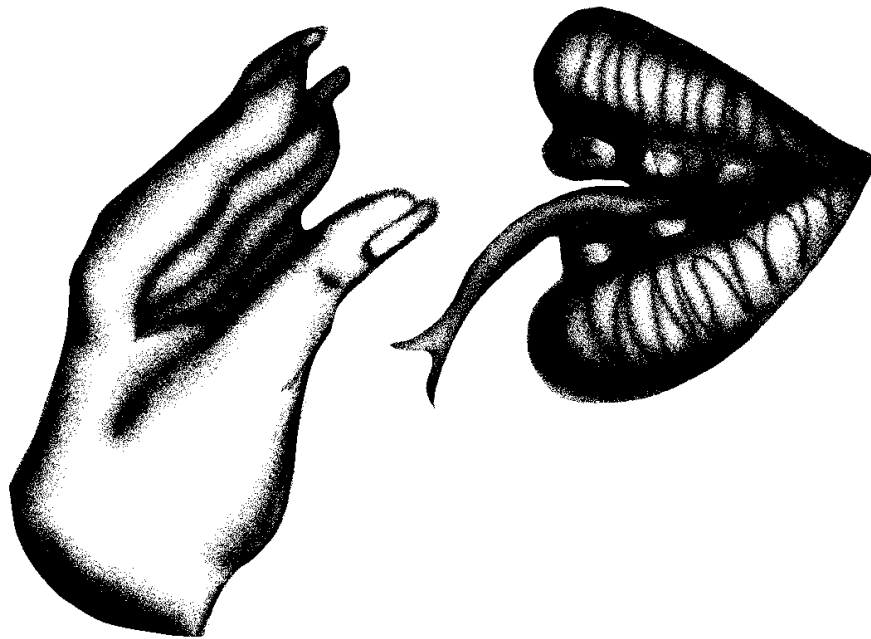


The Study of “How Cultured Meat is influencing Current Dietary Structure”

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Illustrated by Ruihan Xia

1: We need to get rid of traditional meat eating Market, i.e. slaughter house and livestock farming in total.

- Traditional meat market overly relies on livestock farming system, which caused the decreasing in earth's arable land and the waste on fresh water resource.
- According to current trends and studies, people's craving for meat will exceed what traditional meat market was able to provide by the year of 2050. We will be needing at

least 50% more of earth's arable land in order to satisfy people's need for meat and livestock.

- Animals in traditional livestock farming is suffering from poor living and raising condition, thus can be viewed as unhealthy meat sources. Meat products came from such unhealthy sources are not suitable for human's healthy diet.
- The raising of livestock provides a great amount of greenhouse gas (for the record, the largest in percentage of current greenhouse gas), which has damaged the ozone layer and has caused tremendous negative effect on the current global warming and other environmental issues.
- Traditional meat processing factories requires heavy use on clean and fresh water, which can be viewed as an unnecessary abuse on earth's already scarce resource.

2: A brand new invention of "Cultured Meat Market" can be viewed as the perfect replacement for the traditional market.

- According to previous statement and in the situation of world hunger crisis, along with the prediction of future meat eating trends, cultured meat can be the solution here. Due to the nature of cultured meat, which is the almost infinite productivity inside laboratory environment; a brand new cultured meat market does not require the calculation of livestock life cycle and the waste of resources such as arable land, thus will be able to provide what the consumer demand by the year of 2050.
- Unlike traditional livestock farming which is constantly threatened by infectious diseases passed by livestock themselves (such as bird flu, African swine fever or blue tongue), cultured meat production is entirely free of such diseases and thus is able to provide healthy meat that is free from GMOs and contamination.
- Despite the fact that the production of cultured meat needs the support of cutting edge technologies, the price of cultured meat can still be regulated to a reasonably cheaper price

than traditional meat from livestock farming. Just like the plastic producing industry where the price of plastic was regulated by authority to an intentional cheap and affordable price, the cultured meat market can also be regulated and intentionally to be affordable so that everyone can afford meat as they deserved.

3: Cultured Meat Market does less harm to Mother Earth than Traditional Meat Producing Market and Livestock Farming.

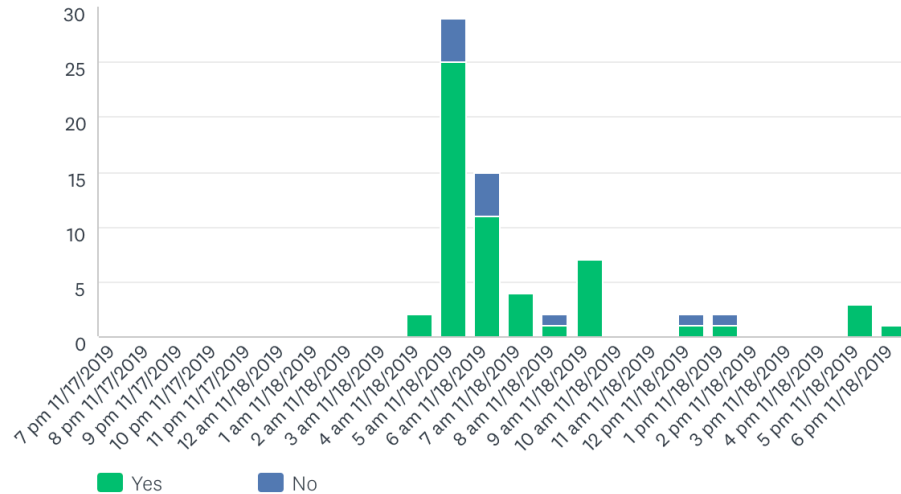
- The growing of cultured meat does not require arable land. Laboratories dedicated to cultured meat growing can be built on almost any land (including barren vegetation), which effectively decreased the abuse on current arable lands.
- The growing of cultured meat only requires minimum amount of livestock farming. Minimum livestock equals minimum greenhouse gas production, therefore does less harm to the environment than the traditional meat producing market.
- Cultured meat grown in laboratories is free from contaminations therefore does not require lengthy and repetitive rinsing process the traditional market requires, therefore can be viewed as a saving towards world's scarce resource: water.

4: According to an anonymous survey, the domination of cultured meat in the future is the new trend

- Survey Link: <https://www.surveymonkey.com/r/FSZBSL5>
- Survey response link: <https://www.surveymonkey.com/results/SM-NVSN99RW7/>

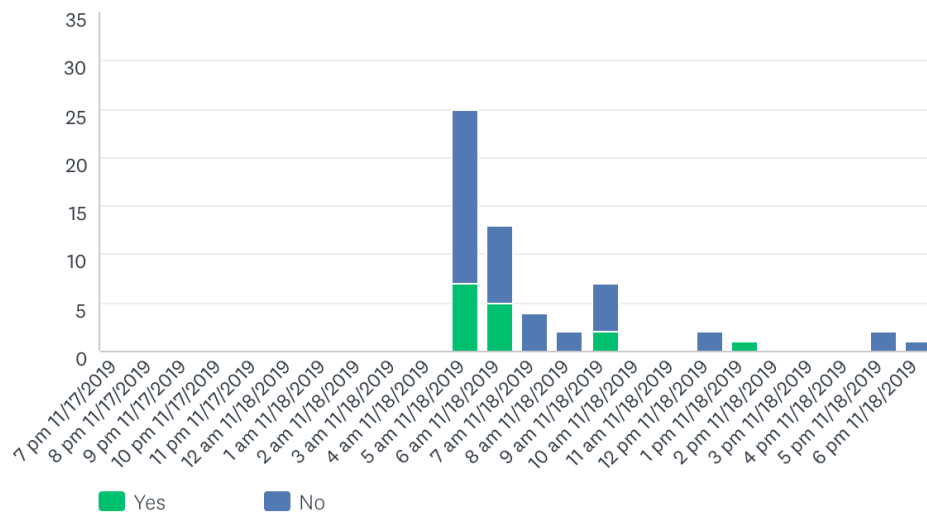
你听说过“人造肉”的概念吗？ Have you heard the concept of “cultured meat”?

Answered: 67 Skipped: 3 First: 11/18/2019 Zoom: 7 pm 11/17/2019 to 6 pm 11/18/2019



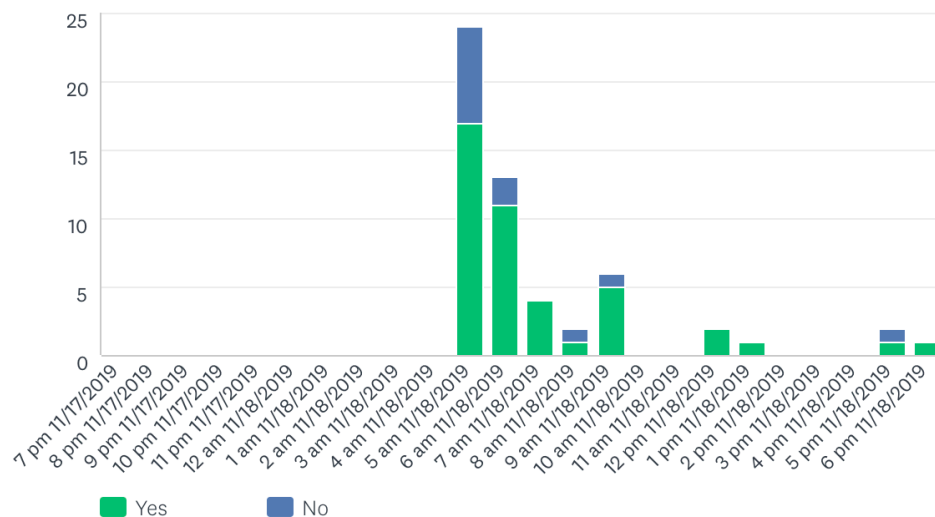
你是否对“人造肉”走上饭桌而感到担心？ Are you worried about "cultured meat" being served on people's dining table?

Answered: 57 Skipped: 13 First: 11/18/2019 Zoom: 7 pm 11/17/2019 to 6 pm 11/18/2019



如果你有更快捷的方式了解“人造肉”的构成、生产与其“不杀生、少污染”的特性，你会想要去了解“人造肉”吗？ If you have an easier / quicker access to the knowledge on the production and distribution of "cultured meat", would you willing to learn more of the topic?

Answered: 55 Skipped: 15 First: 11/18/2019 Zoom: 7 pm 11/17/2019 to 6 pm 11/18/2019



- To sum up: the concept of cultured meat is known to most participants of survey. Most people are not worried about cultured meat being served as dinner and most people whom are not familiar with the concept of cultured meat is willing to learn more about cultured meat.

5: Cultured Meat production does not require slaughtering or animal cruelty, which may turn vegans to cultured meat eaters

- Most vegan diet participants chose to be vegan solely because of environmental issues and animal cruelty issues; if they knew that cultured meat production is free of all their primary concerns, it is possible that a great amount of vegans will go back to meat eating but only with cultured meat.

- Another reason for most vegan diet participants to be vegan is because of health issues such as high body fat rate or lack of fiber. As technology became more advanced in the future, it is reasonable to believe that cultured meat can be customizable in the future. Some customizable parameter can be: fat-rate, fiber amount, calorie amount and etc.
- Unlike traditional livestock farming which is constantly threatened by infectious diseases passed by livestock themselves (such as bird flu, African swine fever or blue tongue), cultured meat production is entirely free of such diseases and thus is able to provide healthy meat that is free from GMOs and contamination.
- Despite the fact that the production of cultured meat needs the support of cutting edge technologies, the price of cultured meat can still be regulated to a reasonably cheaper price than traditional meat from livestock farming. Just like the plastic producing industry where the price of plastic was regulated by authority to an intentional cheap and affordable price, the cultured meat market can also be regulated and intentionally to be affordable so that everyone can afford meat as they deserved.

6: The Future of Cultured Meat

- Other than the availability to be “customizable” in the future, cultured meat can change people’s meat buying habit entirely: people will no longer be going to slaughter house for meat but to laboratories.
- In the future, the growing of cultured meat may not be only limited to laboratories; growing cultured meat in everyone’s house may be as easy as growing catnip at home for cats.
- Moreover, we may be able to grow unique and unusual cultured meat in the future, such as: dinosaur steak (grown from clone cells of dinosaur found in fossils), unicorn steak (grown mixed meat from horses and narwhals), mermaid steak (ethically grown human meat mixed with your favorite fish steak.)