The Regulation of “Cell-Cultured Meat”

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“Cell-cultured meat,” also known as “clean” or “lab-grown meat,” is a product created in a laboratory from animal cells. Although years away from being available at a commercial level, it has already generated a significant amount of interest and controversy. The current political discussion involves the best name for the product, as well as determining whether U.S. Department of Agriculture (“USDA”) or the U.S. Food and Drug Administration (“FDA”) should be in charge of oversight and regulation.

Production of lab-grown meat involves taking muscle, fat or stem cells from an adult animal and placing them in nutrient-rich fluid. Within the fluid, the cells begin to multiply. These groups of cells then start to grow around a structure known as “scaffolding” which helps the meat take on a desired shape. The end result is a product made from animal cells that looks and tastes like meat. At the moment, this process is used to produce ground products such as nuggets and patties, but companies creating lab-grown meat products are hopeful that they will soon be progressing to strips of muscle that would resemble beef steaks, fish fillets, and chicken breasts.

Although lab-grown “meat” products are years away from being available commercially, they are already generating large amounts of political interest concerning oversight and labeling. Many livestock groups support having USDA handle regulation and labeling of lab-grown meat; however, the U.S. Cattlemen’s Association (USCA) has questioned whether USDA is the right choice for taking the lead on regulation and has pushed hard to prevent the use of the word “meat” attached to lab-grown meat products. So far, the state of Missouri has enacted a law declaring that only food derived from harvested production livestock or poultry will be labeled as “meat” and other states are looking at similar legislation. The Missouri law was being challenged by a coalition, including the Animal Legal Defense Fund.
and the ACLU of Missouri, as a violation of the First Amendment right to free speech, but that case was recently settled in February with the terms being unavailable at the present time.

Along with deciding whether to attach the term “meat” to lab-grown meat products, there continues to be disagreement about whether lab-grown meat should be called “lab-grown meat,” “clean meat,” “cultured meat,” or something else entirely. This topic was discussed at the July 2018 meeting held by the FDA. Speakers at the public meeting used a variety of different terms to refer to lab-grown meat and provided reasons for why the group they represented preferred its chosen term. The representative from the American Meat Science Association used the term “cultured tissue,” while expressing a concern that meat scientists did not have enough information to determine whether the products could be called meat. The Good Food Institute, a non-profit that supports plant-based and lab-grown meats, prefers the term “clean meat.” They, and other supporters of the term, believe that “clean meat” refers to the product’s speculated environmental impacts, the belief that it could reduce the consumption of growth hormones, and the fact that such meats are produced without slaughter. Livestock groups like the NCBA oppose the use of “clean meat,” they believe it implies that traditional animal agriculture is dirtier than lab-produced meat. Although the topic of how to refer to lab-grown meat was discussed at the July 2018, no industry-wide conclusion was reached.

While the regulatory process for lab-grown meat is yet to be fully determined, the companies developing these new products continue to be hard at work with goals of having products available to consumers within the next few years. Production costs are still an issue at this time and companies creating lab-grown meat products will also need to clear the hurdle of consumer suspicion. Michigan State University’s Food Literacy and Engagement Poll, conducted in 2018, found that only one third of the participants would be likely to purchase lab-grown meat, with the other two thirds remained skeptical.

In November, 2018, the USDA or FDA announced an agreement for a joint regulatory framework where “FDA oversees cell collection, cell banks, and cell growth and differentiation. A transition from FDA to USDA oversight will occur during the cell harvest stage. USDA will then oversee the production and labeling of food products derived from the cells of livestock and poultry.” This agreement was formalized on March 7th, 2019 in a memorandum signed by principles from USDA and FDA laying out the delegation of responsibility; however the details concerning inspection and the labeling process are still to be worked out by the respective agencies.

Lab-grown meat is still a nascent industry, and it has many practical and regulatory issues to address before it will be widely available in restaurants and supermarkets. Despite those challenges, the industry continues to grow and establish itself as an emerging method of food production.
SOURCES:

Drovers: USDA, FDA to Oversee Production of Cell-Cultured Food or "Fake Meat" (March 7, 2019)

Food Safety News: USDA, FDA Team Up to Hear Comments About What Can Be Called “Meat” (September 17, 2018)

The Good Food Institute: FDA Sets Its Sights on Clean Meat Regulation (July 12, 2018)

Vox: Lab-Grown Meat and The Fight Over What It Can Be Called, Explained (August 31, 2018)

STATUTES:


REGULATIONS:

9 C.F.R. Chapter III, Parts 300-592

ADDITIONAL RESOURCES:

Formal Agreement between the U.S. Department of Health and Human Services Food and Drug Administration and U.S. Department of Agriculture Office of Food Safety

FDA Public Meeting: Foods Produced Using Animal Cell Culture Technology

Memphis Meats

Michigan State University: Food Literacy and Engagement Poll

Joint Public Meeting on the Use of Cell Culture Technology to Develop Products Derived From Livestock and Poultry