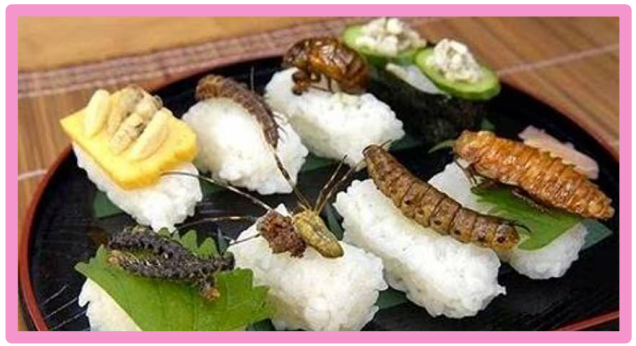
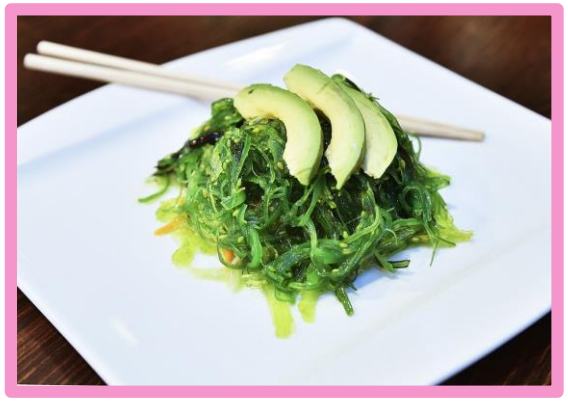
NOVEL FOOD





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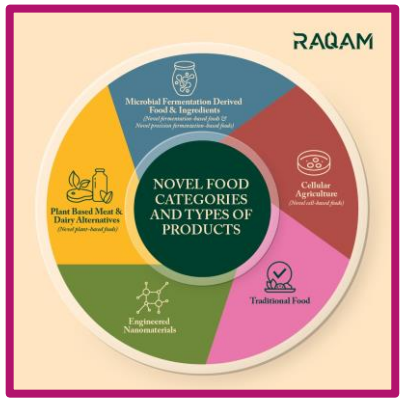
Definition and characteristics

- Foods derived from a process that has never been used before or foods that have undergone genetic modification.
- Novel foods are defined as foods that were not consumed to a significant degree by humans in the EU before 15 May 1997, when the first regulation on these foods came into force.
- Novel foods' can be innovative foods, foods produced with new technologies and production processes, and foods that are or have been traditionally consumed outside the EU.

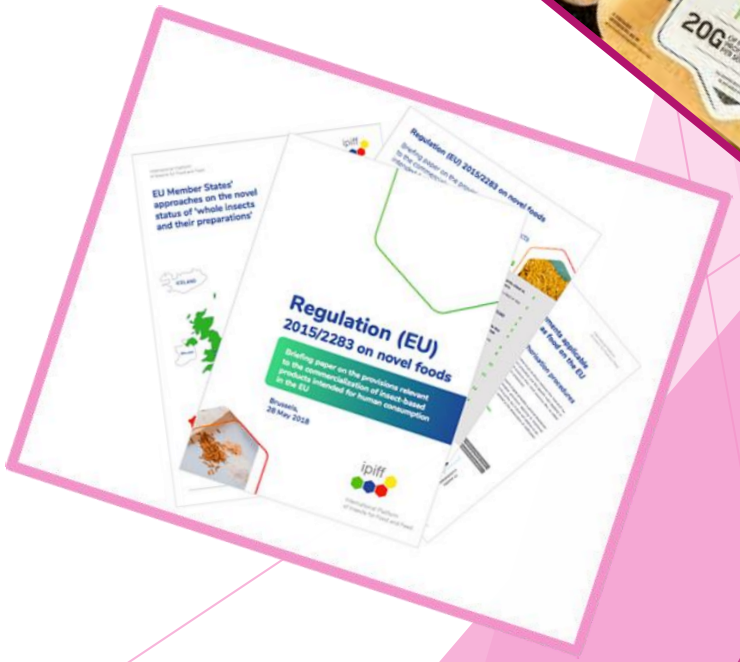
The foods of the future: nutritious, good and sustainable



- Novel foods represent a highly nutritional food source and ecologically sustainable alternatives to traditional foods.
- The new foods can be :
- **More nutritious**, because they are naturally richer in fibre, vitamins and antioxidants that keep the body healthier.
- **Lighter**, because they are cooked simply and naturally to keep all the nutrients intact, without extra fats and oils.
- **Tastier**, because thanks to new cooking techniques, they can bring out the pure flavour of these ingredients.

Safety and approval Regulation (EU) 2015/2283

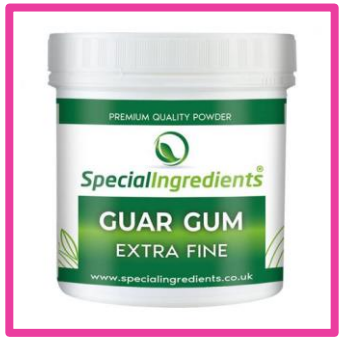
- These foods are not part of the European culinary tradition and, once authorised, can be placed on the market.
- Novel food is controlled: it must not be toxic, it must be labelled and it must not be nutritionally disadvantageous.
- They must be assessed for safety and approved according to Regulation (EU) 2015/2283
- They allow us to change our food production system by using food by-products, new low-impact sources or new technologies.
- Innovative food packaging can lower or eliminate the risk of bacterial contamination. The innovative packaging has got antimicrobial effects.



Categories: Vegetables, Insects, Meat or Fish

All are considered novel food:

Guar gum, noni juice, baobab fruit and some insects such as Chinese centipedes, tarantulas, silkworms, butterflies, scorpions, beetles, crickets, and the most innovative one CULTIVATED MEAT or FISH.



CULTIVATED MEAT
How is cultivated meat made?

- The process of making cultivated meat takes a few weeks and starts when cells are taken from a farm animal. (To grow a beef burger, for example, real cow cells are needed. For a nugget, real chicken cells are obtained.)
- After that, the cells are put into bioreactors and fed “an oxygen-rich cell culture medium,” they grow and change into muscle, fat and connective tissues that make up meat. At this point meat is ready to eat.

CULTIVATED MEAT

ADVANTAGES:

- No pain for the animals
- Less water and electricity consumption compared to farming
- less pollution
- cultivated meat can also be eaten by vegetarians

DISADVANTAGES:

- Low consumer acceptance
- lack of long-term research

A company producing cultured meat: Planted Foods

- Planted Foods is a leading Swiss company in the production of cultured meat. The four founders chose a glass-walled factory as a provocation against slaughtering: vegan meat production can take place in front of everyone's eyes.
- The factory is located in Kempttal (Switzerland)

Planted Foods -Switzerland

- The heart of the company is a glass greenhouse built into the historic factory *building*.
- On the first floor, technicians are tinkering with new textures in the laboratory, in the kitchen next door the results are put to the test, in the Planted-Hiltl Bistro employees meet in a living room to exchange ideas.
- **Planted Foods comes in second at the TOP 100 Swiss Startup Award 2022**