



**bridging the gap**  
 Research Informing Policies & Practices  
 for Healthy Youth

Research Brief  
 November 2015

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# Availability of Healthy Food Products at Check-out Nationwide, 2010–2012

## Introduction

The placement of products in food retail establishments shapes the shopping environment of the consumer and influences which foods and beverages a consumer chooses to purchase.<sup>1</sup> Every shopper passes through the check-out to purchase products, and, as such, is exposed to the products marketed in this area. Products placed near the check-out register appear to encourage last minute or impulse purchases.<sup>2</sup> With over \$5.5 billion in sales of drinks, food, and other products at supermarket check-outs alone each year and a significant portion of these sales consisting of soda and candy<sup>3</sup>, the check-out is a prime location to help encourage healthier food purchases.

The 2010 Dietary Guidelines for Americans included a call to action for a multi-sector approach to improve the food and physical activity environment. As part of this call to action, strategies to improve access to healthy food in a variety of settings were recommended, including partnerships with food retailers and suppliers to promote availability of healthy and affordable foods in food retail establishments.<sup>4</sup>

Changing the options available in food retail check-out aisles such as switching water for soda as well as offering unsalted nuts, fresh fruits, and vegetables instead of sweets or salty snacks, can promote healthier food purchasing choices. This brief describes food and beverage products available at check-out in 8,617 retail food stores (including supermarkets, grocery stores, and convenience and other retail food stores like drug stores, and dollar stores) located in 468 communities across the United States between 2010 and 2012.

**Supermarkets:** had fresh (unprocessed) meat, four or more cash registers, and at least two of the following: butcher, bakery, and/or deli

**Grocery stores:** had fresh meat but did not meet the other supermarket criteria

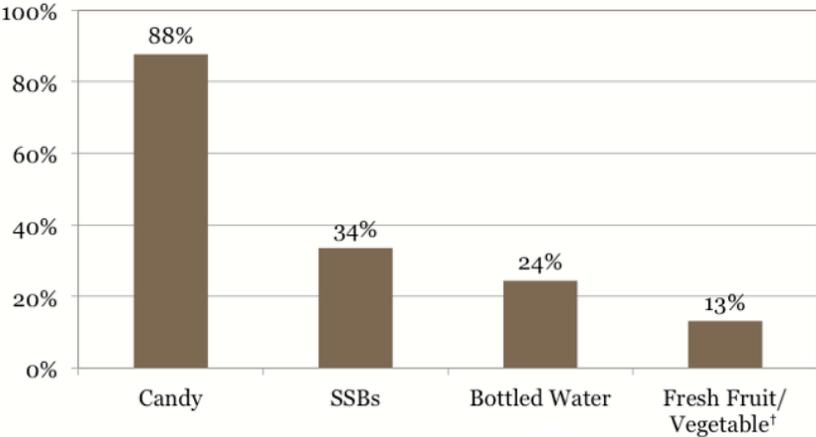
**Convenience and other retail food stores:** had no fresh meat and sold a limited selection of staple groceries or other convenience items

## Key Findings

Healthier foods and beverages were less available at check-out than unhealthy foods and beverages:

- Only 13% of stores carried fresh fruits/vegetables at check-out compared to 88% of stores that carried candy.
- Bottled water, which includes plain, unflavored and unsweetened water, was available at check-out in 24% of stores, while 34% of stores carried sugar-sweetened beverages (SSB), such as non-diet soda, energy drinks, vitamin water, and sugar-sweetened coffee drinks. Milk, 100% juice, and diet sodas were not considered sugar-sweetened beverages.

**Overall Availability of Healthy and Unhealthy Items at Check-out (unadjusted percentage of stores)**

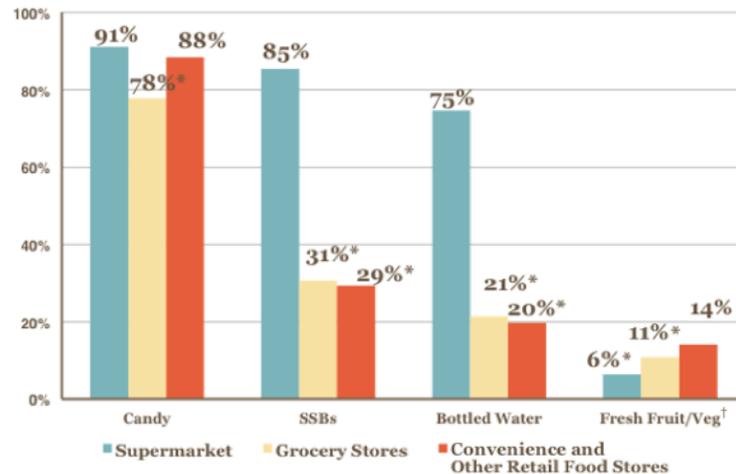


<sup>†</sup>Fresh fruit and vegetable data were not collected in 2010 and thus are only available for years 2011 and 2012.

The type of store determines what is available at check-out:

- Supermarkets were more likely to carry candy at check-out (91%) than grocery stores (78%).
- Supermarkets were more likely to carry SSBs and bottled water at check-out (85%, 75%) than grocery stores (31%, 21%), and convenience and other retail food stores (29%, 20%).
- Convenience and other retail food stores were more likely to carry fresh fruits or vegetables at check-out (14%) than grocery stores (11%) and supermarkets (6%).

### Availability of Healthy and Unhealthy Items at the Check-out by Type of Store (adjusted percentage)

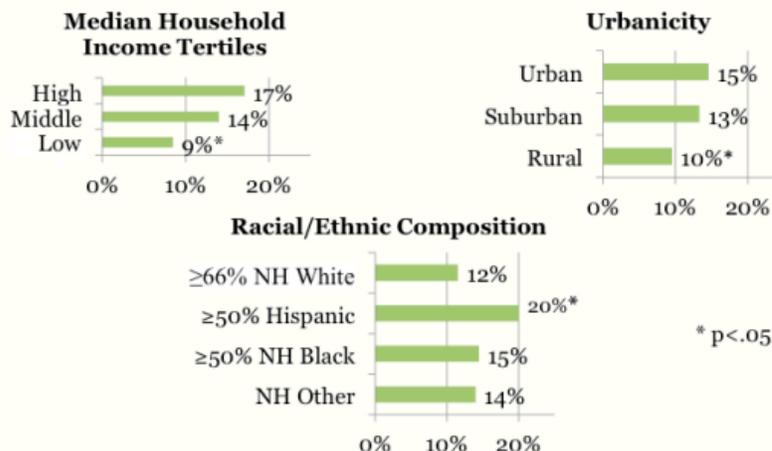


Percentages adjusted for racial/ethnic composition, urbanicity, U.S. census division, median household income, year, and a healthy item availability store score. \*p<.001  
 † Fresh fruit and vegetable data were not collected in 2010 and thus are only available for 2011 and 2012.

The availability of fresh fruits/vegetables at check-out in all retail food stores differs by community characteristics:

- Stores located in low-income communities were less likely to carry fresh fruits/vegetables at check-out than stores located in middle- and high-income communities.
- Stores located in rural communities were less likely to carry fresh fruits/vegetables at check-out than stores located in suburban or urban communities.
- Stores located in majority Hispanic communities were more likely to carry fresh fruits/vegetables at check-out than stores located in majority non-Hispanic white communities.

### Availability of Fresh Fruit and/or Vegetables at Check-out† by Income, Urbanicity, & Racial/Ethnic Composition (adjusted percentage of stores)



Percentages mutually adjusted for racial/ethnic composition, urbanicity, store type, U.S. census division, median household income, year, and a healthy item availability store score.  
 † Fresh fruit and vegetable data were not collected in 2010 and thus were only available for 2011 and 2012.

## Conclusions and Policy Implications

Less than one-quarter of retail food stores included in this study carried bottled water or fresh fruits/vegetables at check-out. Across all types of stores, sugar-sweetened beverages were more available than bottled water at check-out, and stores located in low-income and rural communities had less availability of fresh fruits/vegetables at check-out than those in higher income and more urban settings. Communities with high proportions of Hispanics carried more fresh fruits/vegetables than those in non-Hispanic white communities. These findings suggest there is opportunity to increase the availability of healthy food and beverages at check-out and promote healthier choices for consumers.

Partnerships among government agencies, food manufacturers, and food retail business owners are one such option. In West Virginia, for example, stores that agree to provide healthy snack options at check-out like fresh fruits and vegetables are given shelving units to redesign their check-out aisles, signage and community recognition through press releases from the public health department, as well as advertisements in local newspapers to support their efforts to help customers make healthy choices.<sup>5</sup> Lidl, a 600-store United Kingdom supermarket chain, has removed sweets and chocolate from its check-out aisles following a 10-week trial in 2013 showing an increase in foot traffic and consumer demand for healthier options in the check-out aisle, and public accolades by the Prime Minister.<sup>6</sup>

Adoption of healthy nutrition standards for check-out may be another option<sup>7</sup>, and could lead to government regulation of products at check-out. Standards currently exist for vending machines leased on public property regarding healthy food and can serve as a model for check-out in retail food stores.<sup>8</sup> Short of regulation, government agencies could choose to recognize food retail stores that voluntarily promote healthier food options at check-out, similar to the Leadership in Energy and Environmental Design (LEEDS) program.<sup>9</sup>

Given consumer demand for healthier products and new efforts by the advocacy community to promote change at the check-out<sup>7</sup>, the check-out of the future is likely to look much healthier.

## Study Overview

The findings from this research brief were derived from the Bridging the Gap Community Obesity Measures Project (BTG-COMP). The research team identifies local policy and environmental factors that are likely determinants of health outcomes and collects, analyzes and shares data about these characteristics. The communities surveyed in this study represented school enrollment areas for middle and high schools whose student population was part of an annual nationally representative sample of 8th, 10th, or 12th grade students attending traditional public schools in the continental U.S. in 2010, 2011, and 2012. For this analysis, aggregated census block data from the American Community Survey 2007–2011 5-year estimates were used to measure racial/ethnic and socioeconomic characteristics. Locale codes from the National Center for Education Statistics provided community urbanicity codes. Observational data were collected in a total of 8,960 sampled food stores, with 8,617 stores available for analysis. Of these, 937 were supermarkets, 833 grocery stores, and 6,847 were other retail stores carrying food but not fresh meat (e.g., convenience stores, drug stores, and dollar stores). Data were pooled across the three years for analysis and weighted to account for the sampling design.

## Endnotes

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**Suggested Citation:** Barker DC, Quinn CM, Rimkus L, Mineart C, Zenk SN, Chaloupka FJ. *Availability of Healthy Food Products at Check-out Nationwide, 2010-2012*. A BTG Research Brief. Chicago, IL: Bridging the Gap Program, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago; 2015.

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Bridging the Gap is a nationally recognized research program of the Robert Wood Johnson Foundation dedicated to improving the understanding of how policies and environmental factors affect diet, physical activity and obesity among youth, as well as youth tobacco use. For more information, visit [www.bridgingthegapresearch.org](http://www.bridgingthegapresearch.org) and follow us on Twitter: [@BTGresearch](https://twitter.com/BTGresearch).