mulching and composting to improve soil health



## ARE THESE PRACTICES SPECIFIC TO ORGANIC FARMING?

Not entirely! While they are mandatory for organic farming, these practices are not exclusive to it. Conventional farmers also employ crop rotation, biological pest control, non-GMO seeds, and soil management techniques like cover cropping and mulching for soil health and pest management.

Although organic farming aims for more environmentally friendly approaches by using biological substances and processes, **ORGANIC DOESN'T MEAN...**



## NO PESTICIDES

Organic farming uses pesticides derived directly from natural sources, such as bacteria, plants or minerals, with minimal processing to maintain their natural properties.

## LOCAL AND/OR FAMILY OWNED FARMS

Organic, local and family-owned farms are three separate concepts that can sometimes overlap, but are not inherently linked. While organic products can be sourced from local or family-owned farms, they can also come from overseas or be produced in large-scale operations.



## MORE SUSTAINABLE

Organic farming aims to promote environmental sustainability through soil health, biodiversity, and ecosystem conservation. However, its lower productivity requires more land for scaling up production to meet global food demands. Such an expansion would lead to environmental impacts like deforestation and habitat loss, compromising long-term sustainability.

## MORE NUTRITIOUS

There is no conclusive data showing that organic farming has impact on nutritional value compared to conventional farming.



## HOW DOES IT COMPARE TO CONVENTIONAL?

### CONVENTIONAL PESTICIDES

also originate from biological substances, but instead of using the plant- or bacteria-derived substance, they are chemically synthesised to enhance their effectiveness. These products undergo strict guidelines for registration, use and handling to ensure their safety for human health and environment.



### SUSTAINABLE?

Conventional farming often prioritises high yields and efficiency. However, how sustainable it is, will vary depending on a number of things, including the farm practices used! However, for the same yield, conventional farming often requires less land than organic. Regardless of whether conventional or organic farming practices are used, all farms aim to reduce their environmental impact.

**LOCAL AND/OR FAMILY OWNED FARMS** can be organic or non-organic!

Data doesn't show conclusive evidence that one type of farming results in more **NUTRITIOUS** crops

# STAY TUNED FOR PT. 2!

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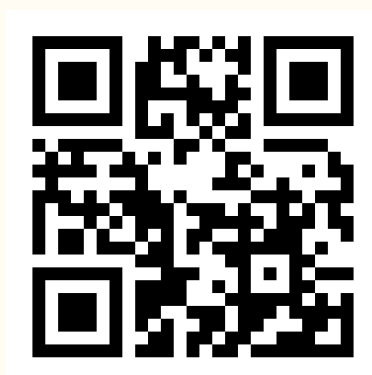
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[Communication on an action plan for the development the of organic production - European Commission](#)

[Is Organic Better? - Harvard Gazette](#)

[A Systematic Review of Organic Versus Conventional Food Consumption:](#)

[Is There a Measurable Benefit on Human Health?](#)

[Use of Copper-Based Fungicides in Organic Agriculture in Twelve European Countries](#)