



Evaluation and Assessment of Fish Consumption Outreach Campaigns and Tools

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Background/Context:

Seafood consumption reflects a delicate balance between promoting optimal nutrition and protecting against contaminants that may be present in edible seafood. In some cases, nutritionally beneficial aspects of seafood (e.g., omega-3 fatty acids) and contaminants (e.g., mercury) affect health in opposing ways, which complicate public health guidance. For example, health studies suggest a diet rich in protein and omega-3 fatty acids is beneficial for maternal and child health, including improved neurodevelopment, so seafood consumption is recommended during pregnancy and early childhood by leading public health and medical organizations. However, mercury, a common contaminant found in edible seafood tissue, is known to adversely impact neurodevelopment, leading the same public health and medical organizations to recommend that pregnant persons and young children use caution when consuming seafood to avoid mercury exposure. Such contradictory messaging is confusing to consumers and health studies have found that the majority of the U.S. population is deficient in omega-3 fatty acids.

Nuanced risk communication is required to encourage fish eating while overcoming the fear of mercury exposure. While the [U.S. Environmental Protection Agency provides general guidance](#) for how to disseminate this complex information to the general public, state public health officials, like Project #2 partners from the Vermont Department of Health (VDH) Environmental Health Division, are frequently on the front lines of establishing seafood consumption guidance that reflects local conditions and communicating this information to the general public. Recent initiatives like VDH's [Eat Safe Fish Cards](#) strive to make information as straight-forward and accessible as possible by providing clear recommendations for seafood options that are low in mercury. VDH also recently updated their website about [mercury in seafood](#) and created a [Fish Meal Mercury Calculator](#) to provide the general public with additional detail if people wish to learn more. Funds used by VDH to support the development and dissemination of the tools to improve seafood consumption guidance were provided via the U.S. Centers for Disease Control and Prevention (CDC), National Center for Environmental Health (NCEH) via a grant titled "Strengthening environmental health capacity (EHC) to detect, prevent, and control environmental health hazards through data-driven, evidence-based approaches."

Research Description:

Tools developed by VDH to convey seafood consumption guidance have been in active use since May of 2025 and partners from VDH are interested in evaluating the effectiveness of both the tools themselves and the modes and means of outreach. Specific questions of interest include:

- Is there evidence that the cards and/or calculator have raised awareness among seafood consumers about safe options for seafood consumption since their launch in mid-2025?
- Do people tend to know how much fish they consume and how frequently they do so?
- Have people's seafood consumption behaviors changed as a result of the website / fish cards / calculator?
- Have the communication mechanisms been effective in conveying the needed information? If not, how can/should tools be improved?
 - Is the information understandable and compelling to diverse audiences?
 - Are risks and benefits of seafood successfully communicated?
 - Has the nuance of weighing simultaneous risks and benefits of seafood consumption been effectively communicated?
 - Would posters or other communication formats have a broader reach than cards and/or calculator?
 - Are VDH partners (e.g., obstetrics and gynecology (OB/GYN) offices where people receive prenatal and postpartum care) displaying and distributing information as VDH hopes / assumes?

Resources such as [CDC's Program Evaluation Framework, 2024](#) may be a useful for students in this team to consider as they collaborate with VDH on this project.

Students in this team will start with a focus on pregnant persons who are hopefully gaining access to fish consumption information through OB/GYN offices and conversations with Family & Child Health Nurse Coordinators, to answer questions about communication efficacy towards the goals of disseminating information and spurring behavior change, students may use methods such as:

- Hosting focus groups among consumers to obtain feedback on the outreach tools currently in place.
- Interview Family and Child Health Nurse Coordinators and staff at OB/GYN offices to deduce:
 - Are cards displayed within waiting areas and/or offices for patients/clients to access? If so, how?
 - Are cards place in information packets for patients/clients?
 - What type of additional waiting room outreach could also be effective?
 - What questions do patients/clients ask clinicians/staff about the information shared?

- Develop questions that could be added to late-term prenatal surveys to gather information about understanding of seafood consumption information and associated behavior change.

As time allows, students in this team could engage with similar activities to support dissemination of seafood consumption advice at grocery store fish counters. This may involve:

- Designing outreach strategies to get the card out to point of sale locations.
- Hosting focus group conversations with shoppers.
- Interviews with grocery store representatives to assess the effectiveness of outreach means and modes in grocery stores.

Your partner has identified the following deliverables as most helpful to their work:

- A report sharing qualitative and quantitative data that can be used to assess the effectiveness of the outreach.
- Recommendations for improvements to outreach tools.
- Recommendations for improvements to communication strategies.

Developing and Evaluating Implementation Strategies for the Vermont Food Security Roadmap

Community Partner: Carlin Molander, Vermont Food Security Coalition Project Lead



Background/Context:

Food insecurity is widespread in Vermont, estimated to impact somewhere between 5-20%^{1,2} of the population. While physically being hungry is an obvious effect of food insecurity, the impacts of hunger on people's health and wellbeing are far reaching. For example, approximately 60-70%³ of people experiencing hunger report being forced to make financial sacrifices in other essential areas such as utilities, transportation, healthcare, and housing. Furthermore, people experiencing hunger are more likely to develop common chronic diseases (e.g., diabetes, hypertension) across the life course and children who experience food insecurity are additionally susceptible to developing behavioral problems and/or have poor educational outcomes. People from marginalized backgrounds (e.g., lower education and income, racial and/or ethnic minority, elderly, and/or disability) are at greatest risk of experiencing food insecurity.

The COVID-19 pandemic exposed and drew attention to vulnerabilities within Vermont's foods systems that strive to meet the needs of Vermonters as the number of people experiencing food insecurity grew sharply. Now, with social service, financial assistance, agricultural, environmental, and public health programs under extreme threat due to destabilization of federal funding to support this critical work, food insecurity is poised to rise again.

[The Vermont Food Security Coalition](#) (the Coalition) is a deep collaboration between seven Member organizations: NOFA-VT, Vermont Foodbank, Hunger Free Vermont, Intervale Center, the Land Access and Opportunity Board, Feeding the Valley Alliance, and the Vermont Sustainable Jobs Fund. Formed in 2024, the Coalition's mission is to achieve lasting food security in Vermont by 2035, guided by the goals, objectives, and strategies outlined in the [Vermont Food Security Roadmap to 2035](#) (the Roadmap). Developed through an intensive, statewide process, the Roadmap outlines systemic strategies to ensure that everyone in Vermont has reliable access to nourishing food, while farms remain viable, and communities become more climate resilient. The Coalition believes true food security for everyone in Vermont can be achieved by 2035 if we all join together as partners in this historic effort.

Research Description:

The Roadmap was released in 2024 and establishes a powerful vision to address food insecurity in Vermont, which, if achieved, will radically transform the state's ability to feed all Vermonters, including our most vulnerable neighbors. However, much work needs to be done to determine exactly how the Roadmap's objectives and strategies will be achieved.

Students working on this project will work closely with the partner to develop a strategies to implement Roadmap [Objective C3: Local Food Access](#). Specific questions of interest include:

- What is the current status of the objective?
- What leadership already exists throughout the state to address the objective and what leadership gaps exist?
- What actions are already underway and/or currently missing to address the objective?
- What would success look like for the objective? How might success be monitored and evaluated into the future?
- What timeline might be appropriate for achieving the objective?

Students in this team will engage with a range of activities including:

- Research to learn about what policy, programs, and infrastructure already exist within Vermont that support strategies in C3: Local Food Access.
- Research to learn about how food security issues and local food access initiatives are being approached outside of Vermont and how they could be adapted for Vermont.
- Interviews with key informants who have expertise related to Roadmap Objective C3: Local Food Access.
- Synthesis of findings from research and interviews in order to create strategy recommendations for your partner.

If time allows, your group may expand its work to repeat a similar process for Roadmap Objectives C1: Town Planning and/or C2: Local Collaboration, a decision that will happen organically through dialogue with your partner and Professor Crawford throughout the semester.

Your partner has identified the following deliverables as most helpful to their work:

- Structured research guides outlining your methods and results from your research and interviews, including a list of key contacts in this arena that you have identified through your work, the status of work already underway, and recommendations for moving the strategy, and ultimately the goal, forward.
- Strategy recommendations that the Project Lead can share with the Coalition for how they can implement and achieve Goal C3 (and other Goals as time allows).

Citations:

1. Farm to Plate testimony to Vermont legislative committees - <https://legislature.vermont.gov/Documents/2024/WorkGroups/Senate%20Agriculture/Food%20Security/Food%20Security%20Roadmap/W~Becka%20Warren~Food%20Security%20Roadmap%20January%202024%20Speaker%20Materials~1-24-2024.pdf>
2. Vermont FoodBank - www.vtfoodbank.org/advocacy/learn-about-hunger/
3. Feeding America - <https://www.feedingamerica.org/hunger-in-america/impact-of-hunger>

Working Towards Climate Justice through Communications and Storytelling (Nicknames: Team Justice, GMJ Project #1)



Community Partners: Tom Morgan, Founder and Executive Director, Green Mountain Justice; Corey Hendrickson, Vermont-based filmmaker, photographer, and storyteller

Background/Context:

Undercurrents and visible examples of disconnect between Vermont's privileged and marginalized communities are numerous. Vermont paradoxically combines progressive values with persistent disconnection that leaves marginalized neighbors disenfranchised, without adequate support and solidarity, keeps privileged individuals complicit in oppressive systems, and prevents collaborative solutions from emerging through proximity and authentic relationship. Environmental justice fails when those protected from climate impacts don't work alongside those bearing the burden.

[Green Mountain Justice](#) (GMJ) is a Vermont community justice ministry¹ working at the intersection of environmental justice, social equity, and community resilience. The work of this team in partnership with GMJ will strive to address a critical gap: elevating and making legible the voices and lived experiences most absent from environmental conversations are those of people directly experiencing climate vulnerability—unhoused neighbors, impoverished families, marginalized communities facing the daily reality of weather extremes and housing instability.

This will be inherently challenging work at the intersection of marginalization, oppression, and environmental vulnerability. Students will encounter neighbors experiencing homelessness in Vermont's harsh winters, families choosing between heat and food, communities systematically excluded from decision-making about their own futures, and the daily indignities that compound when poverty, racism, classism/caste/tribalism, ableism, and climate impacts converge.

Research Description:

Climate narratives systematically exclude those most affected. This student team will work to create communication materials that center the voices of marginalized neighbors and impoverished families whose lives have been directly affected by environmental and social determinants of health—those who experience weather extremes acutely. This approach challenges dominant environmental discourses while elevating grassroots wisdom about resilience and systemic failures. Work will include:

¹ GMJ is structured as a community justice ministry because our work rests on three essential foundations: (1) helping people find purpose and meaning, (2) helping them establish and maintain healthy relationships while detaching from unhealthy ones, and (3) helping them more deeply connect with and through that which is transcendent (values, 'God,' nature, the sacred). Ministry is the relational technology we use to develop authentic relationships and advocate with and for the marginalized. It's also how we help privileged neighbors—who might be intellectually invested in climate justice—engage directly with neighbors for whom environmental factors have played a significant role in their marginalization and disenfranchisement.

- Organizing and implementing a comprehensive media dissemination strategy across multiple platforms (e.g., Substack, Spotify, Apple Music, social media) to amplify marginalized voices and GMJ's proximity-based ministry
- Supporting the production and promotion of podcasts, visual art and imagery, etc. (e.g. [Voices from the Edge podcasts](#)) that will document the lived experiences of unhoused neighbors facing extreme weather
- Developing social media and print content representing GMJ's proximity-based ministry which could include documenting GMJ events through photography, video, and narrative
- Translating learnings around climate vulnerability and emergency shelter systems to:
 - Articulate the intersection of climate change, housing instability, and public health
 - Develop advocacy materials for policy and systems-level change work that connects climate justice with housing rights and “Warmth with Dignity”
 - Document systemic barriers leaving marginalized neighbors most exposed to climate impacts

Your partner has identified the following deliverables as most helpful to their work:

- A description of the proposed media dissemination strategy.
- Communications content for print, web, and social media platforms.

Proximity, Equity, and Transformation: Building Formation and Infrastructure for Sustained Solidarity (Nicknames: Team Equity, GMJ Project #2)



Community Partners: Tom Morgan, Founder and Executive Director, Green Mountain Justice; Margaret Miles, PhD, Associate Professor of Social Work, Vermont State University (VTSU); Brock Leach, D.Min, Unitarian Universalist Ministry in Community-Building

Background/Context:

Undercurrents and visible examples of disconnect between Vermont's privileged and marginalized communities are numerous. Vermont paradoxically combines progressive values with persistent disconnection that leaves marginalized neighbors disenfranchised, without adequate support and solidarity, keeps privileged individuals complicit in oppressive systems, and prevents collaborative solutions from emerging through proximity and authentic relationship. Environmental justice fails when those protected from climate impacts don't work alongside those bearing the burden.

[Green Mountain Justice](#) (GMJ) is a Vermont community justice ministry¹ working at the intersection of environmental justice, social equity, and community resilience. The work of this team, in partnership with GMJ, addresses a fundamental challenge: privileged neighbors want to help but often don't know how to engage authentically without causing harm—and even when prepared, lack clear pathways for sustained engagement.

This team will support the development of “Bending the Arc”. educational materials AND the infrastructure (volunteer systems, congregation partnerships, funding mechanisms) required for authentic, sustained solidarity across difference. Environmental movements often fail to address how privilege shapes who is protected from climate impacts and who bears the burden. This integrated approach explicitly connects environmental justice with intersectional equity, preparing participants to work alongside marginalized neighbors rather than 'for' them, while building the systems that make sustained proximity-based engagement possible.

Research Description:

“Bending the Arc” is envisioned as adult education, systems design, and community organizing project that seeks to prepare privileged neighbors to authentically engage in proximity-based justice ministry while building infrastructure that sustains that engagement. Through research, curriculum development, systems design, and deep engagement with trauma-responsive care principles, intercultural competence

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frameworks, and nonprofit capacity-building, this integrated student team will work collaboratively across interconnected areas including:

- Supporting the development of GMJ's collaborative formation entitled "*Bending the Arc: Proximity, Equity, and Transformation*" in collaboration with Vermont State University's Center for Social Justice and Trauma-Responsive Care
 - Assist with the development of scenario-based learning materials preparing 'neighbors of privilege' to authentically connect with marginalized community members
 - Research and integrate environmental justice content into trauma-responsive care training
 - Research best practices in intercultural competence/humility and proximity-based education
- Infrastructure Support
 - Research and develop community (e.g., faith communities) partnership models and volunteer recruitment systems for GMJ's Neighbor Care Network that create ongoing support rather than one-time engagement
 - Document and strengthen educational partnership coordination across GMJ, VTSU, and community.

As time allows students in this team will research sustainable funding mechanisms (e.g., peer-to-peer campaigns, sustained giving models, etc.) to support "Bending the Arc"

Your partner has identified the following deliverables as most helpful to their work:

- A report summarizing research and findings from your work throughout the semester.
- Scenario-based learning materials to serve as a foundation for Bending the Arc curriculum.

Notes about this project:

- Students in this team will work closely with Dr. Miles and students in VTSU's Social Work Program, specifically those enrolled in Social Work Practice III, a capstone course analogous to ENVS 401, through the Center for Social Justice & Trauma-Responsive Care.
- Ideally, as schedules allow, students in this group will attend a few sessions of Dr. Miles' seminar throughout the semester to facilitate collaboration between Middlebury and VTSU students, and environmental studies and social work disciplines as they pertain to this project.
- Dr. Miles will lead work on the Bending the Arc formation curriculum while Rev. Dr. Leach will lead work on mobilizing privileged communities to engage sustainably in proximity-based ministry. Collectively, these partners' expertise will support the formation of curriculum that explicitly prepares people for the volunteer systems being built.
- Together, these partners' expertise will help to create a complete pathway from awareness to sustained, authentic engagement in proximity-based justice.