

# Food is Medicine

## Community Class Promotes Healthy, Affordable Eating



Food is Medicine is a six-week nutrition and cooking program offered through the Lifespan Community Health Institute, a department of the Lifespan health system. The program focuses on the health benefits of a plant based diet.

Mary Flynn, PhD, RD, L.D.N, a research dietician at Lifespan's The Miriam Hospital, developed the curriculum. Classes have been held repeatedly over the past 12 years in collaboration with community organizations. Flynn has conducted research on the benefits of the diet for targeted populations.

### Background

#### Providence: Majority-Minority City

The Miriam Hospital is a founding member of Lifespan and serves the city of Providence and surrounding areas. Providence is considered a majority-minority city, with a population that is 49.8% white, 16% Black/African American, 38.1% Hispanic/Latino, and 6.4% Asian.<sup>1</sup> Twenty-nine percent of Providence residents live below the poverty line.<sup>2</sup>

Lifespan Community Health Institute, a department of Lifespan, develops and runs community health and education programs and activities. The Institute hosts the Food is Medicine class at its main location in the south side of Providence.

A survey conducted by the Rhode Island Department of Health in the south side neighborhoods reported that of the 500 respondents, 39% were overweight, 26% were obese, 34% had high blood pressure, 11% had diabetes, and 10% had heart disease or have had a stroke. Additionally, 7 in 10 adult respondents reported that they do not regularly consume the recommended amounts of fruit and vegetables.<sup>3</sup>

### Overview

**Institution:** Lifespan/ The Miriam Hospital

**Location:** Providence, RI, population 179,000 (29% live below poverty line)

**Issues:** Addressing food insecurity and promoting healthy eating

**Result:** Study showed the diet improved body weight and food security. The program is now offered as a community education class.

#### Plant-Based Olive Oil Diet: Healthy, Easy, and Economical

Flynn developed the plant-based olive oil diet in 1999 to address weight loss and to improve health measures associated with chronic disease. When Flynn used the diet in a study of women with invasive breast cancer, she learned from participants that following the diet improved their health and helped decrease their food costs.<sup>4</sup>

Subsequently, Flynn began a study with the Rhode Island Community Food Bank to explore the effect of following the diet on food insecurity. The results showed that most participants experienced less food insecurity and showed improvements in body weight during the six month follow up period.

Following the diet proved less expensive than the "most economical" diet recommended by the U.S. Department of Agriculture (USDA). The results of this study were published in the Journal of Hunger and Environmental Nutrition.<sup>5</sup>



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## Program Description

### [Six Weeks of Cooking and Conversations on Food and Health](#)

Classes begin with instructors introducing a weekly recipe. Students observe the recipe being made, then taste the dish and talk about related nutrition topics. Instructors cover a series of talking points, intended to incite conversation about how participants cook and eat at home.

The talking points include health benefits of a plant-based diet, how to get adequate servings of vegetables, and what extra virgin olive oil is and how to use it. Instructors also discuss serving portions and substitutions (e.g. fresh, canned, or frozen ingredients), and tips for buying and storing foods.

The classes are around 30 minutes in length, and cooking is done on an electric hotplate, which further demonstrates the simplicity of preparing simple, healthy meals. Participants receive the program recipe book, which includes information on appropriate portions, cost, and nutrient content. Recipes are economical (ranging in cost from \$.72-\$1.37 per serving<sup>6</sup>) and require no more than 15-20 minutes total preparation time.

### [Partners and Volunteers](#)

The program is promoted through partner organizations via websites, emails, and posters. Trained student volunteers from local institutions including Salve Regina and Johnson & Wales universities lead the community classes.

The class is also held off-site at community partner locations, such as the Genesis Center, a multi-service organization serving low-income, immigrant, and refugee populations. Medical students from the Warren Alpert Medical School at Brown University participate in Food is Medicine research classes.

Lifespan estimates that 50-75 community members participate in the on-site program annually.



## Food is Medicine in Practice

The Food is Medicine program is being employed for research and community education. Program recipes have also been adapted for use on a larger scale at congregate meals sites.

### [Lifespan/The Miriam Hospital Research Study](#)

Flynn is currently conducting research on use of the diet by low-income individuals with type 2 diabetes. Study participants receive food supplies to ensure they can follow the program for the prescribed 2-3 meals per week, during both the six weeks of class and the six-month follow up period. This study is being funded by a grant from the Rhode Island Foundation.

### [Southside Community Land Trust- Community Partner](#)

Located in South Providence, the Southside Community Land Trust (SCLT) runs urban agriculture program. In 2014, SCLT received a grant to fund a nutrition and gardening education program and partnered with Lifespan to use the Food is Medicine curriculum, as the project's nutrition component, under the title of "Better Health and Gardens."

The class is open to community members on a first come first serve basis. In general, classes are kept small, with 5-7 participants. The trust promotes the classes through community partner organizations, and often works with these partners to offer the class within another program. In July 2016, the class was offered within an English as a Second Language (ESL) class for adults.

The Southside Community Land Trust sponsored classes also include a basic introduction to gardening and a free one-year SCLT membership

(\$50 value), which gives participants access to free and discounted garden supplies and to gardening resources. The trust also uses recipes for cooking demonstrations at neighborhood farmers markets.

### [McAuley Ministries/Healing Foods Project – Community Partner](#)

McAuley Ministries is a nonprofit assistance organization run by the Sisters of Mercy-Northeast Community. McAuley House serves 300 hot lunches daily. Flynn worked with McAuley Ministries to adapt Food is Medicine recipes for this institutional setting. To ensure she was meeting attendees' needs, Flynn first surveyed participants to learn what they did, and did not want and how often they came for meals.

A post program survey, conducted nine months after the new plant-based meals were instituted, indicated that 88% of respondents preferred the new meals as much, or more than, the original meals. From this work, the Healing Foods Project website was developed to support healthy eating at congregational meal sites.

The Healing Foods Project Cookbook is available for free. For groups interested in implementing the healthy cooking program on-site, the Healing Foods Project website offers a basic plan to facilitate this.

### **Program Cost and Funding**

Lifespan Community Health Institute runs a myriad of health education and prevention programs. Its programs use equity-based strategies to address health disparities and are part of Lifespan's community benefit investments. Flynn secures grant funding to support her research related to the Food is Medicine program, and she spends eight hours per week on general program administration.

Lifespan supports community education programs by providing space for classes. In addition, community class participants receive free olive oil at the beginning and end of the sessions to encourage them to follow the new recipes. Student volunteers dedicate approximately 24 hours of time to each six-week session.

### **Lessons Learned**

#### [Meet people where they are.](#)

Low-income individuals have many demands on their time and limited financial resources. Food is Medicine recipes were designed to use items that can be found at pantries and stores carrying basic food items. The location of classes in the south side of Providence makes the program accessible to a population that experiences significant diet-related chronic disease and faces barriers to accessing healthy food. The partnership with Southside Community Land Trust gives participants a chance to learn about community gardens and local farmers markets.

#### [Follow up with participants is beneficial.](#)

The class participants can, and do, change their eating habits and improve their health. For the study participants, Flynn found the monthly follow up meetings very rewarding as participants' excitement grew over improvements in their weight, blood glucose, and blood pressure measures, which reinforced the changes they had made.

Lifespan is trying to determine how to support long-term change in its community education classes. One possibility is providing food supplies from its on-site micro-pantry.

### **Opportunities**

#### [Dual Language Classes](#)

One session of the class during the summer of 2016 is being taught as part of an ESL class. Offering classes in Spanish would make the program more accessible to the large Spanish-speaking population in Providence.

#### [Program Evaluation](#)

Lifespan is implementing program evaluation procedures across its community programs. A pre- and post- series questionnaire has recently been implemented to assess program quality and participation. With this feedback, Lifespan will further refine the program.

### Grow Micro-Pantry

Currently, participants in the Food is Medicine program receive food supplies to support them in following the diet. Lifespan hopes to expand the pantry, and to be able to offer food supplies to participants in the community education classes as well.

### Expand Classes and Support Services

Lifespan hopes to engage Food is Medicine participants in its other education classes; these include financial literacy, parenting, and health literacy. Lifespan also strives to reach more people by offering the classes in collaboration with other community based organizations. With this approach, Lifespan seeks to further address health disparities and equity issues.

### **References**

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- (4) Flynn M, Reinert SE. Comparing an olive oil-enriched diet to a standard lower-fat diet for weight loss in breast cancer survivors: a pilot study. *Journal of Women's Health*. 2009;19(6):1-7.

- (5) Flynn, et al. (2013) A Six Week Cooking Program of Plant Based Recipes Improves Food Security, Body Weight, and Food Purchases for Food Pantry Clientele, *Journal of Hunger and Environmental Nutrition* 8:1, 73-84 DOI: 10.1080/19320248.2012.758066
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