

Alternative Protein Innovation in Illinois

The alternative protein industry is bringing new opportunities to businesses, farmers, and consumers in the Prairie State, as identified by Illinois' Alternative Protein Innovation Task Force. Illinois' agricultural capacity, world-class research institutions, and manufacturing infrastructure uniquely position it to lead in this sector, creating new jobs and sustainably advancing food security.

Bolstering industry

Illinois is home to 30 companies producing alternative protein products, ranking 3rd in the U.S.

Nature's Fynd, the groundbreaking Chicago-based fermented fungi company, has sold yogurt and meat products in Whole Foods since 2023. The company has 150 full-time Illinois employees, and announced in 2021 construction of a new 200,000 sq. ft. facility in Chicago.

Upton's Naturals is a food company producing meat alternatives from jackfruit, seitan, and fava beans. The company offers products at specialty grocery stores across the U.S. and at their West Town, Chicago restaurant, Liberation Kitchen, which opened in 2013.

Theo's Plant-Based is a Chicago-based startup that produces jerky made from sweet potatoes and beets. The startup uses the peel and skin of vegetables in their jerky to fight food waste.

OSI Group, a large meat processor and an original supplier to McDonald's, is based in Aurora. OSI Group partnered with Impossible Foods in 2019 to co-manufacture production of their flagship burger.

Clever Carnivore, Chicago's first cultivated meat company, raised \$7M in seed round funding in 2023 to expand its operations to produce cultivated pork sausage. The company has announced scientific breakthroughs enabling cost-effective production of cultivated pork at scale.

Archer Daniels Midland (ADM) is a leader in the alternative proteins space. ADM announced in 2022 a \$300 million investment to expand its alternative

protein production line in Decatur, Illinois and create a Protein Innovation Center.

Driving research

Illinois' world-class research institutions are at the forefront of R&D breakthroughs for alternative protein innovation and the broader biomanufacturing field.

University of Illinois Urbana-Champaign leads the **Illinois Fermentation and Agriculture Biomanufacturing Tech Hub** (iFAB Tech Hub), a world leader in precision fermentation and biomanufacturing, an industry expected to grow to \$200 billion over the next 15 years. The Central Illinois Hub is a partnership between industry and academic partners to scale production of alternative proteins and other high-value products, using fermentation and corn feedstocks.

In 2024, the U.S. Department of Commerce awarded iFAB \$51 million in funding to:

- * upgrade and expand existing facilities to allow more companies to commercialize fermentation technologies and increase production capacity;
- * share and expand capital access, and contract research organizations to attract global companies to the region and foster and retain home-grown entrepreneurs; and
- * design and implement sector-specific training across skill levels for new employees, out-of-school youth, and other underrepresented groups in the biomanufacturing workforce.



Photo credit: iFAB Tech Hub.

The University of Illinois Urbana-Champaign was awarded \$15 million over six years in 2024 from the National Science Foundation to establish a national center for biofoundry applications. The “iBioFoundry” will build on decades of university research to integrate synthetic biology, laboratory automation, and AI to advance protein and cellular engineering.

In 2024, the Grainger College of Engineering, Bioengineering at U of I received a four-year \$10.4 million research grant from the U.S. Defense Advanced Research Projects Agency (DARPA) to create a three-ingredient food from air, water, and electricity.

Northwestern University is also engaging in alternative protein research. From 2022 to 2024, GFI awarded the Department of Pharmacology a \$250,000 grant to reduce costs of cell culture media.

Northwestern Engineering’s Dr. Danielle Tullman-Erk founded Opera Bioscience, a startup which is now part of the Querrey InQbation Lab. Opera Bioscience is transforming protein manufacturing to improve alternative proteins and other consumer products. The startup received \$275,000 in funding in 2023 through the National Science Foundation (NSF) Small Business Innovation Research program and participated in NSF’s Innovation Corps, an experiential training program providing commercialization support.

Supporting farmers

Alternative proteins can diversify markets for Illinois corn, soy, and wheat. The state’s major commodity crops are important ingredients for the alternative protein sector. Plant-based and cell-cultivated meat, dairy, and eggs turn crops and their sidestreams—including starch and meal—into high-value ingredients, transforming otherwise costly waste into commercially viable food products.

Illinois farmers who incorporate plant proteins and feedstocks into their existing operations enjoy new sources of income, while ensuring a more sustainable future. Higher revenues have the potential to attract new young farmers and support the next generation of Illinois farms.



About GFI

The Good Food Institute is a 501(c)(3) nonprofit working internationally to make alternative proteins delicious, affordable, and accessible. GFI advances open-access research, mobilizes resources and talent, and empowers partners to create a sustainable, secure, and just protein supply. GFI is funded entirely by private philanthropic support.