

# GAO Highlights

Highlights of [GAO-20-325](#), a report to the Chairwoman, Subcommittee on Labor, Health and Human Services, Education, and Related Agencies, Committee on Appropriations, House of Representatives

## Why GAO Did This Study

Multiple firms have produced cell-cultured meat as part of their research and development. These products appear likely to become available to consumers in coming years. FDA and USDA are the primary agencies responsible for overseeing the safety of the nation's food supply. However, some stakeholders have expressed concern about the agencies' oversight of cell-cultured meat amidst a fragmented federal food safety oversight system.

GAO was asked to review federal oversight of cell-cultured meat. This report (1) describes what is known about methods for commercially producing cell-cultured meat, and (2) examines the extent to which FDA and USDA are collaborating to provide regulatory oversight of cell-cultured meat. GAO conducted a literature review; reviewed documentation from FDA, USDA, and stakeholder groups; analyzed public comments submitted to the agencies; compared agency efforts with leading practices for interagency collaboration; and conducted site visits to selected cell-cultured meat firms.

## What GAO Recommends

GAO recommends that FDA and USDA more fully incorporate leading practices for effective collaboration in the agencies' interagency agreement. FDA and USDA partially concurred and indicated a willingness to incorporate these practices in a more detailed agreement, which would also meet the intent of the recommendations. The agencies concurred with the four other recommendations.

View [GAO-20-325](#). For more information, contact Steve D. Morris at (202) 512-3841 or [morris@gao.gov](mailto:morris@gao.gov).

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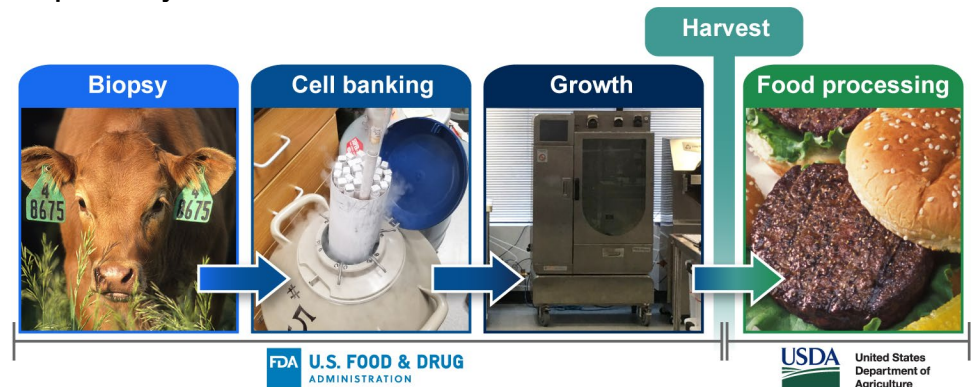
## FOOD SAFETY

### FDA and USDA Could Strengthen Existing Efforts to Prepare for Oversight of Cell-Cultured Meat

## What GAO Found

General information about the process of making cell-cultured meat—food products grown from the cells of livestock, poultry, and seafood—is available. However, no company is commercially producing cell-cultured meat. Specific information about the technology being used, eventual commercial production methods, and composition of the final products is not yet known. The general process contains five phases: biopsy, cell banking, growth, harvest, and food processing (see figure). The technology and methods to be used for commercial production are still in development, and producers, regulators, and consumers do not have clarity about many specifics about the process and final product. For example, it is unclear whether production methods and products will use or contain genetically-engineered cells or medications such as antibiotics.

### The Five Phases of Cell-Cultured Meat Production and Federal Oversight Responsibility



Sources: GAO and U.S. Department of Agriculture's Agricultural Research Service. | GAO-20-325

The Food and Drug Administration (FDA) and U.S. Department of Agriculture (USDA) have begun collaborating on regulatory oversight of cell-cultured meat. For example, in 2019, the agencies signed an interagency agreement and created three working groups to carry out the terms of the agreement. However, the agreement and working groups could more fully incorporate practices to enhance and sustain collaboration, such as defining outcomes. For example, the agreement identifies the development of labeling principles as an outcome, but does not describe how the agencies will track and monitor progress toward this outcome, and the working groups identify a lead agency but not members' roles. Also, agency officials said they decided FDA would oversee cell-cultured seafood other than catfish, but they have not formally announced or documented this decision. Developing and updating written guidance and agreements is also a leading practice for interagency collaboration. By fully incorporating leading practices into their efforts to collaborate, the agencies could minimize potential overlap and fragmentation, use resources in a more efficient manner, and better ensure the public and other key stakeholders have clarity about the agencies' oversight responsibilities.