



Aleph Farms' has created a system to affordably grow steaks – without the cow | Photo source [Aleph Farms](#)

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PLATFORM ALLOWS MASS PRODUCTION OF CULTURED STEAKS

 FOOD & DRINK

A new platform could allow the affordable mass production of cultured meat that looks, cooks and tastes like steak

Spotted: Up to now, cultured meat – meat produced from cell cultures instead of slaughtering animals – has had several major drawbacks. One is that it was primarily available only as a mass of cells, resembling ground beef. The other is that it was very expensive to mass produce. Now, Israeli-based Aleph Farms has announced a platform to allow the mass production of cultivated steaks, grown directly from the non-GMO cells of a living cow.

Aleph claims that its platform is capable of mass producing thin-cut beef steaks in a controlled, automated bioprocess that is suited to economical large-scale production. The company says that its platform mirrors the process of tissue regeneration that occurs naturally in the animal's body.

In order to form whole steaks, instead of just cells, the company uses a plant-based matrix as a scaffold to allow the cells to form structured tissues. Aleph combines this with its own cultivators, which provide the warmth and nutrients needed to build tissue, including water, proteins, carbohydrates, fats, vitamins, and minerals.

Didier Toubia, Co-Founder and CEO of Aleph Farms, studied food engineering in Dijon and was inspired by the desire to create a cultured meat that actually cooks and tastes like meat. “It’s not enough to just make a protein that will fill the nutritional gap; we need to capture the fullness of the meat-eating experience,” he explains, adding, “Meat can be cultivated from cells isolated from different animal breeds, have different cuts, and it elicits different emotions. We see Aleph Farms as crafters of experiences.”

Animal-free meat holds out promise for greater sustainability in food production, lower carbon emissions and the ability to feed the world without needing to raise and slaughter animals. Although animal-free meat has not hit the mainstream yet, we are seeing a number of innovations that are bringing it closer every day. Recent advances include 3D printed [chicken nuggets](#) and lab-grown [kangaroo meat](#).

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Takeaway:

The ability to affordably mass produce cultured meat that looks and tastes exactly like the real thing is the Holy Grail for the cultured meat industry. Unless these hurdles can be overcome, it is destined to remain an expensive, niche product. Aleph's new production platform could allow companies to begin production of affordable slaughter-free meat in a form that will appeal to people who are starting to question the efficacy of meat-eating. The company is working to develop a pilot plant, which is due for launch in 2022. If successful, cultivated meat could be coming to local grocery stores in the near future.