

‘Milk without cows’? What consumers need to know about precision fermentation

“There is a real revolution going on here,” Jim Mellon, a biotech investor and the author of [*Moo’s Law: An investor’s Guide to the New Agrarian Revolution*](#), said about the [cell-based dairy] trend when speaking [to New Scientist](#) last August.

And yet while these “animal-free” dairy brands are promising lower-carbon, kinder products through technology, they may also be benefiting from the fact that most consumers know little to nothing about the science it relies on. And a number of the scientists and food system advocates Civil Eats spoke to worry that a loophole at the U.S. Food and Drug Administration (FDA) has allowed the company to declare its own products safe, despite being an ultra-processed food made with a novel set of proteins that have never before been on the market.

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That protein ferments in giant vats similar to the way beer does, but the process differs greatly from what most consumers think of when they hear the word “fermentation.” That’s because it involves genetically modifying a type of fungi [...] so that it excretes something called Beta-lactoglobulin. Then it’s spun in a centrifuge and dehydrated before combined with water and fats like coconut oil to create a “milk.”

[**This is an excerpt. Read the original post here.**](#)