



Minced beef | Photo source [Food Photographer](#) | [Jennifer Pallian](#) on Unsplash

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## A GENE-EDITING TOOL TO MAKE REAL MEAT CHEAPLY AND WITHOUT A FARM

 SCIENCE

### Bill Gates funded startup could disrupt the \$200 billion meat industry

**Spotted:** A [Bill Gates-funded](#) startup is experimenting with a cheaper way to create meat in a lab. Memphis Meats has applied for a patent to use DNA editing, known as CRISPR, to create chicken and beef using the cells from a type of chicken – the [Gallus gallus](#) – and a type of livestock – the [Bos taurus](#).

There are lots of efforts underway to grow meat in labs from animal cells. But using CRISPR (a gene-editor) could make the process cheaper and more efficient. CRISPR is an enzyme that acts like a pair of scissors, snipping specific bits of DNA to address particular characteristics, like the gene that causes a banana to brown. Types of mushrooms and corn have been created using CRISPR, but they are not commercially available yet. Using CRISPR on lab-grown meats could pave the way to creating sustainable meat eating.

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Website: [www.memphismeats.com](http://www.memphismeats.com), [www.newagemeats.com](http://www.newagemeats.com)

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**Takeaway:**

No lab-grown meat is commercially available today. That's partly because it is too expensive at thousands of dollars to produce a pound of meat. The use of CRISPR has the potential to make lab-grown meat far more affordable. Using CRISPR also changes how lab meat is grown. Most lab meat is produced by taking cells from live animals and reproducing them. The problem is that cells from chickens and cows do not reproduce indefinitely. Using CRISPR could create cells that do. The prospect of creating meat in a lab for mass consumption has already attracted investors like Bill Gates and Tyson Foods. **Both have invested** in Memphis Meats' efforts. Producing affordable meat in a lab could disrupt **the \$200 billion meat industry**. There are also other efforts to create meat substitutes. Springwise has reported on innovations to **produce meat from animal cells** and to 3D print synthetic meat from **vegetable proteins**.