Impact of Cooking at Home on Diet Quality

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PRESENTATION FORMAT: 15 minute oral presentation

TOPIC/TARGET AUDIENCE: Nutritional Epidemiology and Policy

ABSTRACT: Background: Obesity is one of the most prevalent nutritional diseases in adults in the United States. The primary factor is an imbalance of energy expenditure and dietary intake. That is, the quantity of energy going in is not equal to the energy being burned in the body. The daily energy consumed from home food sources and time spent in food preparation at home decreased significantly from 1965 to 2007. However, in the 1970s, policy makers and researchers looked to see if some sections of the community are able to provide affordable and sustainable nutrition despite being in otherwise impoverished environments.

Objective: In this study, we will seek to elucidate the impact of frequency of cooking at home on the diet quality as measured by Healthy Eating Index (HEI) 2010 and Mean Adequacy Ratio (MAR) after controlling for diet cost, attitudes, and sociodemographic factors.

Data: The Seattle Obesity Study II (S.O.S II) used stratified area-based sampling to ensure adequate representation by income, race and ethnicity. The sampling procedures and survey administration were modeled on the Behavioral Risk Factors Surveillance System (BRFSS) telephone surveys.

Methods: The main independent variable of interest was frequency of cooking at home in a week. Based on the distribution of responses, data were grouped into three categories: Low frequency (0-3 times per week), Medium (4-5 times per week) and High (6 or more times per week). The dependent variables were HEI 2010 and MAR scores. A cross-sectional study was conducted using multivariate linear regression to assess this impact.

Results: After having controlled for frequency of eating away-from-home, diet cost, attitudes, as well as demographic, the people who were medium home cooks, i.e. cooked 4-5 times a week, had 3.36 (CI 0.62, 6.10) increase in HEI 2010 scores compared to the low category (p-value <0.05). The people who were in the high category had an increased score of 4.42 (CI 1.77, 7.07) compared to the low category (p-value = 0.001).

Conclusions: We found that cooking at home has a strong independent effect on diet quality as predicted by HEI 2010 and MAR scores, after controlling for diet cost, demographics and attitudes.

OBJECTIVE(S): Explain the reasons for positive deviance in nutrition and how that can be translated into policy

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