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Assessing Availability of Healthy Options in Food Stores to Guide Community Transformation Grant Activities in Massachusetts

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INTRODUCTION. Availability of healthy options in food stores is important to preventing obesity. The Mass in Motion Initiative and two Community Transformation Grant (CTG) projects are conducting statewide longitudinal surveys on availability of major healthy and unhealthy food items in food stores in Massachusetts (MA).

METHODS. The Community Nutrition Environment Evaluation Data System (C-NEEDS) was developed for food environment surveillance. C-NEEDS takes into account seasonal and geographic variations in food supplies, cultural relevance, and USDA dietary recommendations. Between summer 2012 and winter 2013, 567 food stores in 34 municipalities were surveyed and analyzed. Healthy food availability index (HFAI) was calculated for each store. HFAI has a possible range of 0 to 56, with a higher score indicating a greater availability of healthy food items. Community-level variations in HFAI were analyzed in relation to median household income and housing density.

RESULTS. The HFAI scores had good to excellent inter- and intra-rater reliabilities. Store-level HFAI scores had a bimodal distribution, with over 70% of the stores having a score <20. These stores tended to smaller convenience/corner stores and were more likely to be located in urban settings. Approximately 10% of the stores had a near perfect score of 45 or higher and tended to be larger supermarkets located in more affluent, lower density communities.

DISCUSSION. The majority of the surveyed stores were low in healthy food availability, indicating the need of community interventions. Analysis of store- and community-level variations in availability is useful for CTG programs to formulate and prioritize interventions. Future longitudinal surveys of food stores in the intervention and control communities will help evaluate the effectiveness of CTG interventions.

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Special Note: This study has been submitted to APHA for national presentation

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