

# Novel Food

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### What is novel food?

Novel Food means a **food which had not been significantly consumed by humans in the EU** before **15 May 1997**, when the first European regulation on novel foods came into force. "Novel Food" can be innovative novel foods produced using **new technologies** and **production processes**, as well as foods that have traditionally been consumed outside the EU.

- Novel foods are safe because **food safety** is guaranteed by measures put in place by the European Commission which requires a **scientific evaluation by the EFSA** (European Food Safety Authority).
- A novel food, before being placed on the market, must obtain an authorization on the basis of an assessment in line with these **three principles**:
- must be safe for consumers;
- must be labelled correctly so as not to mislead consumers;
- if it replaces a food it must not be less nutritious.

### Some examples of novel food:

Among the many authorized Novel Food we find some insects, spirulina algae, krill oil, chia seeds, noni fruit juice, baobab fruit pulp, lycopene, lactitol, coconut extract in degreased powder, black bean extract, oils extracted from bacteria and fungi, new sources of vitamin K or foods derived from new production processes, such as UV treatment of bread, milk, mushrooms and yeast.



#### Category of edible insects



Compared to cattle, crickets produce 1% greenhouse gas. Livestock industries are the world's second largest cause of air pollution.



Crickets are rich in vitamins! They contain the same amount of vitamin B12 as salmon, have 15% more iron than spinach and are rich in phosphorus, iron and potassium.



Some data on the environmental impact in the production of proteins between cattle and insects.



150 Litri di acqua necessari alla produzione di un Kg di proteine

80 Efficienza di produzione, o percentuale edibile dell'animale

Kg di mangime necessari per ottenere un aumento di peso di 1 Kg dell'animale

2 Metri quadrati di suolo necessari per ottenere 1 kg di proteine



22000 Litri di acqua necessari alla produzione di un Kg di proteine

40

Efficienza di produzione, o percentuale edibile dell'animale

10 Kg di mangime necessari per ottenere un aumento di peso di 1 Kg dell'animale

195 Metri quadrati di suolo necessari per ottenere 1 kg di proteine

## Italian Cricket Farm, Italy

This company breeds crickets (Acheta domesticus), Flour moths (Tenebrio Molitor) and caimans (Zophobas Morio).

They also have the best cricket powder, an excellent protein product, healthy and sustainable. There are 2000 species of edible insects in the world.

Italian Cricket Farm collaborates with some organizations to answer every question regarding the production, the consumption of insects. This organizations are: **CoRoSect, IPIFF, Politecnico di Torino, DISAFA, Word Sustainibility Organisation, Entonote.** 

- CoRoSect is a European project, based on the development of robotic systems for insect breeding. Italian Cricket Farm is one of these 19 European realities, and the soil role will be to define international standards for an Acheta 5.0 breeding.
- The IPIFF (International Platform Insect as Food and Feed) is a European association that works alongside insect breeders throughout their journey. A landmark for European insect breeders, which sees Italian Cricket Farm as its first member for Italy.
- □ In collaboration with the Polytechnic of Turin within the CLIK project, we are trying to understand if an insect breeding is a possible food source (protein) for future lunar colonists and for future space missions.
- "Friends of the sea and Firends of the earth are two standards for products and services that support and protect the marine and terrestrial environment. Italian Cricket Farm has had access to these brands. These certifications demonstrate, even more, the sustainability of the insect.

□ Entonote deals with culinary experiments and to reciprocate opinions and advice on the use of insects.

