

Assessing the Implementation of Kids' Meals Healthy Default Beverage Policies in the State of California and City of Wilmington, Del.

Healthy Eating
Research

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The Issue

There is clear and consistent evidence that reducing consumption of sugar-sweetened beverages (SSB) would improve kids' health. SSB consumption is closely tied to increased risk for developing overweight and obesity, getting dental caries, and potentially developing insulin resistance among children. In response, many government entities have enacted a range of policies intended to limit kids' SSB consumption and encourage healthier choices. Of such policies, healthy default beverage (HDB) policies specifically require restaurants to offer only healthier drinks (e.g., water, milk, 100% juice) instead of SSBs as the default options with kids' meals, a combination of food and drink items sold as a single unit. Parents can still order other, less healthy drinks if they wish. California's state HDB policy (SB-1192) took effect January 1, 2019. A similar city ordinance (Ordinance No. 18-046) in Wilmington, Del., took effect Jan. 6, 2019.

This brief highlights findings from joint research conducted by the Nutrition Policy Institute (NPI) at the University of California Division of Agriculture and Natural Resources and the Center for Research in Education and Social Policy (CRESP) at the University of Delaware to evaluate implementation and restaurant manager perceptions of this policy approach. Data on menus and beverages offered by cashiers during kids' meal orders were collected pre- and post-policy implementation: in California, one month prior to and nine to 12 months after the effective date; and in Wilmington, within one month prior to and seven months after the effective date. Findings suggest that the proportion of restaurant menus compliant with HDB policies increased by 56 percent in California, but did not change in Wilmington between pre- and post-policy implementation. Few restaurant staff ever verbally offered healthier beverages when kids' meal orders were placed in either California or Wilmington.

Introduction

Sugar-Sweetened Beverages and Children

The average child living in the United States far exceeds the daily recommended intake of added sugars, half of which come from SSBs.¹ On average, American children consume 143 calories per day from SSBs alone.² Children who consistently consume SSBs have significantly higher chances of becoming overweight or obese.^{3,4} A child's chance of becoming obese increases by 60 percent for every additional 12 fluid ounces of soda that they consume daily.⁵ At the same time, Americans eat meals outside of the home more today than in the past, with more than half of food expenditures now spent away from the home.



Current Context: The COVID-19 Pandemic

In the era of COVID-19, new questions have emerged about the ways in which consumers access restaurant food and the importance of default beverage policies in this context. Today, we are experiencing a new reliance on online ordering, third-party intermediary ordering, delivery purchasing, and drive through purchasing. The role of default policies in this context is important and not well understood. Although implementation data in this brief was collected prior to COVID-19, studying whether and how restaurants are implementing healthy defaults in online or third-party ordering systems may be beneficial in carrying this work forward.

Children consume 33 percent of their daily calories away from home, including at restaurants and schools.^{6,7,8} Research shows that when children eat at fast food restaurants, their average sugar consumption increases by 24 to 64 calories.⁴ Indeed, 80 percent of the beverages offered by chain restaurants—both sit-down and fast food establishments—are sugar-sweetened.⁹ Finally, a recent 2019 report found that 83 percent of the top 200 chain restaurants with kids' menus offered soda or other SSBs with kids' meals.¹⁰

Both adults and children are susceptible to packaging and advertising. According to a recent study, researchers found that adults who bought bundled meals (i.e., a kids' meal that comes with a drink included) for a child were significantly more likely to buy high-calorie SSBs instead of unsweetened drinks when compared to those buying other types of meals.¹¹ Children are particularly susceptible to images and marketing, a tactic well utilized by the beverage industry.^{12,12} Beverage companies spent \$1.04 billion on advertising in 2018, and children ages 2-5 viewed 26 percent more advertising for SSBs in 2018 than in 2013.¹³ Similarly, exposure to food-related ads (i.e., ads for food and nonalcoholic beverages) was significantly associated with increased consumption of these foods by children.¹⁴ Yet, research indicates that parents and children are open to healthier alternatives. For example, a study of a large national sample of children found that more than 80 percent indicated they would be happy to receive (i.e., receptive to) a restaurant meal served with milk, water, or flavored water instead of soda.¹⁵

Government Action to Date

Increasingly, governments are taking action to ensure that the default beverages sold with kids' meals are healthier (definitions vary across jurisdictions and are described in **Table 1**). To date, the states of California, Hawaii, and Delaware, as well as a number of cities—such as Philadelphia, Pa.; New York; Lafayette, Colo.; Baltimore, Md.; and Louisville, Ky.—have enacted such policies.¹⁶ These policies vary in their application by jurisdiction, but typically apply to quick-service (fast food) as well as full-service restaurants, and may also apply to other food service establishments like cafeterias or soup kitchens. Ongoing campaigns promoting similar policies are currently underway in additional cities, states, and counties across the United States. Rather than restricting what beverages can be purchased with kids' meals, such policies aim to ensure healthier options are included with kids' meals and presented to customers. Ultimately it is the customer's choice if he or she wants to include the healthier beverage or choose an alternative. To date, no such policies have been evaluated.

The California Example

In September 2018, the California legislature passed SB-1192 (effective Jan. 1, 2019) specifying healthier default beverages in bundled kids' meals as plain or sparkling water (with no added sweeteners), unflavored milk, or unflavored, non-dairy milk alternatives.¹⁷ The law also prohibits menus, menu boards, or advertisements for kids' meals that include beverages other than the approved default options.

State Sen. Bill Monning, the law's author, explained the law's importance: "Our state is in the midst of a public health crisis where rates of preventable health conditions like obesity and type 2 diabetes are skyrocketing, due in large part to increased consumption of sugary beverages."¹⁸ SB-1192 establishes fines for those restaurants that fail to comply—within a five year period, written notice is provided for the first violation, \$250 for the second violation, and \$500 for any subsequent violation.

The Wilmington, Del., Example

In October 2018, the city of Wilmington, Del., passed an ordinance (effective January 6, 2019) specifying healthier default beverages as unsweetened plain, flavored, or sparkling water; regular, low-fat or fat-free milk, including flavored milk, or non-dairy milk alternatives; and unsweetened, 100 percent juice.¹⁹ At the time, Wilmington Mayor Mike Purzycki said, "Attention to our personal health and certainly the needs of our children should be of utmost importance to all of us through the course of our lives. At the same time, making sensible nutritional choices can be confusing because we are exposed to so many influences regarding what we eat and drink."²⁰

In July 2019, the state of Delaware passed a statewide law, HB-79, that effectively expanded the policy across Delaware. The policy took effect in July 2020. HB-79 was seen as a starting point for shifting toward healthier choices not only in restaurants but also at home, while not limiting choice.²⁴ Furthermore, leadership in the health department and by state Rep. Melissa Minor-Brown, sponsor of HB-79, reflected concerns for child nutrition and obesity, and the often subtle but powerful influence of the soda industry on families and communities. "We have to think about how communities are overwhelmed by a beverage industry that too often makes cheap, unhealthy, sugar-filled drinks the first option for a drink," said Kara Odom Walker, cabinet secretary, Department of Health and Social Services, and Karyl Rattaysaid, director, the Division of Public Health.²¹

The Wilmington policy includes a fine structure applicable to those restaurants that fail to comply—within a five year period, written notice for the first violation, \$250 for the second violation, and \$500 for each subsequent violation—while the state policy specifies that enforcement will only occur if a restaurant also does not comply with other applicable health and safety standards.

Table 1

Selected Parameters of Healthy Default Policies Across the United States by Location

Location	Requires Pictures of Kids' Meals on Menus/ Ads to Include Only Healthy Beverages	Water, Unsweetened Flavored Water, Sparkling Water	Milk, Non-Dairy Milk	Unsweetened Fruit or Vegetable Juice (8 oz. or less)	Any Drink With Fewer Than 25 kcals/8 oz. and No Artificial Sweetener
States					
California	✓	✓	✓	✗	✗
Hawaii	✗	✓	✓	✓	✗
Delaware	✗	✓	✓	✓	✗
Cities and Counties					
Davis, Calif.	✗	✓	✓	✗	✗
Stockton, Calif.	✗	✓	✓	✗	✗
Perris, Calif.	✗	✓	✓	✓	✗
Berkeley, Calif.	✗	✓	✓	✗	✗
Cathedral City, Calif.	✗	✓	✓	✗	✗
Long Beach, Calif.	✗	✓	✓	✓	✗
Daly City, Calif.	✗	✓	✓	✗	✗
Santa Clara County, Calif.	✗	✓	✓	✗	✗
Wilmington, Del.	✗	✓	✓	✓	✗
Philadelphia, Pa.	✗	✓	✓	✓	✗
New York City, N.Y.	✗	✓	✓	✓	✗
Lafayette, Colo.	✗	✓	✓	✗	✗
Baltimore, Md.	✗	✓	✓	✓	✗
Louisville, Ky.	✗	✓	✓	✓	✓

Brief Methodology: Studying California and Wilmington, Del.

Researchers from NPI (California) and CRESPI (Delaware) collaborated on research design and data collection approaches, using a mixed-methods, pre-post design to understand the extent to which HDB policies in California and Wilmington, Del., were implemented, and their effects on kids' beverages offered on menus and during ordering. In late 2018, baseline data on bundled kids' meals were collected from 111 quick-service restaurants (QSR) in California, and at both QSRs and sit-down restaurants in Wilmington (16 restaurants total). The California sample was a random sample of 111 chain and non-chain QSRs located in 11 low-income counties, obtained from Dun & Bradstreet data. Restaurants were identified as selling an eligible kids' meal based on review of restaurant websites and/or phone calls. In Wilmington, the sample was comprised of all restaurants that offered eligible kids' meals within city limits, determined through phone calls and checking online menu. After the policies took effect, follow-up data were collected from the same restaurants seven months later in Wilmington and 9 to 12 months later in CA.

At both pre- and post-policy time periods, data collection included observations of menu boards and printed menus, both inside and at drive-throughs (if applicable). Pre- and post-policy in California and post-policy in Wilmington, data collectors also purchased kids' meals (both inside and at drive-throughs). During the purchases, data collectors recorded details about how the cashier/server offered beverage options associated with the bundled kids' meals during the purchase process. The combination of printed menus and cashier interactions was used to determine whether each restaurant was compliant with the HDB policy by specifically measuring the proportion of menus listing only healthy beverages and the proportion

of cashiers verbally offering only healthy beverages with kids' meals. Restaurant data, reported below, were examined before and after policy implementation using generalized linear mixed models, clustering by chain and adjusting for presence of drive-throughs. Only restaurants with both pre- and post-data were included in the analysis. Generalized linear mixed models with a logit link and a binomial distribution were used to examine the association between the menu board, and the cashier order policy adherence and time. All models adjusted for drive-through presence and accounted for clustering by chain and restaurant using random effects.

In addition, post-policy data collection included interviews with the managers at restaurants in the pre-policy sample (n=75 in California; n=15 in Wilmington) regarding perceived changes in sales of kids' meals and kids' beverages, perceptions of customers' responses to the policy, and difficulties experienced in policy implementation. For example, managers were asked how much they knew about the policy (i.e., a little, a lot, never heard of it), whether they supported the idea of the policy (regardless of knowledge) and whether they had received any customer complaints. Interview data were analyzed using frequencies (for closed-ended items) and thematic analysis (for open-ended items).

Key Findings

In California, the proportion of menu boards listing only healthy beverages with kids' meals increased 56 percentage points, going from 10 percent at baseline to 66 percent at follow-up (p<0.0001). The proportion of cashiers verbally offering only healthy beverages with kids' meals decreased 4 percentage points, going from 5 percent at baseline to 1 percent at follow-up (p<0.01). There was no change in menu boards in Wilmington, Del. (Table 2).

Table 2

Results from Menu Board Audits and Cashier Orders in California and Wilmington, Del.^a

Area Studied	California (n=62 menu boards; n=100 cashier orders)		Wilmington, Del. (n=13 menus/menu boards; n=14 cashier orders)	
	Prior to Policy n (%)	After Policy n (%)	Prior to Policy n (%)	After Policy n (%)
Restaurant Menu Boards Listing Only Healthy Beverages with Kids' Meals	6 (10%)	41 (66%)*	4 (31%)	4 (31%)
Cashiers Verbally Offering Only Healthy Beverages with Kids' Meals	5 (5%)	1 (1%)*	n/a	1 (7%) ^b

^a Generalized linear mixed models were used to compare changes in adherence for California and for Wilmington, clustering by chain, and adjusting for restaurant type (quick-service or full-service) and presence of a drive-through. * p<0.01, ***p<0.0001

Restaurants with missing responses at pre- or post-data collection were excluded from analysis, resulting in variation in total sample sizes.

Pre-post change is significant at a 0.01 significance level.

^b Cashier orders were not evaluated in Wilmington until after policy enactment.

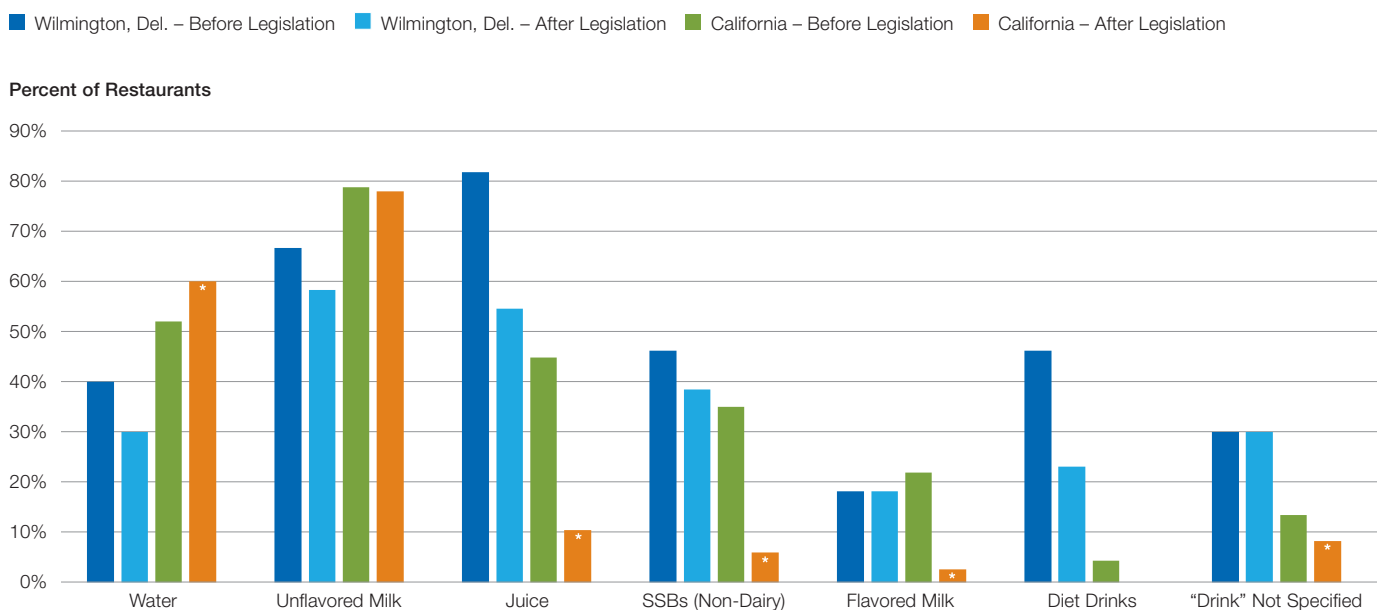
When interviewed, 29 percent of restaurant managers in California and 0 percent in Wilmington reported knowing a little or a lot about the policy, as opposed to having only heard of it or having never heard of it. However, when the policy was explained to managers, 65 percent of managers in California and 100 percent in Wilmington supported the idea of the policy “a little” or “a lot.” Only four managers across both states reported any customer complaints about the beverages sold with kids’ meals. When managers who knew anything about the policy were asked what (if anything) made policy implementation difficult, most cited customer preferences (n=11, 41%), followed by product availability and staff training (n=4, 15%). Of all managers interviewed, most (California: n=54, 73%; Wilmington: n=11, 73%) indicated information/promotion for customers would be helpful for implementation. There were no significant differences in managers’ perceptions of sales of kids’ meals or kids’ beverages before the policy in 2018 and after the policy in 2019.

and diet drinks both decreased slightly, but changes were not significant. In Wilmington, the proportion of restaurants offering all beverage categories *decreased* (range -27% to -8%), except for “drink” not further specified and flavored milk, which did not change.

Our findings from California indicate that following HDB policy implementation, more restaurants included a compliant beverage on menu boards, and fewer restaurants listed juice, flavored milk, soda, and other sweetened beverages. However, in Wilmington no change in policy compliance was observed, suggesting additional efforts are needed both to communicate HDB policies (i.e., no Wilmington restaurant managers knew a little or a lot about the policy) and to support full implementation—including how restaurant staff present beverage options to customers ordering kids’ meals. The California sample included many chain QSRs with voluntary, chain-level standards regarding healthier beverages with kids’ meals. These voluntary standards existed prior to the state law taking effect and were similar to the statewide HDB policy. Chain restaurants, in contrast to non-chain restaurants, are also able to easily and cheaply mass-produce identical restaurant menu materials. These factors likely facilitated policy implementation in California. We found that a sizable number of restaurants are not fully compliant with the policy, even nine months to a year after enactment. Additional educational information for restaurants—potentially training for staff—could help alleviate the gaps in understanding that contribute to challenges in compliance.

Figure 1 shows the proportion of restaurants offering (listed on menu boards and offered verbally by cashiers) different types of beverages with kids’ meals in California and Wilmington, Del., before and after policy implementation. In California, the proportion of restaurants offering water significantly *increased* (52% to 60%, or +8%), while the proportion of restaurants offering juice, SSBs, flavored milk, and “drink” not further specified all significantly *decreased* (juice, -15%; SSBs, -29%; flavored milk, -19%; “drink” not further specified, -5%). The proportion of California restaurants offering unflavored milk

Figure 1
Comparison of Beverages Listed on Menus and Offered By Cashiers Pre- and Post-Implementation of a Healthy Default Beverage Policy in California (n=134 Menu Boards, 88 QSRs) and Wilmington, Del. (n=13 Menus/Menu Boards, Five Sit Down, 8 QSRs)^a



^a Generalized linear mixed models were used to compare pre-post restaurant changes in adherence for California, clustering by chain, and adjusting for restaurant type (quick-service or full-service) and presence of a drive-through.

* p<.01. Sample size may vary for each item due to missing responses in pre- and post-observations for drink categories.

Policy Implications and Recommendations

As policymakers and researchers continue to examine how to encourage healthy selections at restaurants, it is important to recognize that such establishments communicate menus in different ways. While the policy in New York clearly states its definition of offering as being, “listed as part of the kids’ meal,” other jurisdictions only use the term “offer,” which leaves ambiguity with regard to compliance. For example, printed menus, menu boards, and staff all communicate beverage options. Each type of communication should be included in discussions regarding best practices for policy implementation and compliance monitoring. It is recommended, for example, that HDB policies clearly state that cashiers should verbally offer the default beverages and define what type of verbal offer is policy compliant. Where kiosks, third party ordering systems, or online ordering options are present, similar attention should be given to providing adequate guidance as to what constitutes a default beverage.

With respect to sit-down restaurants, while our study sample size was small, we noted clear distinctions in the settings that have implications for policy compliance. Sit-down restaurants have wait staff who typically bring water to each table before taking guests’ orders. This practice can create confusion about policy compliance. As such, future HDB policies should specify that water availability (whether requested or not) does not, in and of itself, mean that a restaurant is in compliance with the policy if other non-compliant beverages are offered when the meal order is placed. Also, because sit-down restaurants often feature more staff-patron interaction than QSRs, they might require more staff training with respect to which beverages can be offered initially with the purchase of kids’ meals.

Future Research Needs

It will be important to understand if HDB policies result in other unintended effects. For example, some restaurants may choose to unbundle kids’ meals (e.g., sell beverages separately) or increase availability of competing small meals¹⁷ not expressly advertised to children in order to circumvent HDB policies. It is also possible that if HDB policies exclude juice as an option for children (current policies allow anywhere from 10% to 100% juice in various sizes), then caregivers may elect to purchase SSBs as the next best option if they do not find water or milk a suitable choice. Future policies might also seek to limit how QSRs can use kiosks to advertise SSBs and other unhealthy choices or, alternatively, feature healthier alternatives.

The acquisition and analysis of kids’ meal sales data represents another opportunity to develop our understanding of the impact of HDB policies. In fact, little is known nationally about the

volume of kids’ meals sold by restaurant or region, kids’ meals most common components, or the proportion of kids’ orders coming from kids’ menus. While we did ask restaurant managers as part of our study to report approximate sales, future studies would benefit from more objective sales measures.

While our study included both QSRs and sit-down restaurants, the number of sit-down restaurants was limited. The ways in which default beverages are presented in the context of sit-down restaurants merits additional study, particularly because the behavior of servers may be more important and water is often brought to the table. Future research should also explore the impacts of HDB policies on patrons’ orders for children and whether parents are more likely to change what they order to drink for themselves.

The increasing presence of alternative ordering venues in QSRs (e.g., in-store kiosks, drive-through kiosks, online ordering) raises important questions about the potential for computerized systems to influence purchasing decisions. For example, a 2019 industry report found that 25 percent of restaurant customers have used ordering kiosks and, assuming all line lengths are equal, 30 percent of QSR customers would prefer to order from self-service kiosks.²²

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About Healthy Eating Research

Healthy Eating Research (HER) is a national program of the Robert Wood Johnson Foundation. Technical assistance and direction are provided by Duke University under the direction of Mary Story PhD, RD, program director, and Megan Lott, MPH, RDN, deputy director. HER supports research to identify, analyze, and evaluate environmental and policy strategies that can promote healthy eating among children and prevent childhood obesity. Special emphasis is given to research projects that benefit children and adolescents and their families, especially among lower-income and racial and ethnic minority population groups that are at highest risk for poor health and well-being and nutrition related health disparities. For more information, visit www.healthyeatingresearch.org or follow HER on Twitter at [@HERResearch](https://twitter.com/HERResearch).

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