



HENS AMONG OLIVE TREES

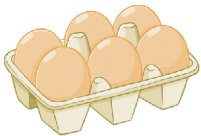
use of resources



THE RESULTS OF SUSTAINOLIVE

SUSTAINOLIVE.EU

A FOOD THAT DOES NOT GET OUTDATED



Despite their simplicity, eggs remain a staple food worldwide. Each Spanish citizen consumes an average of 196 eggs per year, which deliver key nutritional values: 4% of protein, 15% of vitamin D, 9% of vitamin B12 and 8% of folic acid.

extra info



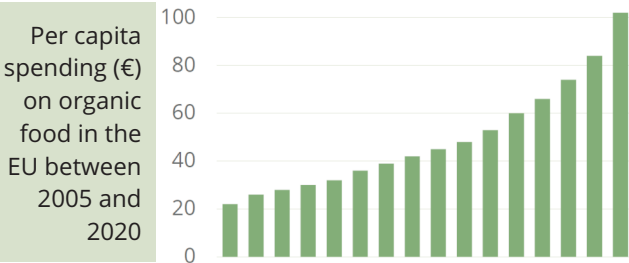
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768 million dozen eggs are consumed each year only in Spain. If we convert that figure into weight, it would be the equivalent of **10 times the weight of the Titanic.**

A BOOMING MARKET

The COVID-19 crisis has accelerated what was already an upward trend in Europe: the consumption of organic food is booming in response to health concerns. In Spain, **organic food consumption increased by 67% during the period 2015-2020.**

extra info



KEEP IN MIND THAT...



Increasingly strict **limitations on intensive livestock systems** are established by European legislation. Rapidly increasing social awareness about animal welfare, along with rising health concerns expressed by consumers turn **sustainable food products of animal origin** onto the **wiser choice.**

THE EXPERIENCE OF NILEAS



With 70 affiliated farmers bringing together 250 hectares of olive groves, the NILEAS A.C. Company yearly produces approximately 400 tons of olive oil (70 of which are organic) in the Greek region of Western Messinia (Peloponnese).

NILEAS dedicates 0.2 hectares to raising hens that graze freely in the olive grove. Initially they had 32 hens, but after several incidents, especially the predation of 7 hens by hawks, their current number has been reduced to 21.



THE CONS



Low demand for organic eggs due to their higher price

Complexity of free-range hen management

Predation by birds and wild mammals

Veterinary advice is necessary

THE PROS



Soil fertilization with manure

Alternative income for the farmer

Eradication of weeds

No dietary supplement is required

The 21 hens of NILEAS lay about 4 eggs a day. The price of organic eggs in Greece is €6 per dozen. Therefore, if all the eggs were put up for sale, a sum of €720 gross per year would be obtained, a return much higher than that which this 0.2-hectare area would generate if it were devoted to the production of olive oil.

ORGANIC, FREE-RANGE OR CAGED ?



The first digit indicates the **production system:**

- 0 **Organically produced** egg
- 1 **Free range** egg
- 2 Egg from hens **raised on the ground**
- 3 Egg from **caged** hens

The State of the EU. If the farm is located in Spain, the letters ES will appear, followed by:

- The province
- The municipality
- The code that identifies the farm

Popular belief associates the quality of the chicken egg with the color of its yolk or even its eggshell. Many consumers think that the more intense the color of the yolk, the better the quality of the egg and, therefore, the healthier it is. That is why the most intense orange color is usually associated with free-range and organically produced chickens. But...

DID YOU KNOW THAT...

one of the factors that most strongly influences the color of the egg yolk is the **type and quality of food** that the hens have consumed ?



Egg yolks get their color from **carotenoids**, a group of plant pigments responsible for the red, orange and yellow hues in certain vegetables and fruits (they are also present in green plants). Sometimes, and for commercial reasons, dyes (as authorized by the EU) are added to hen fodder to adjust the color of yolks to a certain color index. Thus, the color of the yolk **should not be considered an exclusive indicator of the quality** or type of production system to which animals have been subjected.



Colorimetric fan or Roche fan of egg yolk color intensity

- corn
 - grass
 - alfalfa
 - clover
 - cabbage
 - nettle
- carotenoids — light yellow
- + carotenoids — dark orange