

November 4, 2020

The Honorable Stephen Censky Deputy Secretary U.S. Department of Agriculture 201 14th St. SW Washington, D.C. 20227

Dear Deputy Secretary Stephen Censky,

Thank you for the opportunity to submit comments in support of the U.S. Department of Agriculture's (USDA) Agriculture Innovation Agenda. As a coalition of cell-based/cultured meat, poultry and seafood companies, the Alliance for Meat, Poultry and Seafood Innovation (AMPS Innovation) is well aware of the challenges that lie ahead in order to meet growing global demand for food, including that of a growing middle class who will demand more protein in their diets. Meeting this challenge is, in large part, why companies in our industry were founded in the first place: to complement the traditional meat and seafood industries while also providing environmental and nutritional benefits.

As such, we are pleased to be able to share our perspective on how cell-based/cultured technology can be a part of the solution to meet USDA's goal to increase agricultural production by 40 percent to meet the needs of the global population in 2050, while simultaneously cutting the environmental footprint of U.S. agriculture in half. We are also pleased to offer some suggestions for how USDA programs can help accelerate our technology's adoption.

In addition to responding to the questions outlined in the Request for Information, we would like to emphasize that the United States historically has been a world leader in food production, including in the meat, poultry and seafood space, and that leadership has been due to our willingness to embrace new innovations to overcome environmental challenges and make animal agriculture more efficient. Around the world, companies like ours are close to finalizing and marketing cell-based/cultured meat, poultry and seafood products, and other governments are investing to support and grow this industry that, without question, will be a part of our food supply in the near future.

AMPS Innovation's members, all of whom are based in the United States, firmly believe our country should lead the way in establishing regulatory protocols and marketing requirements for these products, and that our government's ability and willingness to move forward quickly will benefit not only the cell-based/cultured meat, poultry and

seafood producers, but also the larger food and agriculture sector as our industry matures and becomes more incorporated into the supply chain.

Our technology is responsive to many of the needs laid out in USDA's request, including that it has the potential to greatly reduce both food waste and greenhouse gas emissions. The cell-based/cultured process allows us to produce meat, poultry and seafood directly from animal cells, while growing only the muscle, fat, skin and connective tissues that are typically eaten—without raising the entire animal. As we scale our production, we expect this efficiency will enable us to supply high-quality meat, poultry and seafood for consumers, while reducing the land and water resources that are needed to feed and care for an animal throughout its life, and reducing greenhouse gas emissions associated with meat production.

For our seafood member companies, environmental concerns are particularly salient, especially given the nature of the U.S.'s reliance on imported seafood and vulnerability in the ocean supply chain. Cell-based/cultured seafood makes it possible for people to have long-term access to species that are endangered due to overfishing and a changing ocean environment, which is a separate benefit from, but related to, those offered by our meat and poultry companies.

Further, our products offer the potential for localized production and distribution, which can help create food supply stability, boost local economies, improve affordability and access, and cut down on the energy required to move product through the supply chain, for example the movement of animals from the farm or fishery to the slaughter/processing facility. This year alone, the coronavirus pandemic and several climate-related severe weather events have created disruptions for our food supply, including in the meat industry, which underscores just how important it is to have diverse food production methods in addition to traditional livestock production and fishing.

In its Request for Information, USDA also asks about the "relative advantage" an innovation has over the current product, and about its "compatibility," defined as how consistent the innovation is with the values, experiences, and needs of the potential adopters. We want to underscore that while there are many benefits of cell-based/cultured production, several of which are described in this submission, our member companies want to complement, not replace, the traditional meat, poultry and seafood industry. We believe that, in combination with traditional meat and seafood suppliers, our products will be a key part of the solution to keep feeding the world in light of increasing environmental challenges.

Regarding compatibility, research published in the journal *Frontiers in Nutrition* showed that two-thirds of U.S. consumers surveyed indicated they are willing to try cell-based/cultured meat, poultry or seafood products¹, and leading meat processors including Cargill and Tyson have invested in the technology. In Asia, where 65% of the

¹ Bryant, C., & Dillard, C. (2019). The Impact of Framing on Acceptance of Cultured Meat. *Frontiers in nutrition*, *6*, 103. https://doi.org/10.3389/fnut.2019.00103

world's middle class will live by 2030, research shows there is already a strong appetite for cell-based/cultured meat, poultry and seafood, and we believe the U.S. should be in a position to export there.²

The USDA, and its partner agency the U.S. Food and Drug Administration (FDA), have already made great strides towards establishing a clear and transparent regulatory process for cell-based/cultured meat, poultry and seafood, which is a promising sign for the industry's future here. Our coalition has been encouraged by their dedication and partnership so far, and we urge their continued prioritization of this work. Separately from this submission, our coalition and a leading trade association representing the conventionally produced meat industry have sent a joint letter to the USDA encouraging an advance notice of public rulemaking to solicit input on how cell-based/cultured meat and poultry products should be labeled, which we believe is important for gathering public input and ensuring a transparent process. We also shared this letter with the FDA, and we support the two agencies working together on joint principles for regulating cell-based/cultured meat, poultry and seafood products.

Other ways that USDA can support the deployment and adoption of our technology include utilizing the Research, Education and Economics agencies to fund research in this space, as several other countries' governments are doing, and by remaining committed to the fair and open dialogue with our industry that you have carried out so far. Finally, recognizing the importance of private sector efforts and innovation to support a food supply chain that is stable, sustainable and more diversified, in the 2018 Farm Bill Congress established USDA's Office of Urban and Innovative Agriculture Production. The office is designed to support new and innovative agriculture production and help small businesses like our member companies navigate federal programs and resources. We urge USDA to continue to support the office through funding and staffing resources, as this would provide helpful coordination and advocacy for a wide array of new and innovative forms of agricultural production.

Because our industry is still very new, we are not yet able to complete full life cycle analyses to measure our exact environmental impact, but for the reasons laid out above, we believe there is no question that cell-based/cultured meat, poultry and seafood will play a role in future diets and the health of our planet. The extent to which we are able to scale our production and therefore offer the full benefits our technology promises, in large part depends on the U.S. government's support for a clear and transparent path to market and a regulatory process that upholds the safety, transparency and trust that consumers depend on.

² Bryant C, Szejda K, Parekh N, Deshpande V and Tse B (2019) A Survey of Consumer Perceptions of

Plant-Based and Clean Meat in the USA, India, and China. Front. Sustain. Food Syst. 3, 11. https://doi.org/10.3389/fsufs.2019.00011

Again, we appreciate the opportunity to provide input for the USDA's Agriculture Innovation Agenda, and we look forward to continued dialogue with the Department.

Sincerely,

Artemys Foods BlueNalu Eat Just, Inc. Finless Foods Fork & Goode Memphis Meats New Age Meats