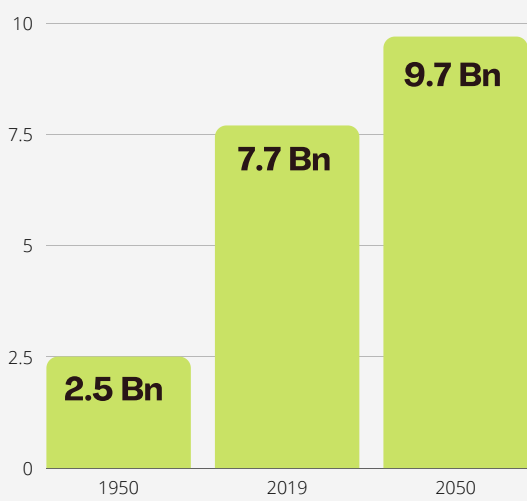


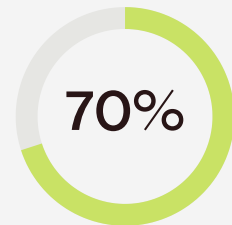
The Context of Clean Meat Today



Global Population

The global population increased from 2.5 billion in 1950 to 7.7 billion in mid-2019 and is expected to reach 9.7 billion people in 2050.

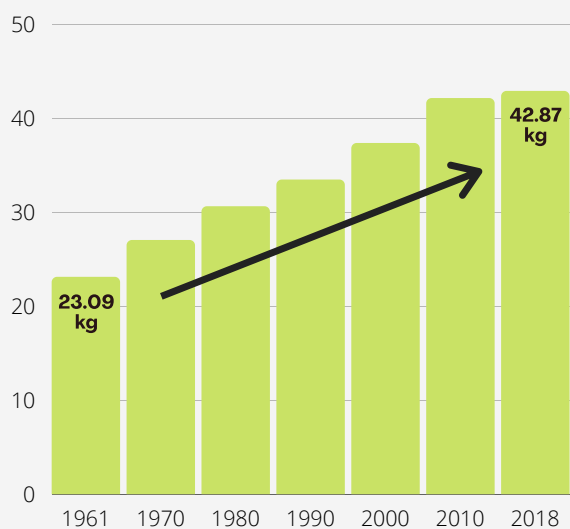
The FAO estimates 70% more food will be needed by 2050 to feed this population.



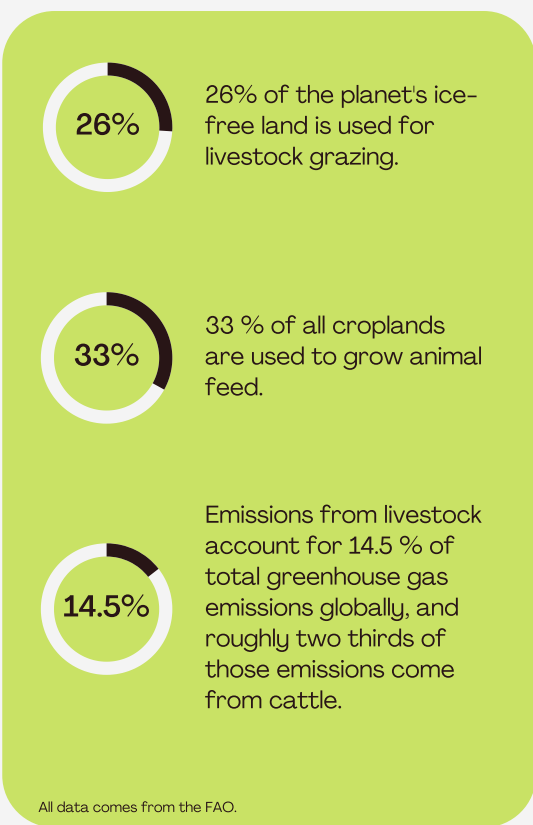
Average Meat Supply Per Capita in Kilograms

The average per capita meat supply in the world has risen from 23.09 kg in 1961 to 42.87 kg in 2018 (FAO). However, meat supply is not equally distributed from country to country. For example, in the U.S. meat supply per capita was about twice as high as in China in 2018.

Nevertheless, as countries become richer, their meat consumption will catch up to that of developed economies. Meat supply in the graph refers to bovine, mutton & goat, pig, poultry and other meat.



Environmental Impact of Livestock Farming



Cultured Meat Production



To meet the increasing demand for food by the growing human population, lab-grown meat has been presented as a good alternative.

Actors in the sector believe it will be a more efficient way of producing protein, while also complying with today's challenges such as **environmental impact, animal welfare** and **food safety**.

Because cultivated meat is not yet produced commercially at a large scale, estimates about its environmental impact are based on assumptions, which result in different conclusions about its efficiency.

There are debates on the claims made by the clean meat industry. If the technology develops as expected, the significance of clean meat will largely depend on **consumers' acceptance**.

Most Often Cited Advantages of Cultured Meat



Less environmental impact. For instance, compared with conventional beef, cultivated beef is estimated to reduce land use by more than 95%, climate change emissions by 74%–87%, and nutrient pollution by 94%.



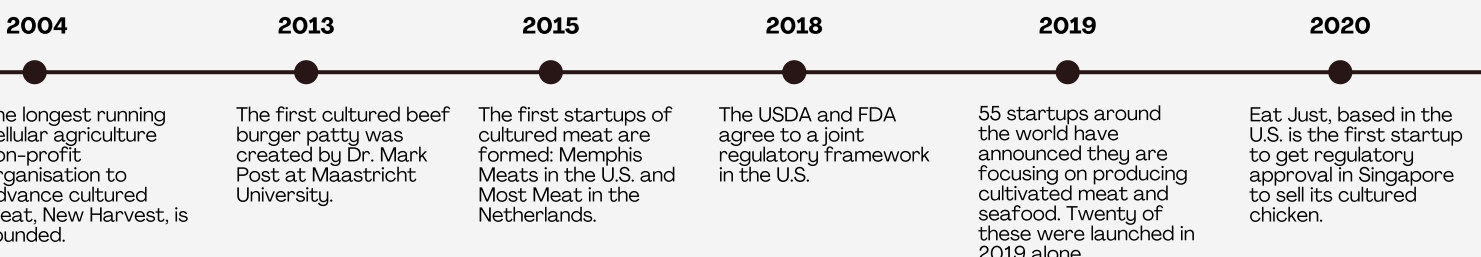
Animal welfare. There is an increasing awareness of animal suffering, especially in Western countries. Cultured meat reduces the number of slaughtered animals significantly.

Food safety. Since cultivated meat is grown in a clean facility it also eliminates the risk of contamination by harmful pathogens such as salmonella and E. coli. It does not require therapeutic antibiotics, thereby reducing the serious public health threat posed by antibiotic resistance.



All figures are taken from The Good Food Institute's report on the cultured meat market.

Milestones



Sources

Data from the FAO can be accessed here: <http://www.fao.org/faostat/en/#data/FBSH>
 Any figures from the Good Food Institute can be accessed here: <https://gfi.org/wp-content/uploads/2021/01/INN-CM-SOTIR-2020-0512.pdf>

