

## Israeli Company Claims Invention of First 'Lab Grown' Steak

An Israeli company says it has produced the world's first steak "grown" in a laboratory.

Researchers from Tel Aviv-based Aleph Farms say they successfully created the meat using methods that do not harm animals. The company claims its scientific invention has the "\_\_\_\_\_".

Shulamit Levenberg is the co-founder and chief scientific officer of Aleph Farms. She considers the company's product "\_\_\_\_\_." She says this is because it is grown in a clean, controlled setting and does not require the killing of an animal.

Some opponents of lab meat production have rejected the term "clean meat" and suggested that "\_\_\_\_\_" would be more exact. Many companies have attempted to create realistic meat replacements with mostly vegetable-based products. Others, like U.S.-based company Just, also have plans to produce beef grown inside a lab.

The process begins when scientists collect live cell tissue from real cows. Aleph Farms says this is easily completed \_\_\_\_\_. The cells are then fed nutrients to make them grow.

The cells are then combined through a process the company says uses \_\_\_\_\_ or 3-D technology to \_\_\_\_\_. The company says small pieces of meat can be produced in as little as three weeks, with each costing about \$50 to make.

Levenberg says animal meat grown in a controlled setting has mostly been limited to simple structures of one or two kinds of cell tissue. This has meant companies have struggled to produce a lab-grown meat that enjoys the similar texture, shape and taste of real steak. So far, cell-created meat development has been limited to \_\_\_\_\_.

Levenberg said Aleph Farms uses four different kinds of animal cells found in traditional cuts of meat. As a result, it can produce a product containing similar properties of steak, including muscle, fat and connective tissues. The company considers this "the key to a product that will be closer to the beef that people \_\_\_\_\_."

Aleph Farms includes a video on its website that shows its steaks being cooked, prepared and eaten.

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The company is still developing its technology in an effort to bring production costs down. The steak product is expected to be ready to sell within two years. Aleph Farms hopes the process can greatly reduce the amount of land, water and food resources necessary for traditional beef production methods.

The United Nations Food and Agriculture Organization has estimated that \_\_\_\_\_ is likely to grow by nearly 70 percent by 2050. The U.N. says such demand \_\_\_\_\_.

Earlier this year, Dutch company Mosa Meat announced plans to make and sell \_\_\_\_\_ in restaurants by 2021. The company has been developing its methods since announcing in 2013 it had produced the world’s first hamburger in a lab.

Mosa Meat uses a similar scientific process for creating beef. But instead of steak, Mosa Meat plans to begin its market launch with ground beef products, mainly for making hamburgers.

The company says its production process uses 96 percent less \_\_\_\_\_s than traditional meat production. In addition, it says it requires 99 percent less land and 96 percent less water.

### Reflect, Write, Discuss:

***What do you think of meat grown in a lab? Would you be willing to try it?***

***Aleph Farms claims that it’s meat is “clean.” Do you agree or disagree? Would the product be acceptable to a vegan or vegetarian?***

***This article claims that raising animals on farms for meat damages the environment. Should people reduce the amount of meat they eat?***

### Words in This Story

steak – n. a thick, flat piece of meat

texture – n. the way something feels when touched

synthetic – adj. not made from natural substances

dimensional – adj. of or related to a measurement in any one direction

crave – v. to desire something very strongly

patty – n. piece of food, usually meat, that is made into a round shape and cooked

emission – n. something being released, usually into the air