bridging the gap
Research Informing Policies & Practices for Healthy Youth

Research Brief
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Prepared Foods Sold in Supermarkets, Grocery Stores, and Convenience Stores

Introduction

Fast food is a significant part of the American diet and has been associated with higher intake of calories, fat, sodium, and sugar; lower intake of vegetables and micronutrients; and higher body weight and weight gain.[1-5] At traditional fast food restaurants, customers order and pay at the counter and food is consumed either on premises or off premises as carryout. But, increasingly, fast food also includes prepared, ready-to-eat food sold in supermarkets, grocery stores, and convenience stores.[6]

A 2005 study in the 20 largest U.S. cities found that 46 percent of neighborhoods had at least one fast food restaurant within walking distance, not counting prepared food available in stores.[7] Given their proximity and convenience, fast food and other prepared, ready-to-eat food sources may be contributing to poor diets and increases in obesity.

This is the first nationwide study of prepared, ready-to-eat food availability in food stores. It looks at the association between community characteristics and the availability of both healthier and less healthy prepared, ready-to-eat foods in U.S. supermarkets, grocery stores, and convenience stores.[*]

This study used 2011–2012 data from the Bridging the Gap Community Obesity Measures Project (BTG-COMP), the only nationwide study involving direct observation of the food environment in the U.S. The data covered 317 communities across 42 states. Researchers identified 620 supermarkets, 620 grocery stores, and 3,121 convenience stores from commercially available business lists (Dun and Bradstreet, InfoUSA) and on-the-ground data collection.

Food and beverage data came from the Bridging the Gap Food Store Observation Form, which measured availability of five prepared, ready-to-eat food items: cold sandwich (wrapped/ready-to-eat or made-to-order), prepared vegetable salads (excluding those premixed with mayonnaise or dressing like coleslaw or potato salad) or salad bar, pizza, hot dog/hamburger, and taco/burrito/taquito. Three dichotomous outcomes were derived: availability of any prepared foods (at least one of the five items); availability of prepared vegetable salad or salad bar; and availability of less healthy prepared foods (at least one of the following: pizza, hot dog/hamburger, taco/burrito/taquito). Because of wide variations in their ingredients, the cold sandwich item was included in the "any prepared foods" measure but was considered neither healthier nor less healthy.

Key Findings

Overall, 63.6 percent of stores sold at least one of the prepared foods examined in this study. Thirty-six percent of stores offered at least one of the less healthy food items and considerably fewer stores (20.0%) offered prepared salads.

Rural stores were 26 percent less likely to carry prepared salads than were suburban stores, but there was no difference in availability of prepared salads between urban and suburban stores. Stores in high-poverty communities (communities in upper third for household poverty rate) were 29 percent less likely to carry prepared salads than those in low-poverty communities (those in bottom third for household poverty rate). Availability of prepared salads in convenience stores was 36 percent lower in high-poverty communities than in low-poverty communities.

Accounting for racial/ethnic composition, poverty level, and other factors, rural food stores were 14 percent more likely to carry at least one less healthy prepared food item than were stores in suburban communities.

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[*] Supermarkets are defined as: selling fresh (unprocessed) meat, having four or more cash registers, and having at least two of: butcher, bakery, or deli. Grocery stores have fresh meat but do not meet the other supermarket criteria. Convenience stores have no fresh meat and sell a limited selection of staple groceries or other convenience items.

Among supermarkets, the likelihood of prepared salad availability was higher in majority white, low-poverty communities than non-white, high-poverty communities.

Conclusions & Policy Implications

Based on the foods assessed in this study, less healthy prepared foods are commonly available in stores, and customers' ability to choose prepared salads is limited, especially in rural stores and convenience stores in high-poverty communities. The continued growth in and demand for prepared, ready-to-eat foods highlights the need for public health professionals to work with storeowners and managers to improve the healthfulness of prepared foods sold in supermarkets, grocery stores, and convenience stores particularly in these high-need communities.

In addition, efforts to reduce exposure to unhealthy fast food, such as fast food restaurant moratoriums and fast food industry reformulation of offerings, may have limited success if prepared foods within stores are ignored. The federal Food and Drug Administration (FDA) regulations requiring chain supermarkets, grocery stores and convenience stores to post calorie information on individually-sized prepared food items are a positive development for increasing consumer awareness of the nutritional quality of prepared foods.

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References

1. Powell LM, Nguyen BT, Han E. Energy intake from restaurants: Demographics and socioeconomics, 2003–2008. Am J Prev Med. 2012;43(5):498-504.
2. Fryer CD, Ervin RB. Caloric intake from fast food among adults: United States, 2007-2010. NCHS Data Brief. 2013;114:1-8.
3. Nguyen BT, Powell LM. The impact of restaurant consumption among US adults: Effects on energy and nutrient intakes. Public Health Nutr. 2014:17:2445-2452.
4. Bowman SA, Vinyard BT. Fast food consumption of US adults: Impact on energy and nutrient intakes and overweight status. J Am Coll Nutr. 2004;23(2):163-168.
5. Rosenheck R. Fast food consumption and increased caloric intake: A systematic review of a trajectory towards weight gain and obesity risk. Obesity Reviews. 2008;9(6):535-547.
6. Sharkey JR, Johnson CM, Dean WR, Horel SA. Focusing on fast food restaurants alone underestimates the relationship between neighborhood deprivation and exposure to fast food in a large rural area. Nutr J. 2011;10:10.
7. Zenk SN, Powell LM. U.S. secondary schools and food outlets. Health Place. 2008;14(2):336-346.

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