

The future of food

In 2050 there will be another 2.5 billion people on the planet. How to feed them? Science's answer: a diet of algae, insects and meat grown in a lab.

The UN says we will have to double our food production. But anyway, there are already one billion hungry people today, not much more virgin land to farm, climate change will only make farming harder, the oceans are overfished, and the world faces growing water **shortages**.

5 Algae

Algae are simple, single-cell organisms that can grow very rapidly at sea, and even in polluted water.

They can provide fats, oils and sugars. They are at the bottom of the food chain : they are eaten by everything from the tiniest shrimp to the great
10 blue whales. They are the base of all life and must be the future, they are already eaten widely in Japan and China

Artificial meat

It looks like meat, feels like meat, and it is meat, but it doesn't come from an animal. Instead, artificial or "cultured" meat is grown from **stem cells**
15 giant **vats**.

Cattle now occupy nearly one quarter of all cultivable land, and growing crops for animal feed takes up another 25%.

Studies show that artificial meat uses far less water, energy and land. In addition, mass production of animals in factory farms and use of growth
20 hormones and antibiotics is already considered questionable.

Artificial meat is researched by scientists in Holland and Britain. The first artificial hamburger could be developed next year.

Insects

Many bugs are rich in
25 protein, low in fat and cholesterol and high in calcium and iron, and insect farms need little space.



30 Environmentally, they beat conventional farms, too : they convert plants into **edible** meat faster than usual cattle, they emit fewer **greenhouse gases** and they can eat paper, algae or industrial waste that we usually throw away.

35 Grasshoppers, spiders, wasps, worms, ants and beetles are not usually on European menus but at least 1,400 species are eaten in Africa, Latin America and Asia. Now, with rising food prices and worldwide land **shortages**, we will see « insect farms » very soon in France.

40 The advantages of "micro-livestock" farming are great, says the European Union. The EU is even offering its member states \$3 millions to promote the use of insects in cooking.

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<http://www.guardian.co.uk/global-development/2012/jan/22/future-of-food-john-vidal>

Vocabulary :

shortage means something is **lacking** = there is not enough

stem cell : « cellule souche »

CO₂ is a **greenhouse gas**

A vat is a big container

Cattle are the animals that we eat (cow, sheep, pig, horse)

edible means you can eat it