

Practicum Abstracts 2024

Degree: MPH-65

Field of Study: Nutrition

Project Title	Project Summary or Abstract
Medically Tailored Grocery Boxes with Community Serving	<p>The Medically Tailored Grocery Boxes project with Community Servings aimed to empower patients with chronic health conditions by teaching them to cook healthy meals aligned with their medical needs. Traditionally known for delivering prepared meals, Community Servings expanded its services to include grocery boxes, each providing ingredients and recipes for two meals per day over one week, with a daily calorie range of 1200 to 1500. Three tailored boxes—Wellness, Vegetarian, and Renal—were developed to meet specific dietary requirements, including low-sodium options and culturally appropriate ingredients. My role involved leading recipe development and nutritional analysis, particularly for the Renal Box, which required precise adjustments for complex dietary restrictions. This project provided firsthand experience in public health nutrition, leadership, and program design, while reinforcing my commitment to nonprofit work that enhances health outcomes and empowers individuals. Set for distribution in January 2025, the grocery boxes are designed to give patients the tools and knowledge they need to manage their health independently.</p>
Metabolic and Mental Health	<p>The Metabolic and Mental Health Program at McLean Hospital aims to progress the metabolic theory of mental illness by conducting original research, advancing the theory, and providing training opportunities for clinicians.</p>
Investigating the Public Health Impact of Toddler Milk Marketing Practices	<p>My practice project, titled "Investigating the Public Health Impact of Toddler Milk Marketing Practices," focuses on understanding how toddler milk products are marketed in the U.S. and their potential public health implications. Collaborating with The CAUSE, a U.S.-based nonprofit organization, I conducted a comprehensive literature review on the marketing of toddler milks and analyzed their nutritional content. The project specifically examined how marketing claims, especially those related to brain development and immunity, align with the nutritional quality of the products and international standards, such as Codex Alimentarius.</p> <p>A total of 24 studies, out of an initial 260 screened, were selected for final analysis, while six popular</p>

	<p>toddler milk brands were subjected to a comparative nutritional analysis. The results revealed significant variability in nutrient content, with many products exceeding recommended sugar levels and lacking consistency in key nutrients like protein, fat, and carbohydrates. Additionally, marketing strategies closely resembled those of infant formulas, leading to consumer confusion about the necessity of toddler milks.</p> <p>The findings of this project highlight the need for stricter regulation of toddler milk products in the U.S. to ensure adherence to health standards and to protect consumers from misleading claims. These insights are essential for public health advocates, caregivers, and policymakers working to promote healthier dietary habits among young children.</p>
<p>Pathway to Healthy Adulthood - Food Security and Nutrition Education for Immigrant Families</p>	<p>This summer, I completed my MPH practicum at Quincy Asian Resources, Inc. (QARI), a non-profit organization that strengthens the social, cultural, and economic lives of immigrants in New York City, Providence, and Quincy. I worked with QARI's 'Pathway to Healthy Adulthood' program, which improves access to fresh produce in schools and provides nutrition education to children and their families. The program also connects families with critical services like language classes and SNAP enrollment.</p> <p>My role focused on developing a mixed-methods evaluation plan to assess the program's impact, using both qualitative and quantitative data. I enjoyed applying my creativity to shape evaluation strategies, and I was able to suggest improvements that would enhance future program effectiveness.</p> <p>This experience allowed me to apply my public health training in a real-world context, deepening my understanding of how social determinants like language proficiency and food security shape health outcomes. Working with QARI, I learned about the importance of delivering culturally appropriate interventions, especially for immigrant communities.</p> <p>Overall, my practicum reinforced my passion for addressing the intersection of chronic disease and social determinants of health. I am excited to take these learnings forward as I continue to work</p>

	toward designing effective, targeted interventions to improve health outcomes in marginalized communities.
Developing New Resources for the Boston Children's fit kit	For my practicum, I worked with the New Balance Foundation Obesity Prevention Center to develop new resources for the Boston Children's fit kit. The fit kit is an existing set of over 300 resources designed to be used by community partners to promote healthy behaviors for children who participate in their programs. The fit kit focuses on five topics: sleep, nutrition, fitness, stress, and screen time. Resources in the fit kit come in the form of handouts, activity cards, worksheets, and policy recommendations for community partners who use the resources. For my project, I helped the team develop new nutrition resources for kids who exercise.
Assessing College Food Insecurity: Evaluating the Viability of a Startup Solution	During my practicum, I conducted research on colleges within the startup's addressable market to assess their strategies for addressing food insecurity. This involved analyzing how these institutions tackle food access challenges and evaluating their potential for funding the food boxes produced by my company. By identifying key initiatives and funding mechanisms at various colleges, I aimed to understand how our offerings could align with their needs and support their efforts to combat food insecurity among students.
Role of Food Vendors in School Food Environments: A Qualitative Study in Dar es Salaam, Tanzania	My practicum project explores the role of food vendors in shaping healthier school food environments for adolescent students in Dar es Salaam, Tanzania. This project was conducted in collaboration with Professor Wafaie Fawzi and the Africa Academy for Public Health (AAPH). I had the opportunity to design the study and lead it from start to finish, including traveling to Dar es Salaam during the summer to conduct primary qualitative research with the AAPH team. The study was conducted in two secondary schools and took a multi-stakeholder approach, including workshops with 33 food vendors, focus group discussions with 32 adolescents, and interviews with two school principals. The findings highlighted several opportunities to promote more diverse and nutritious foods in schools. At the individual level, food vendors could benefit from enhanced nutrition knowledge and improved cooking and food safety skills, while students should receive complementary nutrition education. At the school level, standard operating procedures for food vendors should be developed, with efforts to empower vendors through awareness, skills building, and improved monitoring and enforcement of policies by teachers. Finally, at the policy level, the

	<p>government could consider implementing a national school meal program to provide food for students.</p>
<p>Enhancing Maternal and Child Health Through Integrated Community Care at the Delta Health Center</p>	<p>My service learning project focused on addressing maternal and child health (MCH) disparities in the Mississippi Delta through collaboration with the Delta Health Center (DHC) in Mound Bayou. The goal of my project was to enhance the region's MCH services by developing a comprehensive training curriculum for maternal health workers and establishing a referral system between nutritionists and healthcare professionals. I also aimed to lay the groundwork for future doula training programs and expand culturally competent care to underserved populations.</p> <p>I conducted this project between June and August 2024, during a critical time when Mississippi's maternal health system was under immense strain due to healthcare provider shortages and the impact of the Dobbs decision. My key tasks included designing a curriculum on topics such as preeclampsia, mental health, and gestational diabetes, as well as integrating community feedback through informal surveys and conversations with local health workers and patients.</p>
<p>Universal Free School Meal Policy Implications</p>	<p>Universal Free School Meal (UFSM) policies are gaining traction as more states pass state-wide policies after the temporary COVID-19 federal UFSM policy lapsed. UFSM policies have been shown to improve children's nutrition, overall health, sleep, and academic performance. More information is needed to assess the psychosocial impacts of UFSM. For my project,</p>
<p>Nutritional Evaluation of the "Daily Dollar Meal" at Harvard T. H. Chan School of Public Health</p>	<p>At the Harvard T.H. Chan School of Public Health, an estimated 20% of students experience food insecurity, prompting the implementation of initiatives to address this challenge. To combat this, one notable program is the "Daily Dollar Meal" offered at Sebastian's Café, where any student or faculty member can purchase a pre-selected meal for just \$1. Launched in January 2020, this option has received positive feedback for its accessibility and popularity across the Longwood campus.</p> <p>Despite its widespread use, there has been a lack of evaluation regarding the nutritional and caloric adequacy of the Daily Dollar Meal. Therefore, I chose to assess the nutritional quality of this program by comparing the meal offerings to a standard diet of 2,500 kcal, utilizing the standard American diet and EAT-Lancet human and planetary health guidelines. By examining the meals in this context, it can be determined whether the Daily Dollar Meal can effectively meet the dietary needs of students and</p>

	<p>faculty, contributing to the broader discourse on food security and health within academic environments.</p>
<p>Cultural Adaptation of the Disease Prevention Section of The Nutrition Source</p>	<p>My practicum at The Nutrition Source focused on the cultural adaptation of the "Disease Prevention" and "Healthy Longevity" sections of the website for the Latin American adult population. I used the FRAME methodology to ensure that the content was culturally relevant and tailored to Latin American dietary preferences and traditions. The adaptation involved modifying text, graphics, and other materials, with input from Spanish-speaking colleagues and community members to ensure that specific foods and language were appropriate. The goal was to provide science-based nutrition guidance that resonates with this community, making it more actionable and accessible. The project also included the development of a comprehensive guide documenting the adaptation process, from initial steps to feedback and adjustments. This guide will be valuable for future adaptations of other sections or for different cultural groups. In addition to the adaptation work, I tracked engagement metrics to assess the effectiveness of the adapted content once it was disseminated through social media.</p> <p>This project was significant for The Nutrition Source, broadening its ability to reach and impact the Latin American community by making its resources more culturally relevant. By tailoring the content, we aimed to reduce disparities in access to health information and promote better dietary habits in minority populations.</p>
<p>Balanced Beginnings - Empowering Children For A Healthier Future</p>	<p>The project aimed to equip 150 children in the 6th grade with a comprehensive education to address the escalating rates of overnutrition within the community, guided by the principles of lifestyle medicine—nutrition, movement, sleep, and mental health. Supporting objectives included raising awareness, providing education within schools, and engaging the community in initiatives promoting healthy living. Key deliverables involved developing educational materials tailored for the pediatric population within this cultural context to implement healthy nutrition, movement, sleep, and mental health education. After creating the educational materials, I conducted regular in-person sessions with the children to help them understand these principles. For instance, to educate them about healthy snacking habits, I designed interactive activities to teach them how to make nutritious snack choices by pairing different foods.</p>
<p>Novel Food and Drug Regulatory Research and</p>	<p>BIOMILQ is a biotech startup utilizing human mammary cells to reproduce the functional ingredients in human milk outside of the human body. BIOMILQ aims to bring the health benefits of human</p>

Biotech Business Development	breast milk to more babies while empowering mothers with varying capacities of feeding their kids with breast milk. My role as a Regulatory Associate centered on supporting the regulatory landscape in commercializing novel ingredients in global markets such as in Europe, the U.S., and Asia.
The Influence of the DASH Diet on the Microbiome	Heart disease remains the leading cause of death worldwide, highlighting the imperative need for effective interventions. The Dietary Approaches to Stop Hypertension (DASH) diet has shown significant promise in improving blood pressure and cardiovascular health over nearly three decades of research. While the DASH diet has demonstrated benefits, its effects on the gut microbiome have not been extensively studied. This practicum aims to investigate the effects of various food groups recommended by the DASH diet on the gut microbiome. Additionally, this review examines the effects of foods limited by the DASH diet on the microbiome. By exploring the relationships of these foods, this project aims to bridge the gap in understanding how the DASH diet may modulate the gut microbiome.