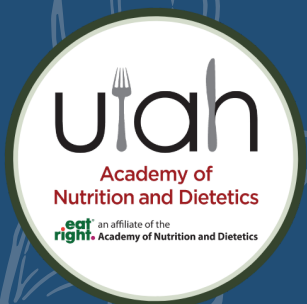


Utah Academy of Nutrition and Dietetics

# 2022 ANNUAL CONFERENCE ABSTRACT AND POSTER SESSION



**POWERING THE FUTURE THROUGH NUTRITION  
CONNECTIONS**

March 25, 2022 | West Jordan, Utah



## Category: Undergraduate Dietetics and Nutrition Student

### Research

**Title:** Study on the Impact of Diet on Unified Fire Authority Firefighter Performance.

**Authors:** Marin Easton, Katie N. Brown, PhD, RDN, CSSD, Utah State University

#### Abstract

**Objective:** This project aimed to examine the impact of nutrition knowledge, dietary intake, and physical activity on firefighters' performance on their routine physical assessment (RPA)

**Methodology:** Members of the Unified Fire Authority were invited via email to participate in this cross-sectional study. Participants (N=92) completed a 40-question survey that assessed specialized diet adherence, dietary intake, nutrition knowledge (using questions from the General Nutrition Knowledge Questionnaire; 1 point for each correct answer [26 points possible]), regular physical activity (International Physical Activity Questionnaire), and perceived physical performance on their RPA. Based on their responses, participants were categorized into one of two groups: High Performance (performed exceptionally well/very well) and Lower Performance (performed moderately well/slightly well/not well at all). Chi Squared Distributions and Independent T-Tests were used to assess group differences. Statistical significance was set at  $p < 0.05$ .

**Results:** More High Performance firefighters reported eating  $\geq 5$  servings of fruits and vegetables (29.2% vs 10.8%,  $p = 0.04$ ) than Lower Performance firefighters. There were no significant differences in prevalence of vigorous physical activity (12.1% vs 17.8%,  $p = .27$ ), prevalence of following a specific diet (27.1% vs 21.6%,  $p = .57$ ), or nutrition knowledge score (18.7 vs 18.2,  $p = .49$ ) when comparing High Performance and Lower Performance firefighters.

**Conclusions:** High Performance firefighters had a higher prevalence of high fruit and vegetable consumption. Diet quality, including intake of fruits and vegetables, should be an included strategy for firefighters wishing to improve their physical performance. Future studies should use interviews and lab-based assessments to further assess factors that may influence firefighters' performance on RPAs.

**Performance Indicator(s):** 12.2 Conducts a needs assessment to support the development and implementation of nutrition and dietetics or health promotion programs, initiatives or interventions.

**Title:** Establishing Content And Face Validity Of A Theoretically-Based Survey About Factors Related To Food Insecurity And College Students

**Authors:** Elyce Gamble, MS, RD, (1); Amanda Meier, MS, RDN, CD, (1); Kanae Lee, (1); Carol Mathusek, Brigham (1); Nathan Stokes, PhD, (1); Jenny Jackson, PhD, MS, RD, (2); Jinan Banna, PhD, RD, CDN, (3); Stephanie Grutzmaker, PhD, (2); Kendra OoNorasak, MS, RD, LD, (4); Brooke Reeves, MS, (2); Andrea Barney, (1); Cade Kartchner, (1); Jennette Kilgrow, RDN, (1); Paola Martinez, (1); Rickelle Richards, PhD, MPH, RDN, (1). 1 Brigham Young University, 2 Oregon State University, 3 University of Hawaii at Manoa 4 University of Kentucky

#### Abstract

**Study Objective.** Food insecurity is a growing concern among college students and has been linked to unfavorable health and academic outcomes. The study objective was to develop and test the validity of a food insecurity-related survey for college students, using the social cognitive theory as the framework.

**Methods.** Interview data from college students ( $n = 57$ ) were used to create a 144-item survey. Four expert reviewers evaluated the survey for content validity, including whether theoretical constructs (environmental, personal, behavioral) were accurately assigned to survey items. Face validity was tested via cognitive interviews ( $n = 25$ ). Feedback from expert reviewers and cognitive interviews were used to make survey revisions.

**Results.** Following expert reviews, branching questions were added to better reflect students' living situations and questions about alcohol and credit card debt were added. Researchers modified wording and theoretical construct assignment and deleted 25 items due to low relevancy, importance, and/or clarity. After cognitive interviews, researchers added section breaks to enhance survey flow, modified wording, and deleted 41 items due to confusing or duplicative items. The final 95-item survey had environmental questions ( $n = 25$ ) about living space and food access; personal questions ( $n = 43$ ) about cooking self-efficacy, financial priorities, and stress; and behavioral questions ( $n = 27$ ) about money-saving strategies, shopping/cooking, and food choices.

**Conclusions.** Content and face validity were established for a survey aimed to measure factors related to food insecurity among college students. The framing of this survey around the social cognitive theory will provide a novel approach to evaluating food insecurity among college students in the future.

**Performance Indicator(s):** 6.1 Participates in and leads research initiatives following ethical and scientifically sound research methodology. 6.3 Disseminates research findings to support knowledge translation.

**Title:** Factors That Influence Dietetic Interns' Dietary Practices

**Authors:** Courtney Weese; Karli Breinholt; Marin Easton; Katie Thompson; Madison Gunter; Brianne Oronoz; Jenna Sacks, BA; Kaitlyn Reich; Breann McFarlane; Dawson Croxall; Adalyn White; Kelzie Devitt; Lacie Peterson, MS, RDN, BC-ADM, CDCES, FADCES, FAND; Rebecca Charlton, MPH, RDN; Holly Hopkins, RDN; Katie Brown, PhD, RDN, CSSD

#### **Abstract**

**Background:** The dietetic internship is a rigorous supervised practice experience that all future registered dietitians must complete. Research suggests that environmental and social factors may affect dietary choices. No studies have assessed if the rigorous internship experience affects interns' dietary practices.

**Purpose:** The objective of this focus group research study was to gather opinions from various dietetic interns to understand what factors of the internship experience, if any, affected their dietary habits.

**Setting:** Virtual focus groups were conducted via Zoom.

**Methods:** Candidates were recruited across the United States through an email distributed by dietetic internship directors. Participants (n=41) who were currently completing or had completed their dietetic internship within the past six months attended one of seven virtual focus groups.

**Analysis:** Transcripts were separately coded by two to three trained researchers using methods outlined by Krueger and Casey to identify themes and subthemes. Researchers discussed any disagreements in coding and established a consensus.

**Results:** The main factors affecting interns' dietary choices were finances, access/availability (e.g. access to a refrigerator, microwave, etc.), mental load, and time. A minor theme identified was social influence, including the influence of preceptors. The majority of participant comments suggested a decline in dietary habits due to these factors. However, many interns indicated that there was an overall improvement or no change in their diet.

**Conclusions:** Finances, access/availability, mental load, time, and social influences impacted interns' diets. Dietetic programs and preceptors should explore ways to minimize the potential negative impacts of these factors on interns' dietary habits.

**Performance Indicator(s):** 6.5 Leads or supports activities related to the development or management of academic programs.

## **Project or Program**

**Title:** Development of Classroom Resources for Teachers, Parents, and Classmates of Elementary School-Aged Children with Type 1 Diabetes

**Authors:** Karli Breinholt, Katie Brown, PhD, RDN, CSSD

#### **Abstract**

The prevalence of Type 1 Diabetes Mellitus (T1DM) in children is increasing. Intensive insulin therapy supports positive short-term and long-term health outcomes. Unfortunately, support and training for school personnel is often inconsistent and inadequate. This project's focus is to develop classroom resources for teachers, parents, and classmates of young children with T1DM. Needs assessment interviews were held with mothers of children with T1DM (n=4), teens/adults who were diagnosed with T1DM as children (n=3), and elementary school teachers who have a student with T1DM (n=2). Parents and children were concerned about the child being seen as different. Despite existing teacher trainings, parents were concerned about adverse health events while the child is at school. Teachers were concerned about the child's time away from learning due to T1DM-related care. Based on this feedback, the following materials were created: 1) classroom curriculum that incorporates a simulated diabetes experience into reading and math activities to promote empathy from the teacher and classmates, and 2) a customizable infographic that identifies the student's individual hypo and hyperglycemia signs/symptoms to facilitate prompt recognition and action in the event of a high or low blood glucose. These resources will undergo an expert review (including parents, teachers, and registered dietitians) prior to being piloted in an elementary school classroom.

**Performance Indicator(s):** 3.3 Advocates for nutrition and dietetics services and resources for clients and populations.

## Category: Graduate Dietetics and Nutrition Student

### Research

**Title:** Development and Validation of a Spanish Nutrition Screening Tool for Hispanic Children Aged 3-5 Years

**Authors:** Elaine Parry, BYU, Marc-Aurel Martial, PhD, MPH, RN, BYU, Sarah Bellini, PhD, RDN, BYU

#### Abstract

Several screening tools exist identifying nutrition risk in children, but few have been developed, revised, and validated in Spanish. As different social identities, such as culture and language, influence practices and descriptions regarding nutrition risk factors, the development and validation of a pediatric nutrition risk screening tool in Spanish is essential. The social-ecological model provided the theoretical framework for this study as Hispanic food choices are influenced by intrapersonal, interpersonal, and community factors. The screening tool development consisted of focus groups, expert review, and pilot testing to establish face and content validity. Four focus groups were conducted in Spanish with parents of children aged 3-5 years to discuss words and phrases describing nutrition risk factors and to discover common foods eaten by Hispanic families. A preliminary screening tool was developed containing questions about food security, eating habits, dietary intake, and other behaviors based on this feedback and a literature review. Next, interprofessional experts (n=7) in the field of pediatric nutrition assessed the screening tool for relevance, clarity and simplicity. This data was analyzed through a content validity index. Two questions about eating habits and dietary intake were revised and one question was added to ensure screening tool accuracy. A pilot test with Hispanic parents/caretakers (n=23) of children in the same age group then assessed the nutrition screening tool for feasibility. The final Spanish pediatric nutrition screening tool consists of 22-items intended for Hispanic parents/caretaker of 3-5-year-olds to complete.

**Performance Indicator(s):** 1.7 Applies cultural competence and consideration for social determinants of health to show respect for individuals, groups, and populations. 10.1 Conducts nutrition screening to identify individuals who require a nutrition assessment.

### Project or Program

**Title:** Updating the Clinical Nutrition Knowledge of Out-of-Practice Registered Dietitians to Facilitate Workforce Re-Entry Using Online Modules

**Authors:** Carly Alba (1), Marianne Hallam (1), Corinne Loizos (1), Sara Saltzgeber (1), Jean Zancanella, MS, RD (1),

Kristine Jordan, PhD, MPH, RD (1,2), Amy Reeder, MS, RD, CDCES (1,2), Sarah Boyt, MS, RD (1), Joy Musselman, MBA, RD, CNSC (3); (1)Department of Nutrition and Integrative Physiology, University of Utah, Salt Lake City, UT, (2)Office of Wellness and Integrative Health, University of Utah, Salt Lake City, UT, (3)Intermountain Healthcare, Salt Lake City, UT.

#### Abstract

The likelihood of Registered Dietitian Nutritionists (RDNs) taking a career break from employment is high. The majority of RDNs in the United States are women, with research indicating women are more likely to take career breaks than men. Additionally, dietetics is an evolving field in which professional practice standards are routinely updated to reflect current research findings. These frequently changing practice standards provide the rationale for RDN professionals to update clinical knowledge when re-entering the workforce. The purpose of our Focused Area of Study project was to facilitate re-entry into the clinical workforce by creating up-to-date clinical nutrition education modules for out-of-practice or non-clinical RDNs. Our objective was to develop a comprehensive set of clinical nutrition education modules to improve the knowledge and confidence levels of out-of-practice RDNs, with narrated PowerPoint presentations. Participants (n=15) were recruited to pilot the modules and complete the Pre-Assessment and Post-Assessment surveys, with 12 participants meeting the inclusion criteria. Survey data indicate that self-reported confidence levels increased among all participants, with knowledge levels improving by 21.3%, from the Pre-Assessment to Post-Assessment survey. All participants reported that the modules were either very effective (33.3%) or fairly effective (66.7%) in the Post-Assessment survey. This project suggests that the modules would be practical for future use among similar RDN populations. However, survey findings reveal areas for improvement, such as using more accessible software with additional interactive elements. Overall, this project provides an effective way to bridge the knowledge gap among out-of-practice RDNs interested in re-entering the clinical workforce.

**Performance Indicator(s):** 9.3 Designs, selects and implements education strategies to meet the learning needs of individuals, groups, communities and populations.

**Title:** Revising the NDFS 100 Online Course using Pedagogy and Theoretical Foundations to Promote an Effective Learning Environment

**Authors:** Kaitlyn Datwyler Bastian, Merrill Christensen, PhD, Rickelle Richards, PhD, MPH, RDN, Pauline Williams, PhD, MPH, RDN

**Abstract**

Online education has emerged as a viable option for both traditional and non-traditional college students. With enrollments and availability of online courses increasing, a need was identified to update the online basic nutrition course (NDFS 100) offered at Brigham Young University. The objective of this project was to enhance student engagement and promote a more effective online learning environment by redesigning the basic nutrition online course. The project was accomplished by assessing the current online environment, seeking guidance from research and educational experts, and obtaining student feedback. A literature review of online pedagogy was conducted along with interviews (in process) with instructional design experts (n=3), faculty teaching the course (n=6), and students (n=56). Common themes and areas for improvement to the course were identified including establishing teacher presence, creating clear course organization, organizing format and flow for consistency, providing activities to increase student learning, clearly defining course expectations, and promoting a sense of community. Information gained from the literature review and interviews is being compiled and will be used to create a draft outline and plan for the online course. The draft outline will include ideas for consistent content in lessons, such as videos, readings, and assignments; updated format that is visually appealing and easy to navigate; and recommendations for teacher and student engagement. Implementation of the redesigned nutrition course will provide a more effective and engaging online learning environment to educate college students about essential nutrition knowledge and empower students to establish long lasting health habits.

**Performance Indicator(s):** 9.3 Designs, selects and implements education strategies to meet the learning needs of individuals, groups, communities and populations.

9.4 Provides nutrition and dietetic education to a variety of individuals, groups and populations.

**Title:** Development Of A Culinary And Sports Nutrition Education Curriculum For The Utah Jazz Professional Basketball Team

**Authors:** Morgan Cannon<sup>1</sup>, Jessica Nakae<sup>1</sup>, Lucas Perry<sup>1</sup>; Katherine A. Beals, PhD, RD, FACS<sup>2</sup>, Theresa Dvorak, MS, RD, CSSD<sup>2</sup>, Kary Woodruff, PhD, RD, CSSD<sup>2</sup>, <sup>1</sup>Graduate Student in the Department of Nutrition and Integrative Physiology, University of Utah, Salt Lake City, UT. <sup>2</sup>Department of Nutrition and Integrative Physiology, University of Utah, Salt Lake City, UT

**Abstract**

Basketball is a physically demanding sport. Optimal performance requires that players meet energy and nutrient requirements. However, research suggests that professional athletes often fail to meet sports nutrition recommendations for a variety of reasons including inadequate nutrition knowledge and/or culinary skills. Nutrition and culinary education interventions designed specifically for professional basketball players may improve nutrient intakes which, in turn, could support optimal performance and health. The purpose of this project was to create a sports nutrition curriculum specific to the sport of basketball for the NBA team the Utah Jazz. A needs assessment consisting of twelve questions was conducted with the Jazz players to identify nutrition topics of interest and barriers to preparing healthy meals. Insight from ten players' responses combined with a focused literature review guided the creation of nine performance nutrition education modules (e.g., hydration, supplements, macronutrients, performance plates), three culinary education modules (e.g., cooking skills, meal planning), twenty performance recipes, and six recipe demonstration videos. All materials were compiled and organized onto a Google Site to be used as a visual tool for the team's sports Dietitian during player education sessions. Future considerations for the curriculum include voiceovers for the PowerPoint presentations (allowing athletes to move through the content without a dietitian present) and piloting the modules to receive player feedback.

**Performance Indicator(s):** 8.3 Applies the required knowledge and skill for safe and effective sports nutrition and dietetics practice and exercise training.  
12.2 Conducts a needs assessment to support the development and implementation of nutrition and dietetics or health promotion programs, initiatives or interventions.

**Title:** Development of a Nutrition Education Curriculum for Students and Faculty Members of the University of Utah School of Dance

**Authors:** Kerensa Hofmeyer<sup>1</sup>; Sabine Krautgasser-Tolman<sup>1</sup>; Maria Shanklin<sup>1</sup>; Kary Woodruff, PhD, RDN, CSSD<sup>1</sup>; Katherine Beals, PhD, RD, FACSM, CSSD<sup>1</sup>; Amy Loverin, MS, RD, CD<sup>1</sup>; Chris Michaels, MS, ATC<sup>2</sup>; Traci Thompson, MS, ACSM, HFD, CSCS<sup>3</sup>; Department of Nutrition and Integrative Physiology, University of Utah, Salt Lake City, UT<sup>1</sup>; University of Utah School of Dance, University of Utah, Salt Lake City, UT<sup>2</sup>; PEAK Health and Fitness, University of Utah, Salt Lake City, UT<sup>3</sup>

#### **Abstract**

Dance is an artistic sport that requires grace, strength, and endurance. The physical demands placed on dancers necessitate unique training regimens to maintain health and maximize performance. An essential yet often overlooked training component is nutrition. Despite the prominence of dance specific performance education and training, nutrition-related education and services are often not available. Previously, there was no nutrition education curriculum for dancers at the University of Utah. The purpose of this project was to create a nutrition education curriculum for dancers and faculty at the University of Utah School of Dance.

In this multi-phase project, a needs assessment identified areas of need and interest related to general and sports nutrition at the School of Dance. These results, along with a literature review, provided the foundation for the curriculum content. Next, we created six nutrition education modules specific to dance including: (1) an introduction to sports nutrition, (2) macronutrients, (3) pre-and post-exercise fueling, (4) common micronutrient deficiencies, (5) hydration and sleep, and (6) meal prepping. Each module consisted of a PowerPoint presentation, a detailed lesson plan, handouts, and an in-class activity. Future directions for this project may include piloting the curriculum to assess its efficacy.

Overall, a nutrition education curriculum can address a myriad of food- and nutrition-related concerns among collegiate dancers and is essential to the health and well-being of dancers.

**Performance Indicator(s):** 2.1 Adapts communication methods and skills to meet the needs of audiences.  
3.3 Advocates for nutrition and dietetics services and resources for clients and populations.

**Title:** Malnutrition in Utah: Why it matters and what actions to take

**Authors:** Brittany Woodbury; Sarah Bellini, PhD, RDN, CD; Rickelle Richards, PhD, MPH, RDN, CD; Pauline Williams, PhD, MPA, RDN, CD

#### **Abstract**

Residents of Utah are not immune to the devastating effects of malnutrition. Nearly 25% of Utah seniors and 1 in 8 Utah children are food-insecure, a malnutrition risk factor. Malnutrition is highly preventable but untreated can lead to higher morbidity and mortality, longer hospital stays, increased hospital readmissions, and higher healthcare costs. The purpose of the project is to create a series of white papers to increase awareness of malnutrition and outline future actions to reduce the physical, financial, and social burdens of malnutrition in Utah. Information on malnutrition in Utah and potential actions was gathered through literature reviews and interviews with Utah professionals experienced in malnutrition for different life stages and areas. Recommended actions include: 1) Outline strategies to prevent and treat malnutrition such as increasing awareness of community food and nutrition programs, educating healthcare professionals on effective treatment of malnutrition, advocating for policies that enhance food access at reasonable costs, and increasing nutrition education in the community. 2) Encourage adoption of standard procedures for screening and diagnosis of malnutrition such as the Malnutrition Screening Tool for Adults, the Academy and ASPEN Consensus Statement, Global Leadership Initiative on Malnutrition, World Health Organization Criteria, and the Subjective Global Nutrition Assessment. 3) Improve coordination of community programs, healthcare systems, and local policy makers. 4) Widely distribute white papers to dietitians, healthcare providers, community programs, faith-based organizations, and public policy makers to increase awareness of the prevalence and challenges of malnutrition in Utah and provide actions and solutions to address identified challenges.

**Performance Indicator(s):** 2.3 Collaborates with inter- and intra-professional team members to achieve common goals and to optimize delivery of services.  
12.1 Advocates for health promotion and disease prevention in communities, in populations and globally.

**Title:** Improving Wellness for Endometrial Cancer Survivors Using a Positive Psychology

**Authors:** Helen Hardy<sup>1</sup>, Brooke Kudelka<sup>1</sup>, Amber Lawrence<sup>1</sup>, Mary Playdon, PhD, MPH<sup>1,2</sup>, Kary Woodruff, PhD, RD, CSSD<sup>1</sup>, Kristine Jordan, PhD, MPH, RD<sup>1,3</sup>, Sara Soyaju, RD, MAPP<sup>4</sup>; <sup>1</sup>Department of Nutrition and Integrative Physiology, University of Utah, Salt Lake City, UT, <sup>2</sup>Huntsman Cancer Institute, University of Utah, Salt Lake City, UT, <sup>3</sup>Office of Wellness and Integrative Health, University of Utah, Salt Lake City, UT, <sup>4</sup>Steinhardt School of Culture, Education, and Human Development, New York University, New York, NY

**Abstract**

Endometrial cancer (EC) is the most commonly diagnosed gynecologic cancer among women in the United States. Although early-stage EC is highly treatable, EC survivors are at greater risk of developing metabolic diseases, such as type 2 diabetes and cardiovascular disease, than the general population, independent of adiposity. Weight loss is a common intervention to improve metabolic health. Specifically, achieving a healthy weight is linked to better surgical outcomes for EC patients. However, evidence suggests that other behavioral approaches, such as time-restricted eating (TRE), may promote metabolic health while also demonstrating better adherence than traditional calorie restriction. In this project, we developed a curriculum to support the TREND study, which will compare TRE with calorie restriction and usual care for efficacy in improving metabolic health among EC survivors before cancer surgery. The two diet groups will receive pre-prepared meals and menus to control dietary intake. All participants will undergo the wellness program, which consists of five weekly modules providing activity-based education informed by the Diabetes Prevention Program and positive psychology. In addition, we expanded an existing recipe database to enhance cultural diversity with respect to three cultural groups represented in the Salt Lake City metro area: Native American, Hispanic, and Hawaiian/Pacific Islander. Further, we presented our curriculum materials and recipes to focus groups for feedback. We revised materials accordingly to address program engagement and support. In summary, this wellness program will be an important tool in future dietary research to improve metabolic health among endometrial and other obesity-related cancer survivors.

**Performance Indicator(s):** 12.3 Designs and develops community and population health programs, interventions or initiatives to meet the needs of communities and/or populations.

**Title:** Pediatric Nutrition Education Guidebook for Discover Develop Impact Vantage

**Authors:** Rachael Clark, Kara Sephel, Felicia Soth,

**Abstract:** DDI Vantage (DDI) provides multidisciplinary care to infants with delays or disabilities across Utah. DDI identified a need for a comprehensive evidence-based nutrition resource tailored to infants and toddlers in their early intervention program. Multidisciplinary intervention inclusive of nutrition education can improve growth, reduce obesity, and promote healthy eating. The purpose of this project is to provide nutrition education materials for DDI to incorporate into their early childhood intervention. To identify specific nutrition topics, students surveyed and shadowed employees. Survey results emphasized the need for a basic nutrition guide for children aged 0-3 leading to the development of the Nutrition Education Guidebook. Topics addressed in the guidebook stem from regularly updated resources provided by government agencies and are supported by population specific evidence-based research. Students organized the guidebook into 5 different sections: 1) Nutrition for Lactating Women, 2) Infants 0-6 Months, 3) Infants 6-12 Months, 4) Toddlers 1-3 Years, 5) General Child Nutrition. Students recorded an orientation video to instruct DDI employees on utilizing the PDF guidebook. The guidebook is formatted to be user-friendly by including decision trees, graphs, and tables. Embedded hyperlinks allow the user to jump directly to desired sections within the document. The guidebook includes a compilation of caregiver handouts allowing easy distribution during client visits. Future projects could include the creation of educational materials for specific delays and disabilities, further expanding DDI's scope of intervention. This guidebook will improve the nutrition education provided by DDI staff, positively influencing the multidisciplinary care for infants in Utah.

**Performance Indicator(s):** 1.7 Applies cultural competence and consideration for social determinants of health to show respect for individuals, groups, and populations.  
2.1 Adapts communication methods and skills to meet the needs of audiences.  
3.3 Advocates for nutrition and dietetics services and resources for clients and populations.

## Category: Professional

### Project or Program

**Title:** Basic Needs are Not so Basic: Pursuing a College Education When Hungry

**Authors:** Ben Chenot, Nikole Pruess, Sarah Elizabeth Garza-Levitt, MSW, CSW, E-RYT, C-IAYT, C-MQI

#### Abstract

College students' basic needs insecurity is gaining national recognition due to its detrimental impact on retention and completion rates. Basic needs are defined as undergraduate and graduate students' financial, food, and housing requirements. A recent study at a mountain west medical school reported that over 50% of the students indicated they were food insecure, a statistic that is five times the national average of reported household food insecurity.

The good news is that college student food insecurity is a solvable problem. One group taking up the charge is the UHealth FEED U Pantry, a program founded in March 2020. Located on the University of Utah Health Campus, this pantry combats food insecurity for faculty, staff, students, and the hospital-based workforce. The pantries student based leadership team is comprised of faculty, staff, and students who recognize that one's capacity to meet their basic needs has a direct impact on their health, safety, and success. This prescient philosophy has shown its worth during the Covid-19 pandemic.

A few program highlights include:

A food recovery project with University Hospital Nutrition Care Services recovers sandwiches, salads, fruits, and vegetables that would have been discarded and distributes them through the pantry; totals since March 2020 are ~12,000 lbs of food, which is ~\$30,000 in-kind or ~10,000 meals! The Junior League of Salt Lake City donated over 2,000 lbs in hygiene and infant care items. Campus colleges and departments donated an additional 2,000 lbs. A Seed Sharing program partnership stocks free plant seeds to promote sustainability.

**Performance Indicator(s):** 1.7 Applies cultural competence and consideration for social determinants of health to show respect for individuals, groups, and populations. 3.3 Advocates for nutrition and dietetics services and resources for clients and populations. 12.3 Designs and develops community and population health programs, interventions or initiatives to meet the needs of communities and/or populations.

**Title:** Level Up! with Wellness: Youth Summer Wellness Program

**Author:** Jenna Dyckman, MS, RDN

#### Abstract

In the last 30 years, global deaths caused by chronic diseases has risen from 57% to 72%. Lifestyle choices are a key component to determining risk for chronic disease. Choices individuals make in their formative years can impact their health as an adult. The purpose of the Level Up! with Wellness program is to give children and youth ages 5-13 the opportunity to practice and build healthy and sustainable lifestyle habits with the goal of reducing their risk for chronic disease. The program was created and piloted in Cache County in the summer of 2021. It is an eight-week summer program, that consists of eight weekly wellness challenges. Examples of the weekly challenges include: increasing physical activity, mental health check-in, eating veggies and fruits, reading with family, and more. The program reached over 300 children and youth in Cache County in 2021, through partnering with local city libraries. An innovative approach used to motivate children and youth to engage in the program was referring to each weekly wellness challenge as a "level". As participants completed a weekly challenge, they advanced to the next level, essentially leveling up their wellness. Gamifying the wellness program is a strategy implemented to tailor the wellness program to the target audience. Data collected from the completed booklets showed that for each of the eight levels, 50% or more of the participants completed 100% of the wellness challenge each week. In 2022, this program will be implemented in four counties in the state of Utah.

**Performance Indicator(s):** 6.4 Engages in scholarly activities through critical inquiry, continuous learning, application of evidence to practice, and support of research activities.

9.2 Establishes, develops and implements program outlines and learning plans to meet the needs of individuals, groups, communities and populations.

12.3 Designs and develops community and population health programs, interventions or initiatives to meet the needs of communities and/or populations.



**Title:** The Embrace Project: Supporting the Health and Wellbeing of Pacific Islander and Other Minority Women Along Utah's Wasatch Front

**Authors:** Alexandra Hernandez, MS, RDN1, Kristine Jordan, PhD, MPH, RDN1,2, Madeleine French, MS, RDN1,2, Nancy Ortiz, MBA2, Siale Vaitohi Teaua, BS3, Deepani Jinadasa, MPH3, Ban Naes, BA3, Robin Marcus, PT, PhD, OCS4, Michelle Debbink, MD, PhD5, Brittney Okada, MPH, CHES3  
1The Wellness Bus, Office of Wellness and Integrative Health, University of Utah, Salt Lake City, UT. 2Department of Nutrition and Integrative Physiology, University of Utah, Salt Lake City, UT. 3Office of Health Disparities, Utah Department of Health, Salt Lake City, UT. 4Department of Physical Therapy and Athletic Training, University of Utah, Salt Lake City, UT. 5Department of Obstetrics and Gynecology, University of Utah, Salt Lake City, UT.

#### **Abstract**

Native Hawaiian/Pacific Islander (NHPI) women in Utah face significant health disparities. The Embrace project is a nine-month experiential program that provides culturally responsive health services to minority women, specifically NHPI women aged 18-44. Further, Embrace is a collaboration with five community-based organizations that work with racially and ethnically diverse women. The objective is to reduce health disparities related to (1) maternal mortality and morbidity and (2) diabetes and gestational diabetes, in racial/ethnic minority women along the Wasatch Front.

NHPI women were randomized into the intervention group (n=24) or control group (n=26), while non-NHPI minority women were assigned to the comparison group (n=26). All participants received biometric screenings and individual health coaching sessions focused on nutrition, physical activity, and mental wellbeing with registered dietitians. The intervention group also attended group sessions rooted in NHPI traditions that emphasize culture as a source of resilience, led by a community facilitator. For the overall sample, baseline data included biometric measures, reported as mean and standard deviation for body mass index ( $36.3 \pm 11.0$  kg/m<sup>2</sup>), waist circumference ( $41.2 \pm 8.3$  inches), and hemoglobin A1c ( $5.6 \pm 1.4\%$ ), as well as self-reported dietary, physical activity, sleep, and self-care behaviors.

Upon project completion, further data analysis is planned for program evaluation, with maternal mortality and morbidity and diabetes measures as dependent variables. This project reinforces the role of culturally relevant practices in community-based participatory research to address health disparities in NHPI communities.

**Performance Indicator(s):** 1.7 Applies cultural competence and consideration for social determinants of health to show respect for individuals, groups, and populations.

2.3 Collaborates with inter- and intra-professional team members to achieve common goals and to optimize delivery of services.

3.3 Advocates for nutrition and dietetics services and resources for clients and populations.

**Title:** Journey to Health: An Experiential Nutrition Program for Utahns Living in Underserved Communities

**Authors:** Madeleine French, MS, RDN, Alex Hernandez, MS, RDN, Nancy Ortiz, MBA, Kristine Jordan, PhD, MPH, RDN, Kara Sephel, BA, Julie Metos, PhD, RDN.

#### **Abstract**

The COVID-19 pandemic disproportionately affects marginalized communities who experience higher rates of comorbidities, such as obesity and diabetes, intensifying COVID-19 severity. Journey to Health (J2H) addresses critical needs, as this free six-month bilingual nutrition education program aims to reduce health disparities in Utahns from racially and ethnically diverse and low socioeconomic communities. J2H is a collaboration amongst the University of Utah Center for Community Nutrition, the University of Utah Wellness Bus, and the Utah Food Bank, offering programming in West Valley, Glendale, South Salt Lake, and Kearns. These respective locations were intentionally selected due to high incidence of chronic diseases, compounded by low socioeconomic status. The J2H curriculum, offered in English and Spanish, emphasizes low-cost strategies to improve health and wellness, with a focus on reducing incidence of diabetes and cardiovascular disease in the 122 participants to date. Utilizing the RE-AIM framework, continual program adaptation is informed by feedback from community partners and participants. Participants attend nine events within six months, which include biometric health screenings, nutrition classes, dietitian-lead health coaching sessions, and a community meal. Methodologically, J2H assesses changes in biometric scores, including height, weight, blood pressure, blood glucose, hemoglobin A1c, total cholesterol, low- and high-density lipoproteins, triglycerides, and carotenoid levels. These data are collected at month one and five. University of Utah nutrition graduate students co-teach classes with dietitians for community field experience. Future work includes continuing curriculum modification and expansion to Wellness Bus sites across Utah.

**Performance Indicator(s):** 1.7 Applies cultural competence and consideration for social determinants of health to show respect for individuals, groups, and populations.  
6.6 Designs and analyzes program curricula that align with program goals, objectives and competencies.  
9.4 Provides nutrition and dietetic education to a variety of individuals, groups and populations.

**Title:** Team Thrive: a novel, behavior-based diabetes prevention program for high school students

**Authors:** Amy Loverin, MS, RD; Madeleine French, MD, RD; Nica Clark, PhD, RD; Julie Metos, PhD, RD

**Abstract**

In Utah, the percent of adolescents with obesity increased from 5.4% to 9.8% between 1999 and 2019. Adolescents who are overweight or obese are at higher risk for developing type 2 diabetes in adulthood. In 2017, few adolescent diabetes prevention programs existed in the literature, the majority of which were purely didactic. In response to increasing rates of obesity and diabetes, we created Team Thrive – a novel nutrition curriculum for high school students focused on behavior change and active learning. We based the curriculum on thematic analysis of focus groups and Social Cognitive Theory. The six-lesson curriculum incorporates technology, personal goal-setting, competition, and incentives to promote healthy behaviors. Students focus on three goals during Team Thrive: increasing fruit and vegetable intake, increasing physical activity, and decreasing added sugar consumption. We taught Team Thrive in three intervention high schools in urban and rural districts, and compared results with three demographically similar schools receiving standard nutrition education. The intervention group slowed their rate of weight gain, increased consumption of fruits and vegetables, and increased minutes of physical activity. The intervention group did not significantly decrease sugar sweetened beverage consumption. In response to COVID-19, we developed a practical, convenient curriculum packet for online dissemination that is free of cost. As of February 2022, teachers in 135 high schools with 28,249 students in Utah have received the curriculum. Future work will expand Team Thrive to high schools across the Mountain West and improve nutrition and diabetes knowledge and behavior scores among participating teachers.

**Performance Indicator(s):** 6.3 Disseminates research findings to support knowledge translation.  
6.6 Designs and analyzes program curricula that align with program goals, objectives and competencies.  
9.5 Evaluates the achieved learning and delivery methods when delivering education to individuals, groups and populations.