

118TH CONGRESS  
1ST SESSION

# H. R. 5097

To amend the Food, Agriculture, Conservation, and Trade Act of 1990 to direct the Secretary of Agriculture to establish research centers of excellence for alternative protein innovation, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

AUGUST 1, 2023

Ms. BROWNLEY introduced the following bill; which was referred to the Committee on Agriculture, and in addition to the Committee on Education and the Workforce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## A BILL

To amend the Food, Agriculture, Conservation, and Trade Act of 1990 to direct the Secretary of Agriculture to establish research centers of excellence for alternative protein innovation, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Producing Real Oppor-  
5 tunities for Technology and Entrepreneurs Investing in  
6 Nutrition Act”.

1 **SEC. 2. FINDINGS.**

2 Congress finds the following:

3 (1) Protein innovation that produces the char-  
4 acteristics of animal protein using plants, animal cell  
5 cultivation, and fermentation is an essential compo-  
6 nent of the bioeconomy.

7 (2) The United States has produced several  
8 groundbreaking biotechnological breakthroughs  
9 across the alternative protein sector in the last dec-  
10 ade.

11 (3) In recent years, multiple countries have dra-  
12 matically increased public investments into alter-  
13 native protein research and development while gov-  
14 ernment spending in the United States is still ex-  
15 tremely modest.

16 (4) According to the United States Department  
17 of Agriculture, every one dollar of investment into  
18 agricultural research results in twenty dollars of eco-  
19 nomic productivity.

20 (5) As of 2019, the plant-based food industry  
21 supported over 55,000 jobs in the United States,  
22 and the alternative protein sector could create as  
23 many as 10 million jobs globally by 2050.

24 (6) Diversifying the protein supply of the  
25 United States will increase domestic supply chain re-  
26 silience, decrease reliance on foreign grain and other

1 commodities, and provide more choices to American  
2 consumers.

3 (7) The global demand for meat is predicted to  
4 double by 2050, thus increasing the need for addi-  
5 tional food sources such as alternative proteins.

6 (8) Widespread adoption of alternative proteins  
7 would decrease the risks associated with antibiotic  
8 resistance and zoonotic disease.

9 (9) Widespread adoption of alternative proteins  
10 would improve global and domestic food security.

11 (10) Widespread adoption of alternative pro-  
12 teins would improve the nutritional quality of the  
13 United States food system, contributing to improved  
14 health outcomes.

15 (11) Widespread adoption of alternative pro-  
16 teins would likely help the United States' food sys-  
17 tem become more climate-friendly and sustainable.

18 **SEC. 3. RESEARCH CENTERS OF EXCELLENCE FOR ALTER-**

19 **NATIVE PROTEIN INNOVATION.**

20 Section 1673 of the Food, Agriculture, Conservation,  
21 and Trade Act of 1990 (7 U.S.C. 5926) is amended by  
22 adding at the end the following:

23 “(d) CENTERS OF EXCELLENCE FOR ALTERNATIVE  
24 PROTEIN INNOVATION.—

1           “(1) RECOGNITION.—The Secretary shall recog-  
2           nize not fewer than 3 centers of excellence, one of  
3           which will be led by an 1890 Institution (as defined  
4           in section 2 of the Agricultural Research, Extension,  
5           and Education Reform Act of 1998 (7 U.S.C.  
6           7601)), to focus on the advancement of alternative  
7           proteins in the areas described in paragraph (2).

8           “(2) AREAS OF FOCUS.—

9           “(A) ALTERNATIVE PROTEINS RESEARCH  
10           AND DEVELOPMENT.—A center of excellence  
11           recognized under paragraph (1) may carry out  
12           research, development, and education programs  
13           that support the quality, production, or cost-ef-  
14           fectiveness of foods with the characteristics of  
15           animal meat using plants, animal cell cultiva-  
16           tion, or fermentation.

17           “(B) STUDENT SUCCESS AND WORKFORCE  
18           DEVELOPMENT.—A center of excellence recog-  
19           nized under paragraph (1) may engage in ac-  
20           tivities to ensure that students have the skills  
21           and education needed to work in the alternative  
22           proteins industries, including agricultural  
23           science, technology, engineering, mathematics,  
24           and related fields of study.

1           “(3) AUTHORIZATION OF APPROPRIATIONS.—  
2           There is authorized to be appropriated to carry out  
3           this subsection \$15,000,000 for each of fiscal years  
4           2024 through 2028.

5           “(4) REPORT.—Not later than 1 year after the  
6           date of enactment of the Producing Real Opportuni-  
7           ties for Technology and Entrepreneurs Investing in  
8           Nutrition Act, and every year thereafter, the Sec-  
9           retary shall submit to the Committee on Agriculture  
10          of the House of Representatives and the Committee  
11          on Agriculture, Nutrition, and Forestry of the Sen-  
12          ate a report describing—

13                   “(A) the resources invested in the centers  
14                   of excellence recognized under paragraph (1);  
15                   and

16                   “(B) the work being done by such centers  
17                   of excellence.”.

18 **SEC. 4. AGRICULTURE AND FOOD RESEARCH INITIATIVE.**

19          Section 2(b)(2)(E) of the Competitive, Special, and  
20          Facilities Research Grant Act (7 U.S.C. 3157(b)(2)(E))  
21          is amended—

22                   (1) by redesignating clauses (ii) through (v) as  
23                   clauses (iii) through (vi), respectively; and

24                   (2) by inserting after clause (i) the following  
25                   new clause:

1                   “(ii) characteristics of animal meat  
2                   using plants, animal cell cultivation, or fer-  
3                   mentation;”.

4 **SEC. 5. AGRICULTURAL RESEARCH SERVICE.**

5           (a) ESTABLISHMENT OF NATIONAL PROGRAM.—The  
6 Secretary of Agriculture, acting through the Adminis-  
7 trator of the Agricultural Research Service (referred to in  
8 this section as the “Secretary”), shall establish a new na-  
9 tional program dedicated to the research of alternative  
10 proteins that is focused on developing knowledge and ena-  
11 bling commercially-viable technologies related to foods  
12 with the characteristics of animal meat using plants, ani-  
13 mal cell cultivation, or fermentation.

14           (b) AUTHORIZATION OF APPROPRIATIONS.—There is  
15 authorized to be appropriated to carry out the program  
16 \$10,000,000 for each of fiscal years 2024 through 2028.

17 **SEC. 6. ALTERNATIVE PROTEIN ADVANCED MANUFAC-**  
18 **TURING AND PRODUCTION GRANT PROGRAM.**

19           (a) IN GENERAL.—Not later than 180 days after the  
20 date of enactment of this Act, the Secretary of Agriculture  
21 (referred to in this section as the “Secretary”) shall estab-  
22 lish a grant program to ensure that the United States has  
23 a viable domestic manufacturing and production capability  
24 to support and sustain increased global demand for alter-  
25 native proteins.

1 (b) ELIGIBLE ENTITIES.—An entity is eligible to re-  
2 ceive a grant under subsection (a) if—

3 (1) such entity is—

4 (A) a nonprofit or for-profit private entity;

5 (B) an institution of higher education;

6 (C) a National Laboratory;

7 (D) a State or local government; or

8 (E) a consortium of entities described in  
9 subparagraphs (A) through (D); and

10 (2) such entity—

11 (A) is headquartered in the United States  
12 and operates primarily within the United  
13 States;

14 (B) is at least 51 percent owned and con-  
15 trolled by 1 or more individuals who are citizens  
16 of the United States; and

17 (C) deploys intellectual property and con-  
18 tent that is owned by United States individuals.

19 (c) GRANTS.—

20 (1) USE OF FUNDS.—An entity that receives a  
21 grant under this section shall use funds received  
22 through the grant—

23 (A) to carry out 1 or more demonstration  
24 projects for the advanced manufacturing, pro-  
25 duction, or processing of alternative protein;

1 (B) to construct 1 or more new commer-  
2 cial-scale facilities for the advanced manufac-  
3 turing, production, or processing of alternative  
4 protein in the United States; and

5 (C) to retool, retrofit, or expand 1 or more  
6 existing facilities located in the United States  
7 and determined qualified by the Secretary for  
8 advanced manufacturing, production, or pro-  
9 cessing of alternative proteins.

10 (2) AMOUNT OF GRANTS.—The amount of a  
11 grant awarded under this section shall be not less  
12 than \$10,000,000 for an eligible entity carrying out  
13 1 or more projects described in paragraph (1).

14 (d) AUTHORIZATION OF APPROPRIATIONS.—There is  
15 authorized to be appropriated to the Secretary to carry  
16 out the program \$50,000,000 for each of fiscal years 2024  
17 through 2028.

18 **SEC. 7. ALTERNATIVE PROTEIN WORKFORCE DEVELOP-**  
19 **MENT GRANT PROGRAM.**

20 (a) IN GENERAL.—Not later than 180 days after the  
21 date of the enactment of this Act, the Secretary of Agri-  
22 culture (referred to in this section as the “Secretary”)  
23 shall establish a competitive grant program to support al-  
24 ternative protein workforce development.

1 (b) ELIGIBLE ENTITY.—An entity is eligible to re-  
2 ceive a grant under this section if the entity is—

3 (1) a governmental entity;

4 (2) a public, private, or cooperative organiza-  
5 tion organized on a for-profit or nonprofit basis; or

6 (3) an Indian Tribe (as defined in section 4 of  
7 the Indian Self-Determination and Education Assist-  
8 ance Act (25 U.S.C. 5304)) on a Federal or State  
9 reservation or any other federally recognized Indian  
10 Tribe.

11 (c) USE OF FUNDS.—An entity to which a grant is  
12 made under this section may use the grant funds to—

13 (1) train new and existing employees on alter-  
14 native protein production and processing methods;

15 (2) establish a center for training, technology,  
16 and trade that will provide training to employees  
17 who process alternative protein;

18 (3) provide higher-education scholarships to  
19 students pursuing careers in alternative protein pro-  
20 duction and processing, including at community col-  
21 leges;

22 (4) conduct regional, community, and local eco-  
23 nomic development planning and coordination for  
24 the purpose of increasing alternative protein produc-  
25 tion and processing;

1           (5) provide technical assistance to gain compli-  
2           ance with Federal, State, or local regulations related  
3           to alternative protein production and processing; or

4           (6) facilitate business and lending opportunities  
5           related to alternative protein production and pro-  
6           cessing, including identifying relevant information  
7           necessary for obtaining—

8                   (A) private capital investments;

9                   (B) Federal and State loan guarantees;

10                  (C) Federal and State direct grants; or

11                  (D) other financial support mechanisms  
12           from Federal and State entities.

13           (d) AUTHORIZATION OF APPROPRIATIONS.—There is  
14           authorized to be appropriated to carry out this section  
15           \$25,000,000 for each of fiscal years 2024 through 2028.

16   **SEC. 8. NATIONAL STRATEGY ON ALTERNATIVE PROTEINS.**

17           (a) ESTABLISHMENT OF A NATIONAL STRATEGY ON  
18           ALTERNATIVE PROTEINS.—The Secretary of Agriculture  
19           (referred to in this section as the “Secretary”) shall—

20                   (1) establish a national strategy on alternative  
21           proteins in coordination with the Secretaries con-  
22           cerned that meets the requirements of subsection  
23           (c); and

24                   (2) not later than 1 year after the date of en-  
25           actment of this Act, finalize such strategy.

1 (b) CONSIDERATIONS.—When developing the na-  
2 tional strategy under subsection (a), the Secretaries con-  
3 cerned shall consider—

4 (1) the best available science related to prod-  
5 ucts with the characteristics of animal meat using  
6 plants, animal cell cultivation, and fermentation;

7 (2) the societal benefits of expanding research,  
8 development, and production of alternative proteins  
9 relating to—

10 (A) personal and public health;

11 (B) climate change and energy;

12 (C) food and agricultural innovation;

13 (D) resilient supply chains; and

14 (E) cross-cutting scientific advancements;

15 (3) global competition and the economic bene-  
16 fits of alternative proteins relating to—

17 (A) future economic productivity;

18 (B) job creation in the biotechnology sec-  
19 tor; and

20 (C) existing public investments and strate-  
21 gies of competitor countries; and

22 (4) existing policies and programs offered by  
23 the Federal and State governments that—

1 (A) fund open-access research and develop-  
2 ment at higher-learning institutions and govern-  
3 ment agencies;

4 (B) incentivize private sector research and  
5 development;

6 (C) support new and existing alternative  
7 protein producers and manufacturers;

8 (D) support farmers in the United States  
9 that produce outputs related to alternative pro-  
10 teins; and

11 (E) represent a barrier for effective—

12 (i) open-access alternative protein re-  
13 search and development;

14 (ii) scale-up of alternative protein pro-  
15 duction and manufacturing; and

16 (iii) regulatory oversight.

17 (c) CONTENTS.—The national strategy shall—

18 (1) use a whole-of-government approach to en-  
19 sure that the United States remains the global lead-  
20 er of alternative protein research, development, pro-  
21 duction, and workforce development for future gen-  
22 erations; and

23 (2) include—

1 (A) objectives to fulfill the purpose of the  
2 national strategy specified in paragraph (1), in-  
3 cluding interagency coordination;

4 (B) barriers to fulfill such purpose;

5 (C) solutions to the barriers identified in  
6 subsection (b)(4)(E); and

7 (D) a plan for the implementation of the  
8 national strategy.

9 (d) SECRETARIES CONCERNED DEFINED.—In this  
10 section, the term “Secretaries concerned” means—

11 (1) the Secretary of Defense;

12 (2) the Secretary of Energy;

13 (3) the Secretary of Commerce;

14 (4) the Director of the National Science Foun-  
15 dation;

16 (5) the Director of the National Institutes of  
17 Health;

18 (6) the Commissioner of Food and Drugs;

19 (7) the Director of the Centers for Disease  
20 Control and Prevention;

21 (8) the Administrator of the Environmental  
22 Protection Agency; and

23 (9) the Director of the Office of Science and  
24 Technology Policy.

1 **SEC. 9. RULE OF CONSTRUCTION.**

2       Nothing in this Act, or an amendment made by this  
3 Act, shall be construed to support the production of in-  
4 sects for food or animal feed.

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