













Food Sovereignty Workshop: Community-Centered Approaches for Food Systems Transformation

This work is supported by AFRI Sustainable Agricultural Systems (SAS) grant no. 2021-69012-35918 from the USDA National Institute of Food and Agriculture.

My Journey



- Academic Background
- Non-Profit & Community Experience
- Back to Academics
- Current Work
 - FDA
 - Growing Healthy Communities
 - SUSHI

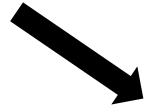


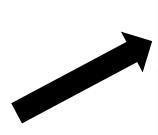
One table. One connection.



















Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems.

It puts those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations.

- Declaration of Nyéléni, 2007, International Forum on Food Sovereignty

7 Pillars of Food Sovereignty

- 1. Food as a Human Right
- 2. Agrarian Reform
- 3. Natural Resource Protection
- 4. Food Trade Reorganization
- 5. Ending Globalization of Hunger
- 6. Social Peace
- 7. Democratic Control





Food sovereignty implies new social relations free of oppression and inequality between men and women, peoples, racial groups, social classes and generations.

Food sovereignty makes sense for people in both, rural and urban areas, and poor and wealthy countries.

It is as much a space of resistance to neoliberalism, free market capitalism, destructive trade and investment, as a space to build democratic food and economic systems, and just and sustainable futures. [...]

- Nyéléni Forum for Agroecology - 2017



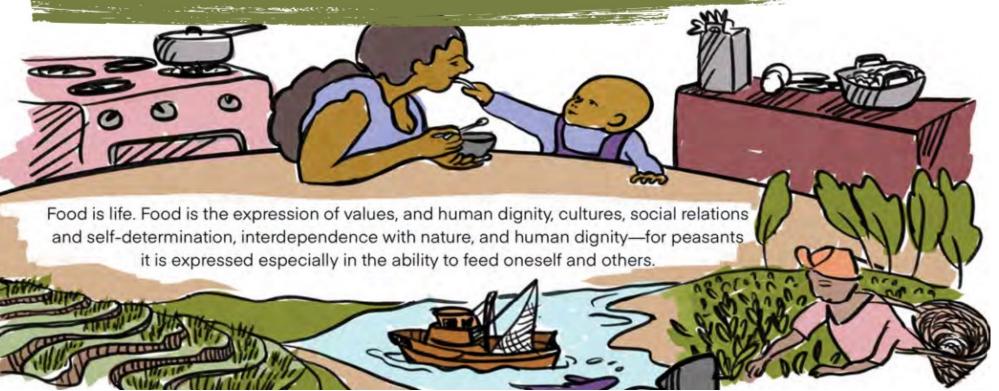




October 3, 2022



THE RIGHT TO ADEQUATE FOOD AND NUTRITION REQUIRES THE RIGHT TO FOOD SOVEREIGNTY



SUSHI Project Overview:

Our multidisciplinary team is led by a HBCU, and collaborators include another 1890 HBCU, a 1994 Tribal College, and multiple 1862 Institutions. The team aims to:

- 1. support use of hemp as a safe ingredient, leading to approval as an economically and environmentally sustainable fish feedstuff;
- 2. expand domestic markets for hemp and trout;
- 3. increase workforce diversity in agriculture; and
- 4. improve economics and public health of Menominee Nation through increased local production of fish and produce.

Our extension and education products will serve as models enhancing intertribal research and extension relationships and impacting the national health and economic stability of Native Americans and other URM.

All project outcomes will contribute to the USDA goal of transforming the food and agricultural system to increase American agricultural production by 50% and reduce environmental footprint by 40% by 2050, while improving the lives of rural, low-income, and URM.

SUSHI Project Collaborators

- Brandy Phipps, Ph.D., Central State University
 Project Director & Lead PI, Education
- Craig Schluttenhofer, Ph.D., Central State University
 Lead PI, Analyses of Hemp Grain and Feed & Cannabinoid Metabolism Trials
- KrishnaKumar Nedunuri, Ph.D., Central State University Lead PI, Water quality monitoring in RAS
- Waldemar Rossi, Jr., Ph.D., Kentucky State University Lead PI, Feeding Trials
- Brian Kowalkowski, M.S., College of Menominee Nation Lead PI, Development of Research at CMN & Extension
- Tyler Mark, Ph.D., University of Kentucky Lead PI, Production Economics
- Brandon McFadden, Ph.D., University of Arkansas Lead Pl, Consumer Economics
- Seong Yun, Ph.D., Mississippi State University Lead Pl, Ecosystems Services



Objectives & Tasks

Research: Use of hemp as feedstuff for trout in aquaculture.

Education: Tribal College/HBCU articulation - positively impacting atrisk student completion and provide cross-cultural learning experiences, increasing MR degree-holders by 1.4%.

Extension: Provision of aquaponics systems to certificate graduates - building production capacity, economic stability, and workforce (0.36%) in a disadvantaged population.

Research: Establishment of long-term, independent research line at a Tribal College to increase education and funding opportunities.

SUSHI

Recent Work

Study Protocol to Measure the Impact of a "Farm-to-Fork" Program on Food Security and Nutrition Outcomes in the Menominee

Brandy Phipps,1 Brian Kowalkowski,2 Jeremy Wescott,2 Mc-Fadden Brandon,3 Craig Schluttenhofer,1 and KrishnaKumar

¹Central State University; ²College of Menominee Nation and 3University of Delaware

Objectives: Native Americans have higher food insecurity and negative health outcomes than non-Native citizens. One way to address this problem are community-based programs targeted to improve Native Americans. The Menominee Nation (MN) is located on the Menominee Indian Reservation, also referred to as Menominee County, WI. In a 2015 Community Food Assessment (CFA) of the MN, 73% of respondents reported hunger as a concern. Additionally, county health data indicate that Menominee County ranks last in the state for both food security and health outcomes. A recent archeological discovery of MN's ancestral community garden bed sites has renewed interest in food sovereignty, with 65% of CFA respondents reporting an interest in growing their food if assistance was available. We present a study protocol of "farm-to-fork" programming developed to

address these expressed needs for greater food sovereignty among MN Tribal Members. Further, we present a protocol to use primary and secondary data pre- and post- to assess outcomes. Our hypothesis is that community-centered nutrition programming and support will increase production, self-efficacy, and consumption of nutrient-dense foods by

Methods: A new extension aquaponics facility is being developed to raise fish and culturally relevant produce desired by MN. Over the next four years, education programming will be offered through field days and Native Chef demonstrations at the Farmer's Market, as well as workforce training and start-up funds for new aquaponic producers. Pre- and post-surveys measuring self-efficacy, food sovereignty, and nutrition and health outcomes relevant to the needs and priorities of nutrient intake are combined with county health data to make comparisons before and after implementation of programming.

Results: Expected Results We expect an increase in production, self-efficacy, and consumption of nutrient-dense foods by Menominee Tribal Members, leading to an increase in food sovereignty of the MN.

Conclusions: We believe this project serves as a model for creating sustainable and effective nutrition/health partnerships with historically disadvantaged and excluded populations.

Funding Sources: This work is supported by the USDA National Institute of Food and Agriculture.

Nutrition

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Study Protocol to Measure the Impact of a "Farm-to-Fork" Program on Food Security and Nutrition Outcomes in the Menominee Nation 3

Brandy Phipps, Brian Kowalkowski, Jeremy Wescott, McFadden Brandon, Craig Schluttenhofer, KrishnaKumar Nedunuri

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Study Protocol to Measure the Impact of a "Farm to Fork" Program on Food Security and Nutrition Outcomes in the Menominee Nation Brandy E. Phipps¹ (bphipps@centralstate.edu), Brian Kowalkowski², Jeremy Wescott², Brandon R. McFadden³, Craig Schluttenhofer¹, and KrishnaKumar Nedunuri¹ ¹Central State University, ²College of Menominee Nation, ³University of Delaware

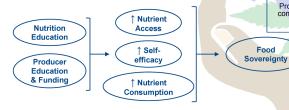
This work is supported by the Sustainable Agriculture Systems Competitive Grant no. 2021-69012-35918 from the USDA National Institute of Food and Agriculture.

Motivation:

- 1) Native Americans have higher food insecurity & negative health outcomes than non-
- 2) Targeted & community-centered programming can improve nutrition & health outcomes. 3) Equitable & culturally relevant programs are needed in historically disadvantaged
- 4) Menominee Tribal Members have expressed desire for holistic & sustainable programming that addresses education, nutrient access, food sovereignty, & economic needs in their community.

Objectives:

- 1) Increased production of nutrient-dense foods desired by community.
- 2) Increased self-efficacy & consumption of nutrient-dense food.
- 3) Increased food sovereignty of the Menominee Nation (MN).



TASK 1: Conduct Focus Groups

Determine community perspective on food security & sovereignty & desired foods.

TASK 2: Community Aquaponics Facility

Produce & distribute culturally-accepted, nutrient-dense foods in MN.

TASK 3: Community-centered Nutrition & Production
Programming

Provide workforce training & certification in aquaponics. Provide community-centered programming in production & preparation of nutrient-dense foods.



Provide start-up funds and equipment to certificate graduates.









Figures (clockwise): Welcome sign; walleye in aquaculture tank; lettuce sales at Keshena Farmer's Market (KFM); vegetable booth at KFM.





















Lessons (being) Learned

- "Best Practices" vs. BEST Practices (Community Needs Assessments)
- Microequity/Equity within Equity
- Flexibility and Cultural Humility
- Place-Based Work
- Asset-Based Mindset



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https://twitter.com/sas_sushi

