

Scientist works on taste, texture and color of lab-produced hamburger

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Dr. Mark J. Post is confident his recipe for his \$300,000 cultured hamburger will not only come down in price but someday make it to market, according to a July 12th presentation at IFT15: Where Science Feeds Innovation hosted by the Institute of Food Technologists (IFT) in Chicago.

"It's realistic that we can do this," said Post, chair of the department of physiology and professor of vascular physiology and [tissue engineering](#), Maastricht University, The Netherlands, who is refining what he already sees as a patty consistent in look, texture and color to a traditional ground beef [burger](#) but lacking in taste. "We're starting a company to do this. Initially, it's going to be a very expensive product but given there's a hamburger in one restaurant for \$450, there's a market for them." He said he plans to start the company this year.

Using the [stem cells](#) from a cow to grow muscle fiber shaped like a donut, Post and his team created what looks like a hamburger patty but missing the fat content that gives it flavor and taste. He's redesigning models and cell sources to create tasty [fat content](#) for his burger and even offered it up for a taste test to celebrity chefs and tasters in London in 2013 who to his relief, didn't reject it outright.

"They came up with the same analysis as me, 'it's OK, it's much better than any other replacement we've seen but it's not there yet.'"

A Guardian readership survey, and later an independent survey in the Netherlands, found more than 60 percent of consumers surveyed said they would buy and eat a cultured burger.

He's confident early adapters of the lab-produced burgers will urge others to consider it and perhaps even overcome any concerns over its origin, be it natural or unnatural.

"We eat livestock beef because we like it," Post said. "Once you have alternatives, you can no longer do that. Eventually, the ethical dilemma will be for cultured beef versus livestock beef."

Post is also working on his models with a [stem cell bank](#) which is projecting production costs of his burger could go down from \$300,000 to an estimated \$65 per kilo.

"Steaks are more difficult to make," Post said, "but we're working on that as well."

More information: www.am-fe.ift.org/cms/

Provided by Institute of Food Technologists

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