# **Food Education**



United Way of Olmsted County 903 W. Center Street, Suite 100 Rochester, MN 55902 507-287-2000





## **Introduction**

The following report is an exploration of a narrow field within the broad context of health and human services work. It is not an exhaustive treatment of all effective programs or approaches within the field, but rather a narrow investigation of a topic of interest.

The subject matter of this paper does not necessarily represent an area of financial investment, grant funding, or other programmatic pursuit for United Way of Olmsted County. Rather, this report reflects on a specific type of intervention that allows individuals to reach their full potential, and presents related research.

There may be a wide variety of programs or services that address individual and community needs, and this report is not designed to enumerate all possibilities. United Way of Olmsted County hopes that readers will think creatively about the ways in which the ideas and experiences contained within the report might inform programs, services, and community changes in Olmsted County.

## What is Food Education?

Food education includes any efforts to educate individuals on their food choices. This can include consumption, budgeting, planning, and preparation methods. It can also include enrichment activities around food preparation and cultivation.

## Why is it Important?

The primary motivation for promoting food and nutrition education is to promote positive health outcomes. While unhealthy eating habits can affect anyone's health, individuals who are food insecure have an increased risk for diet-sensitive chronic diseases such as hypertension, high blood pressure, and diabetes (Seligman, Laraia, & Kushel, 2010). Somewhat paradoxically, those who suffer from food insecurity may disproportionately suffer from obesity, possibly due to restricted access to low-calorie and high-fiber foods which tend to be more expensive than refined and processed food (Franklin et al., 2012). Nutrition is more than simply having enough to eat, it also requires there to be sufficient vitamins and minerals – as well as appropriate levels of fats, salts, and sugars – to result in good health.

At the individual level, health literacy refers to having the skills required to make informed health-related decisions. Being able to understand nutrition labels allows individuals to make good eating choices, but the design of the



labels and math required to make sense of them often leave them unused – particularly by overweight, Black or Hispanic, unmarried, and male individuals (Blitstein & Evans, 2006). Unfortunately, these subpopulations also tend to have more negative health outcomes than the overall population. Similarly, understanding how to build a balanced meal can help promote good health and weight loss, but only ¼ of Americans have eating patterns with sufficient amounts of vegetables, fruits, and dairy (US Department of Agriculture, US Department of Health and Human Services, 2004).

At the family level, the nutritional literacy of the mother often has an impact on the rest of the family, as many times she does the bulk of the food purchasing and preparation (Blaylock, Variyam, & Lin, 1999). Parent education on nutrition has been shown to readily influence what children eat and drink (Rich, 2012). And children that grow up in households where healthy eating is modeled and encouraged tend to exhibit similar behaviors when they are grown (Savage, Orlet Fisher, & Birch, 2007). Prenatally and during exclusive breastfeeding, a mother's nutrition directly impacts her child. Prenatal and breastfeeding education can help promote healthy birthweights, avoid birth defects, and pre-incline their children to healthy options (Savage et al., 2007)

Although providing nutrition education to mothers tends to influence the behavior of the whole family, it has been anecdotally noted by women in such classes that they need the support of their husbands in order to implement these changes in the family (CHNA Community Dialogues Debrief, 2017). Educating children directly (either through the schools or integrated programming) allows them to learn for themselves what good nutrition is, rather than relying on parents to both learn and apply this information. However, children do not typically purchase food, and may not have a healthy alternative available to them should they decide to forgo unhealthy options presented to them. In households where the child has access to healthy food and a voice in what they eat, however, child education programs may be effective in changing eating habits

Food and nutrition education can allow families to leverage the resources available to them, particularly when income is limited. Classes that teach the value of purchasing store brands, checking expiration dates, couponing, and meal planning can help families stretch their dollars farther. For recent immigrants and refugees, American food and utensils may be new and/or challenging to use. For those on food assistance or becoming accustomed to new preparation methods, cooking classes can both empower individuals to



use new ingredients and avoid damaging expensive appliances. This in effect becomes a cost reduction method, as less food is wasted and fewer utensils have to be replaced.

Further, classes on gardening can educate individuals on how to produce their own food, which is both healthier than processed food and cheaper than produce found in a grocery store. Community gardens have been shown to have positive impacts on vegetable intake, food security, and family relationships (Carney et al., 2012). Not inconsequentially, community gardens coordinated by immigrant and refugee populations also allow the continuation of culture-specific farming practices, increase the availability of culture-specific fruits and vegetables which may otherwise be unavailable, and provide the community a place and time to gather together.



## **Successful Models**

**SNAP-Ed (Supplemental Nutrition Assistance Program Education)** is an evidence-based program that helps people lead healthier lives. SNAP-Ed teaches people using or eligible for SNAP about good nutrition and how to make their food dollars stretch further. ("USDA (United States Department of Agriculture): Food and Nutrition Service," 2017)

**Vida Saludable** was a two-phase intervention delivered over 9 months to low-income Hispanic mother-child pairs. The first part of the project was educating the mothers on healthy drink choices for their children, the importance of physical activity for both mother and child, and the importance of providing a health role model for their children. The second part of the project involved bringing the mothers together in community settings to reinforce healthy behaviors, including visits to grocery stores, fast food restaurants, a park, a community walk, and a cooking class. The education and community components were delivered bilingually and designed to be culturally-relevant. Healthy behaviors were adopted readily by the group, and the majority continued those behaviors in follow-ups (Bender, Nader, Kennedy, & Gahagan, 2013).

**CityKid Farms** is a component of Urban Ventures in Minneapolis, MN. The program has an educational plot in Midtown as well as a six-acre plot in Lakeville. Between the two sites, neighborhood youth and volunteers grow 45,000 pounds of fresh produce each year. This food enters back into the community in the form of Community Supported Agriculture shares (CSAs) as well as Neighborhood Harvest Shares ("Urban Ventures: CityKid Farms").



## **Sources**

**CHNA Community Dialogues Debrief, 2017** – During a debrief on October 2, 2017 at Olmsted County Public Health, it was noted among dialogue facilitators and note takers that a number of participants had asked why men did not attend nutrition classes, stating that it was difficult to implement nutritional changes to a household unilaterally, with a lack of support, or with resistance from one's husband.

Bender, M., Nader, P. R., Kennedy, C., & Gahagan, S. (2013). A Culturally Appropriate Intervention To Improve Health Behaviors in Hispanic Mother–Child Dyads. *Childhood Obesity*, 9(2), 157–163. https://doi.org/10.1089/chi.2012.0118

Blaylock, J. R., Variyam, J. N., & Lin, B.-H. (1999). *Maternal Nutrition Knowledge and Children's Diet Quality and Nutrient Intakes* (Food Assistance and Nutrition No. 1). Washington, DC: United States Department of Agriculture.

Blitstein, J. L., & Evans, D. (2006). Use of Nutrition Facts Panels among Adults Who Make Household Food Purchasing Decisions. *Journal of Nutrition Education and Behavior*, *38*, 360–364. https://doi.org/10.1016/j.jneb.2006.02.009

Carney, P. A., Hamada, J. L., Rdesinski, R., Sprager, L., Nichols, K. R., Liu, B. Y., ... Shannon, J. (2012). Impact of a Community Gardening Project on Vegetable Intake, Food Security and Family Relationships: A Community-based Participatory Research Study. *Journal of Community Health*, *37*(4), 874–881. https://doi.org/10.1007/s10900-011-9522-z

Franklin, B., Jones, A., Love, D., Puckett, S., Macklin, J., & White-Means, S. (2012). Exploring Mediators of Food Insecurity and Obesity: A Review of Recent Literature. *Journal of Community Health*, *37*(1), 253–264. https://doi.org/10.1007/s10900-011-9420-4

Rich, K. (2012). Parent Nutrition Education and the Influence on Family Lifestyle Behavior Changes (Thesis). Utah State University. Retrieved from http://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=2202&context=etd

Savage, J. S., Orlet Fisher, J., & Birch, L. L. (2007). Parental Influence on Eating Behavior: Conception to Adolescence. *The Journal of Law, Medicine, and Ethics*, *35*(1), 22–34. https://doi.org/10.1111/j.1748-720X.2007.00111.x

Seligman, H. K., Laraia, B. A., & Kushel, M. B. (2010). Food Insecurity is Associated with Chronic Disease Among Low-Income NHANES Participants. *The Journal of Nutrition*, 140(2), 304–310. https://doi.org/10.3945/jn.109.112573



Urban Ventures: CityKid Farms. (n.d.). Retrieved from https://urbanventures.org/citykid-farms/

US Department of Agriculture, US Department of Health and Human Services. (2004). What We Eat in America (National Health and Nutrition Examination Survey (NHANES)).

USDA (United States Department of Agriculture): Food and Nutrition Service. (2017, June 22). Retrieved from https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-education-snap-ed