

### Screening for healthy dietary habits among patients seen in the resident clinic

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#### Background

The Mediterranean diet (MD) is characterized by a high intake of plant-based foods, monounsaturated fats, and fish and a moderate intake of meat. The MD is strongly associated with better cardiometabolic health outcomes, reduced risk of depression, and may help prevent certain types of cancer. Despite the health benefits of the MD, many sociodemographic and economic determinants cause disparities in the level of adherence to this dietary pattern. Food insecurity is significant public health problem associated with poor diet quality and chronic diseases. Healthcare providers play an important role in assessing patients for food insecurity and dietary behaviors as part of their preventive care practices. This study aimed to examine the food insecurity and MD adherence of a racially and ethnically diverse patient population at the University Hospital Ambulatory Care Clinic in Newark, NJ.

#### Objectives

This goal of this study was to describe the prevalence of food insecurity and MD adherence of a high-risk patient population. This study also allowed for clinicians to evaluate the utility of a brief screening tool to facilitate the identification of patients who may benefit from nutrition counseling and referral to community resources.

#### Methods

Fifty-four adult patients completed a 12-item screening tool. The tool included a 9-item MD screening questionnaire recommended by the American Heart Association (AHA), a 1-item self-rated diet quality question used in the National Health and Nutrition Examination Survey, and 2 food insecurity screening questions. During clinical encounters, healthcare providers assessed adherence to the MD and screened for food insecurity. They provided brief diet counseling or referred patients to nutrition services when appropriate. Patient charts were retrospectively reviewed for demographic data and Body Mass Index (BMI). Patient characteristics, MD scores, and food insecurity responses were summarized using descriptive statistics.

#### Results

In December 2019, 54 patients participated in the study. Mean age was 51.3, 39% were male, mean BMI was 28.0 kg/m<sup>2</sup>, 52% were Hispanic, and 43% were African American. Nearly half (48%) of participants rated their diet quality as poor or fair. The mean Mediterranean Diet Score (MDS) was 5.3 (SD 2.1), having a low of zero and a high of nine. Less than 25% of participants drink less or equal to 2 drinks/day of wine for male and 1 drink/day of wine for

female participants. Less than 40% of participants have a handful of nuts/seeds most days/week. Half (51%) of participants screened positive for food insecurity.

### Discussion

Nearly half of the participants in this study rated their diet as fair or poor. This is consistent with the results of the total MDS. For the individual MD food group components, more than half of participants met the minimum recommended servings. However, the mean MDS indicates that most participants are only adhering to 5 of 9 MD recommended food group components. Most patients (61%) were overweight or obese. Fifty percent of the participants experienced food insecurity in the last 12 months. Food insecurity is important risk factor for overweigh/obesity that should be monitored to understand how a patient's socioeconomic situation might be compromising their food choices. During this study, providers agreed that nutrition referrals should be initiated based on food insecurity screening regardless of MDS. More efforts should be made to refer patients to Registered Dietitians to address gaps in nutrition knowledge and to community based resources to address food insecurity.

### Limitations

The limitations of this descriptive study warrant consideration. A small sample of participants were recruited from one ambulatory care clinic and the results may not be representative of this population. While the MD screening tool is recommended by the AHA, to our knowledge, it has not yet been validated.