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The Impact of USU Extension on Public Nutrition and Health

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The Impact of USU Extension on Public Nutrition and Health

Outcomes and Impact Quarterly: Special Edition

Lead Contact: Heidi LeBlanc

Primary Critical Issue: Nutrition and Health

There is a need to provide effective nutrition information and education to the public to enable consumers to make wise dietary choices. As the relationships between diet, physical and mental health, and disease prevention become clearer, the promotion of healthy eating behaviors and lifestyles for both youth and adults has received increased attention in recent years. With high levels of obesity, chronic disease, and poor dietary habits, there is a need for non-formal nutrition education that addresses individual and family health and wellness. The Public Nutrition and Health Education program at Utah State University (USU) Extension seeks to decrease the incidences of chronic diseases and other nutrition-related health issues among residents through non-formal nutrition education. The priorities for this program are to expand nutritional research and education and to promote healthy dietary habits. Therefore, the desired long-term outcomes are the Public Nutrition and Health Education program are to (a) empower residents to make healthy food choices and improve their nutritional intake, and (b) reduce the economic cost of chronic diseases in Utah through ongoing nutrition education to youth and adults.

Diabetes Prevention and Management

USU Extension Faculty Contact: Cindy Jenkins

In Utah, over 180,000 people have been diagnosed with diabetes and an estimated 38% of adults have prediabetes. In 2020, only 12,859 people with diabetes participated in a Diabetes Self-Management Education and Support (DSMES) program. Of the estimated 652,000 adults with prediabetes, approximately 1,500 per year complete the National Diabetes Prevention Program (National DPP). The CDC identified low awareness of program availability as a gap in participation. Therefore, one way to reduce the disease burden in our population is to increase awareness of program availability. USU Extension sought to reduce the burden of preventable diabetes among adults in Utah via a “Food as Medicine” webinar series. Webinars were delivered in English and one in Spanish. The webinar series targeted adult individuals in the state of Utah diagnosed with diabetes or at risk of developing diabetes. The public diabetes programs highlighted the National DPP, Diabetes Self-Management Education and Support (DSMES) Toolkit, and Walk with Ease (WWE) program.

After attending the workshops, evaluation results indicated 28% of participants were “extremely likely” or “somewhat likely” to enroll in the National DPP; 44% were “extremely likely” or “somewhat likely” to enroll in DSMES, and 50% stated that they were “extremely likely” or “somewhat likely” to enroll in WWE. Most respondents agreed the webinars increased their awareness of these programs. These results show that major objective of these webinars was accomplished by increasing public knowledge about evidence-based diabetes programming. Over half of the respondents indicated they would be “extremely likely” or “somewhat likely” to recommend the webinar series to others. Qualitative comments were generally positive with

respect to the content of the webinars, the quality of the presenters, recipe demonstrations, and the convenience of attending online.

Overall, the Food as Medicine webinar series provided valuable health information to 124 live participants and 123 viewers of recorded sessions. The total reach of this program was 247 views, an encouraging number despite the possibility that some of these views could be from the same individual. Based on the evaluation, participants were more likely to enroll in the featured programs given their increased awareness of these programs.

Chronic Disease Prevention

USU Extension Faculty Contact: April Litchford

Chronic diseases are the leading causes of death and health care costs in Utah. There is an ongoing need to develop Extension programs to promote sustainable and healthy lifestyles by applying integrated approaches to reducing chronic disease. In Cache County Utah, USU Extension expanded the focus on a diabetes education program. The Diabetes Cook Along Classes were piloted in Box Elder and Cache County. The classes were expanded in 2022 to two other counties. The program aimed to reduce individuals' risk for chronic diseases and to help them manage their chronic diseases. The 4-week in-person diabetes education program combined lecture-based learning and hands-on cooking experience. Each class included information to help individuals with diabetes or pre-diabetes better manage their disease symptoms. Participants prepared a diabetes-appropriate meal during the class, participated in discussions, and set goals to make lifestyle changes.

A total of 30 participants attended the program. Evaluation results showed 95% of participants in the diabetes cooking classes said they were "satisfied" or "very satisfied" with the information provided in classes. Results indicated all participants experienced an increase in knowledge of the concepts covered in the curricula. Most participants also reported positive changes to their lifestyle behaviors (e.g., checking blood sugar levels daily, exercising daily, taking medication as prescribed, and limiting carbohydrate intake daily). Anecdotal reflection by the program team included, "this program was able to help individuals with diabetes to implement small changes to help them increase their confidence and ability to manage their diabetes successfully."

Statewide Create Better Health (CBH) Programming

USU Extension Faculty Contact: Heidi LeBlanc

Food insecure, low-income adults and youth are more likely to have poor diet quality and physical activity behaviors contributing to an increased risk of chronic health conditions including, but not limited to obesity, Type II diabetes, heart disease, and certain cancers. Improving the dietary and physical activity behaviors of individuals through improved knowledge, skills, and access may improve individuals' health trajectories, outcomes, and overall quality of life. Utahns experience hunger, poverty, unemployment, and many other hardships that contribute to an increased risk of obesity and chronic diseases. Over 14% of Utah households are food insecure and 12.7% of Utahns are living in poverty. Utah has a fairly low unemployment rate of 3.8%, however, many Utah families are considered working poor as a result of working part-time or full-time jobs with low wages. For example, 38% of low-income families have a

family member who works, however, only 35% of children in poor families have at least one full-time working parent.

While food insecurity remains a public health concern among adults and youth living in poverty, this population is also experiencing overweight and obesity at higher rates than their middle and high-income counterparts. Improving dietary habits and physical activity behaviors of low-income populations may help prevent or reduce health conditions associated with poor diet and sedentary lifestyles. Create Better Health Utah (CBH) offers group nutrition education classes to adults and youth, implements policy, systems, and environmental strategies to improve healthy food access for the target audience, and uses social marketing campaigns and social media platforms that aim to improve diet and physical activity of those reached.

Short-term evaluation results of direct CBH educational activities indicated that after participating in a virtual or one-time class, adult participants ($n = 307$), 45% intended to stretch their food dollars to last the month more often, 51% intended to choose a variety of foods based on MyPlate more often, 47% intended to be physically active for at least 30 minutes, 5 days a week more often, and 33% intended to adjust their meals to use foods on hand more often.

For medium-term outcomes, 57% reported an increase in fruit intake since the start of the CBH series, 50% reported an increase in vegetable intake since the start of the CBH series, 52% reported adjusting meals to use foods on hand more often, 62% reported an increase in the number of days they were physically active for at least 30 minutes, 61% reported using MyPlate recommendations to make food choices more often, 48% reported stretching their food dollars to last the month more, and 49% reported using a grocery list to shop more often. In addition, results of the non-parametric Wilcoxon signed-rank test indicated there was a statistically significant increase in participants' vegetable intake after they completed the program ($W = 3.42$, $p < 0.001$).

With respect to long-term impacts (i.e., 6 months after completion), 50% reported using MyPlate recommendations to make food choices more often, 25% reported having enough food to last the month more often, 50% reported eating more vegetables, 29% reported eating more fruits 50% reported being more physically active, 28% reported adjusting meals to use foods on hand more often, 56% reported using the nutrition facts label more often, 44% reported choosing foods with less added sugar more often, and 44% reported choosing foods with less sodium.

CBH also conducts nutrition programs for youth. Medium-term evaluation results indicated youth in 1st and 2nd grade ($n = 503$) improved their recognition of healthy snacks (37%), fruits (23%), and dairy foods (22%). Youth also recognized proper hand washing (33%) and physically active behaviors (17%). Youth in 3rd - 6th grade ($n = 722$) reported eating more vegetables (23%), fruits (24%), and healthy snacks (26%). Youth also reported an increase in physical activities (27%) and hand washing before eating (20%).

CBH aims to help people cook healthy meals on a budget, buy and prepare whole foods, understand food labels, practice safety in the kitchen, and much more. With the increase in disease and obesity in the United States, there is an obvious need for more education to promote

positive lifestyle changes. Evaluation results show that CBH is increasing the knowledge, skill set, and overall well-being of adults and youth across the state.