Building Back Better: Investing in Alternative Proteins

The Biden administration’s commitment to build back better includes making American agriculture stronger, more resilient, and more inclusive. Investment into alternative protein research and development aligns perfectly with these priorities.

Alternative proteins can help usher in a new era of American food innovation and drive environmentally sustainable economic growth. Right now, the United States leads the world with the most companies, and most diverse companies, in the sector. But this leadership is not assured. Over the past four years, other countries have invested in alternative protein research and development while the United States government has hesitated. Bold leadership is needed to ensure that the full diversity of protein foods are grown and made in America, and in all of America.

The United States should support the production of plant-based meat and cultivated meat. We respectfully request that the Biden administration make significant investments in alternative protein research as part of the U.S. economic recovery plan.

Alternative Protein Research Will Create Jobs and Spark Infrastructure Growth

The Biden administration’s commitment to an economy where every American enjoys a fair return for their work and an equal chance to get ahead will require more and better jobs. Investment in open-access research in alternative proteins can accelerate this economic development. With public support, the alternative protein sector will generate more than 200,000 new jobs.

Plant-based and cultivated meat can be made from a wide variety of high-value crops and will support the growth of a more biodiverse and resilient food supply. Open-access research will expand the agriculture industry’s understanding of key value opportunities, such as the most nutritious specialty crop and pulse ingredients for plant-based meat, creating enormous market opportunities for established growers and new farmers alike. The U.S. Department of Agriculture will be a critical partner in engaging farmers and assisting with business planning, insurance, extension, and export services.

Basic research will fuel technological innovation and allow the industry to scale, driving economic growth. The construction of pilot plants and retrofitting of existing commercial facilities will create high-quality, green jobs, especially across farming regions and rural communities where there is a geographic and skilled labor advantage. Production of the state-of-the-art tools and equipment needed to process these new protein sources will spark a renaissance in American manufacturing.

Studies show that every dollar spent on agricultural research generates 20 dollars in economic activity. Given the right incentives, alternative protein production facilities similar to craft beer breweries will open in rural, semi-rural, and urban areas. This widely distributed production and supply network will create opportunities for Black, Latino, Asian American and Pacific Islander, and Native American

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1 Plant-based meat is different from veggie burgers and the like as traditionally understood. The goal of plant-based meat and whole biomass fermentation is to give consumers the taste, texture, and full meat experience, but without the adverse external health and climate costs.

2 Cultivated meat is produced from a small sample of animal cells grown in a tank called a cultivator, which provides warmth and the water, proteins, carbohydrates, fats, vitamins, and minerals needed to grow muscle. The result is meat, poultry, and fish that looks, tastes, and cooks the same as the traditional version.
workers in farming and food production and keep money flowing through local economies. A distributed system will also make our food system more resilient by creating an overlapping network of production to protect against supply chain disruptions. That means fewer lost jobs due to storms, droughts, wildfires, flooding, and disease outbreaks—and that Americans who live in the areas most vulnerable to these disruptions will have better opportunities to earn a decent living for themselves and their families.

**Growing This Sector Will Yield Climate, Global Health, and Food Security Dividends**

Alternative proteins can also help address the climate crisis and de-risk the American food supply against future global challenges, including zoonotic disease and antibiotic resistance.

Alternative proteins have a lighter environmental footprint than conventional meat, allowing more food to be produced with dramatically fewer resources. Producing meats directly from plants and cultivating meat directly from cells, for example, uses anywhere from 35 to 99 percent less land than conventional meat production. Two of the most innovative plant-based burgers on the market right now reduce greenhouse gas emissions by 89 percent over conventional beef burgers. Cultivated beef is similarly projected to reduce greenhouse gas emissions by 74 to 87 percent.

Our current meat production system is vulnerable to zoonotic disease and increases the risk of future global pandemics, which are likely to have disproportionate impacts on people of color. Alternative protein production methods eliminate this risk. Plant-based meat is completely insusceptible to zoonotic disease because it is free of animals, and cultivated meat is grown in a closed system where any contamination can easily be contained, safeguarding public health and securing our food supply. Plant-based meat and cultivated meat production processes also do not require the use of antibiotics, unlike conventional meat production systems.

Investing in alternative proteins will allow U.S. agriculture to produce more diverse protein options without additional stress to planetary boundaries or public health.

**Recommendations**

To achieve these economic and environmental benefits, we respectfully submit these recommendations, which build on the Biden Plan’s commitment to invest $300 billion in federal research and development and breakthrough technologies.

1. **Fund alternative protein research.**
   - Allocate $1 billion for the National Science Foundation, the Agricultural Research Service, and the National Institute of Food and Agriculture to fund and perform open-access alternative protein research tackling key white spaces to accelerate the growth of this sector.

2. **Establish alternative protein centers of excellence.**
   - Allocate another $1 billion to establish a national network of 20 interdisciplinary research centers to serve as technology hubs for conducting alternative protein research and fostering deep collaboration among academia and industry, including at 1890 historically Black land-grant universities to advance racial equity in America.

3. **Create an interagency Alternative Proteins Initiative.**
   - Establish an interagency initiative akin to the National Nanotechnology Initiative to coordinate federal research efforts on alternative proteins to improve efficiency and minimize duplication of effort.

We look forward to supporting the Biden-Harris Administration in building a more secure, sustainable, and just food supply that enables us to meaningfully advance our most critical climate goals.