

Cell-Cultured Protein



Technology has advanced to where proteins are able to be produced using cell-cultured technology. A major issue with this new technology is how the proteins will be labeled. The livestock industry does not support labeling foods produced using animal cell culture technology as meat. The term meat is our brand, applied to a product that livestock producers have worked for generations to perfect. We also believe that consumers have the right to know what they are eating. A product that has been developed in a petri dish or other media with the same label as livestock—cattle, pork, chicken, turkey, fish—raised and harvest in the traditional way, could dissolve trust between consumers and livestock producers.



HOW CELL-BASED FOODS ARE PRODUCED

1) Collect Cells



Fetal Bovine Serum, or blood drawn from a calf fetus, is the most popular means of cell collection.

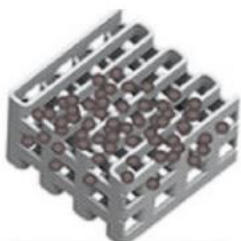
The calf fetus is removed during evisceration and blood is extracted via cardiac puncture without anesthesia.

2) Proliferation of Cells



The cells marinate in a growth medium composed of hormones, cytokins, signaling molecules, gases, sugars, fats, minerals, amino acids, & vitamins.

3) Growth Structure



The cells need something to grow on. In live animals, this is the skeleton. In cell cultured foods, these are called "scaffolds".

Cells can also be grown in bioreactors, but must be stretched to mimic muscle movements.

4) "Harvest"



Once the cells are removed from their structure, they are non-viable. This is a trouble spot.

The scientific understanding of post-harvest activities is severely limited. Contamination occurs most frequently at this point.