**Supplemental Table 1.** SSB Strategies Codebook from Survey 1

|  |  |  |  |
| --- | --- | --- | --- |
| **Strategy** | **Sub-Strategies** | **Definition** | **Example Quotes** |
| **1. Education** | **Behavior Change Techniques** | Reduce SSB consumption using behavior change techniques (e.g., role modeling, empowerment, target messaging, changing social norms, goal setting). | “Somehow break the perceived norm that TV viewing goes along with SSB consumption. Something like making your TV time a time to get healthy "health time" - doing jumping jacks and drinking water ...”  “Ensure that staff only consume water onsite so they are a good role model.”  “Healthier choice if you can't do healthiest choice. This over that, with an emphasis on social modeling and social interactions to keep social interactions of coffee shops without the sugar.” |
| **Passive, Written Education** | Educate through passive, written materials either as stand-alone education or in conjunction with in-person education. This strategy also includes signage used to discourage SSB consumption. | “For pediatricians well baby, other community based resources, develop plain language, simple warning (poison logo warning) and guidance cards about sugar, childhood obesity and consequences - attached to FREE cut-out or sticker sheets featuring characters from educational media like Sesame Street … for young mothers and their kids.”  “Create easy-to-read, translated in many languages, handouts that child care providers can share with parents to encourage them to avoid SSBs at home.” |
| **Counseling, Screening** | Healthcare professionals (e.g., pediatricians, dentists, OBGYN) screen and counsel children and parents on reducing SSB consumption during office visits. | “Use oral health care organizations and providers as a key message carrier - both to young patients and to parents and young adults (future parents) - on oral health consequences of sugary drink consumption and benefits of water … especially in baby bottles. Important and eager partners in this work - and not as overloaded with information to convey as are pediatricians!”  “Integrate sugary drink discussion prompts into electronic medical decision software at well child visits for clinicians to ask parents about sugary drink consumption … and provide the providers with information to share with parents on reducing consumption.”  “… Opportunities are available to provide education to pregnant woman during child and maternal checks. There needs to be greater emphasis on diet during pregnancy, this could be delivered in multiple modes in addition to checkups, including text messages, telephone service, mothers groups.” |
| **Technology-delivered Education** | Education on reducing SSB consumption delivered through online/mobile technology (e.g., text message, smartphone application, TV, videos). | “Develop graphic app that has scan code that shows, when item is scanned, amount of sugar in bottom of the container of that product along with # of teaspoons.”  “Develop a smartphone application to help parents reduce their own SSB consumption, their child's beverage consumption by providing feedback, reinforcement, and other behavior change techniques.”  “Develop a Sesame Street or (better!) Peppa Pig episode about the importance of not drinking SSBs in youth. Educate kids through popular kid shows.” |
| **Provider Training, Education** | Education and training of providers working with children (e.g., healthcare, early childhood education) on SSBs and how to best reduce SSB consumption. | “Support childcare provider … wellness education for healthy hydration so that (a) providers choose not to drink sugary drinks and instead model drinking water, and (b) providers become personally invested in horrors of SSB and benefits of healthy hydration.”  “Conduct regular trainings (2X/yr) for all CACFP-funded program staff so they know the restrictions and policies on SSBs.” |
| **Unspecified Education** | General education strategies to decrease consumption of SSBs and increase consumption of healthy beverages. Includes techniques such as hands-on activities (e.g., food preparation, demonstrations), integration into the school curriculum, or community SSB education. | “Work with the school nutrition specialist and the food service director to implement programs such as a Fun Food Academy where parents can learn about healthy drinks options, while learning about healthy eating and food preparation.”  “Incorporate nutrition concepts into math and science curricula in K-12 (Lesson example: Calculate and compare the sugar content among popular beverages and visualize the results with sugar cubes).”  “Focus on not only the obesity issue but also oral health. Dental caries is far more "immediate" to parents and depending on the health system very costly to families to get care - unless extractions are used but this is becoming less and less attractive even for poorer people.”  “Expand the Healthy Beverage Zone that currently runs in the Bronx by Dr. Vanessa Salcedo so that community health centers serve as the hub for SSB education and knowledge sharing/activation to decrease SSB consumption in the community.” |
| **2. Campaigns** | **Public Awareness Campaigns** | Refers to community-wide campaigns and initiatives aimed to decrease SSB consumption and often increase public awareness, disseminated across a variety of settings. | “Implement broad reaching counter marketing campaign in communities of color (especially areas that are disproportionately marketed to by the beverage companies). Incorporate messages and activities related to the negative effects of SSBs, as well as messages, events, and investments in a positive identify of water (such as creating artistic destination water fountains, massive investments in water bottle filling stations and water bottles, positive identity around water bottle usage, etc.)”  “Extend public health anti-SSB & pro-water messaging campaign developed by Alaska State Department of Public Health on “Drink This - Not That,” including emulating their use of local heroes … target to childbirth classes, hospital maternity wards, WIC, Medicare, pediatric and other clinic settings, childcare sites, libraries, blood draw labs … anywhere that young parents and others who care for small children (including grandparents) spend time.”  “"You're the Mom" campaign from Tufts uses social media to encourage moms of young children to limit SSB intake when eating out, suggest partnering with Tufts to get this campaign into more communities.”  “Do a TRUTH campaign similar to tobacco about the effects of sugar on health/chronic disease. Unfortunately, scare tactics work (think smoker commercial with a hole in throat analogous to a diabetic who has lost a limb).” |
| **Competitions, Contests, Challenges** | Influence the reduction of SSBs using competitions, contests, or challenges. | “Local-based competitions that engage families with young children to not consume any SSBs for a period of time ... “  “Have a contest that involves the parents and the children to help reduce their sugar intake both at home and at daycare.”  “Create a health challenge with quarterly incentives for the parents and children that participate. Place goals quarterly so they will have multiple opportunities to be successful. Incentive examples: water bottles, t-shirts, gift cards.” |
| **3. Marketing and Advertising Changes** | **Choice Architecture** | Refers to environmental strategies to reduce SSB purchasing by manipulating the store displays and offerings. | “Develop campaign/incentives to get grocery stores to put water in more prominent location, SSBs in less prominent location.”  “Remove all SSBs from supermarket check-outs.” |
| **Counter-Advertising** | Refers to advertising the negative effects of SSBs through a variety of outlets (e.g., media, point-of-purchase). | “Have celebrities (with young kids) make commercials, announcements about why they are not giving SSBs to their children.”  “Place signage at point-of-purchase suggesting SSBs are not healthy for young children in grocery and convenience stores.”  “Product placement in television shows and movies to elevate awareness of the dangers of SSBs and appealing beverage alternatives among parents and older siblings by the influence of media characters and pop culture.” |
| **Restrictions, Regulations** | Refers to strategies that would restrict or regulate the way SSBs are advertised and promoted across various outlets, especially to children and other vulnerable populations. | “Restrict marketing of SSBs to families with young children. Digital marketers and platforms, such as YouTube, should eliminate advertising for SSBs alongside content viewed by young children. This would protect children who are highly vulnerable to marketing and to digital media from being exposed to enticements for SSBs.”  “Eliminate increased marketing (price reductions, placement by entry door etc.) for SSBs during SNAP location days (differ by states).”  “Eliminate the marketing of any sugary drinks on any programing that targets the 0-5 year old markets (on TV, print or online).” |
| **4. Price Changes** | **Monetary, Coupon Incentives** | Provide monetary incentives (e.g., coupons) to reward individuals or programs for not purchasing SSBs or vice versa, remove incentives to purchase SSBs (e.g., reimbursement). \*Price changes\* | “Federal programs targeting young children should not reimburse for flavored milk. Right now, CACFP is the only program that doesn’t reimburse for flavored milk in 0-5.”  “For SNAP participants with kids 0-5 (or older) who don't purchase sugary drinks with their benefits, give them an additional benefit at the cash register (free gallon of milk and 2 Liters of Club soda?)”  “Eliminate the tax deduction for marketing expenses for all sugary beverages (and foods).”  “Offer incentives to parents of 0-5 year olds through grocery stores. For parents who currently purchase a high amount of SSBs, offer coupons (for other goods) every week they purchase fewer SSBs …” |
| **Non-Tax Price Changes** | Make SSBs more expensive through methods other than taxation (or unspecified). | “Make sodas more expensive, not more tax.”  “Increase the cost of SSBs limiting purchase or access in the home.” |
| **Tax SSBs** | Make SSBs more expensive through taxation on SSBs and/or added sugar. | “Create an excise tax on the distribution of SSBs (of at least 2 cents per ounce) and use the revenue to subsidize healthy food access strategies, especially in communities of color (those who are disproportionately marketed to by beverage companies).”  “So far taxing SSBs appears to be successful in reducing purchases of these beverages but is only in a few communities. Work to get SSB taxes in more jurisdictions; using revenue produced for childcare (perhaps adding or expanding preschools in public elementary schools) might be the "carrot" that induces jurisdictions to pass SSB taxes.”  “Sugar tax. Add 10% tax to all sweetened products that market to kids.” |
| **5. Reduce Physical Access to SSBs** | **Kid’s Meals, Menus** | Reduce access to SSBs by making healthy drinks (water or milk) the default in kid’s meals, or prohibit restaurants (all types) from serving SSBs to children. | “Establish healthy children's beverage defaults for children's menus in restaurants and prohibit any marketing of unhealthy beverages in restaurant settings to children (e.g. toys, pictures, messages). This could be approached from a policy and/or recognition program perspective.”  “Prohibit restaurants/food service places from offering anything except water, milk, 100% juice with kid's meals. We just did this with the Baltimore City Council and it passed almost unanimously. It was tempered, however, with a clause that allows parents to request soda or other beverages. This was spearheaded by Sugar Free Kids along with Center for Science in the Public Interest. We signed on (Maryland Public Health Association) and testified, too, as did the city health department. The framing is giving kids and parents a choice to be healthy.”  “Eliminate SSBs as an included item with "kids meals" in restaurants, casual dining and fast food establishments. Charge extra (full price) for SSBs if ordered.” |
| **Sale, Serve, Purchase, Consumption Restrictions** | Reducing physical access to SSBs by restricting the sale, serve, purchase, and/or consumption by setting (e.g., federal nutrition programs, children’s venues, early childhood education, food retail, healthcare, and other federal/taxpayer funded locations) or age. Will analyze by setting. | “Get juice out of **WIC** packages and SSBs out of **SNAP**.”  “Encourage **family-oriented venues** like zoos, museums, etc. to adopt health beverage policies and remove SSBs from sites.”  “Reduce frequency of allowable juice serving from once per day to 3 times per week at any **child care center** receiving funds from the CACFP.”  “Eliminate flavored milk and other SSBs from meals and snacks packed from **home**.”  “Prohibit serving SSBs in any **venue receiving taxpayer funding**, including all schools, health care settings, community centres, sports centres, etc.”  “Prohibit sugary beverage vending machines from all **federal facilities**. This could include HUD housing facilities.”  “Restrict sale of SSBs to minors (under 18 years old).”  “Require establishments to hold/pay for a license to sell SSBs, similar to the license required to sell liquor.”  “Prohibit the sale of SSBs within a certain radius of schools or work to reduce density of vendors of SSBs around schools (similar to tobacco).”  “… No smoking and no drinking of SSBs in the offices, public transport, parks, school, hospital, etc. Show poor health outcomes. Raise the minimum SSB drinking age to 12 years-old.” |
| **6. Labeling and Packaging of SSBs** | **Packaging** | Change the way SSBs are packaged to deter purchasing. | “Ban baby bottles made to look like bottles of sugary drinks.”  “Remove characters from SSB packaging.” |
| **Warning Labels** | Add warning labels to SSBs to deter purchasing and consumption. | “Adoption of front of pack food warning labels (black octagon in Chile) on beverages with high added sugar that would alert parents …”  “Warning labels on sugary drinks. This would follow the tobacco playbook and increase education at the point of sale for parents and caretakers to decrease consumption in young children.”  “Having straight forward graphics on the beverages of how many teaspoons of sugar are in the beverage. (Panera Bread does this on their cold cups) But I truly believe it would be more useful than grams for the general public. Grams don't mean much to the average shopped in the terms of really understanding the quantity.” |
| **7. Improve Setting, Program Capacity** | **Recognition, Rating Systems** | Implement strategies such as recognition programs and ratings to incentivize settings to reduce or eliminate SSBs. | “Ensure restriction of SSB consumption is included in the state child care quality rating system (QRIS).”  “Establish a local, state or national recognition program for any organization that supports the well-being of young children and make this available via an online platform that is easily accessible. The criteria could include an environment that supports physical activity, has free access to safe water, doesn't serve sugary drinks, supports breast feeding, etc. (e.g. kid friendly childcare, restaurants, play areas, community centers, etc.).” |
| **Resources, Funding, Incentives** | Improve setting or program capacity through technical assistance, capacity building, and funding. Also includes incentivizing settings to decrease SSB offering or increase healthy beverages (e.g., grocery stores, ECE). | “Create a technical assistance and grant platform to help child care providers, particularly family child care providers … and other providers that tend to serve low income and other populations disproportionately impacted by nutrition related chronic diseases in planning healthy meals and snacks and purchasing only healthy beverages to serve to the kids they care for. Providers want to serve healthy things to the kids in their care - they need education, capacity building, and financial help to do so.”  “Increase funding for Rethink Your Drink campaigns especially in underserved populations.”  “Provide incentives for grocery stores corner stores and convenience stores to incentivize the purchase of non-SSBs (pricing, placement, promotion strategies).” |
| **8. Decrease Sugar in SSBs** | **Portion Sizes** | Reduce sugar consumed through SSBs by decreasing the portion size. | “Decreasing sizes (ounces) of all individual consumption SSBs.”  “Provide families with tools to help them determine portion sizes-specifically, it is very difficult to find a 6 oz. sippy cup.” |
| **Reformulation** | Reduce SSB consumption through industry reformulation to create healthier products. | “Reduce the amount of added sugar in beverages sold in the US.”  “Broker voluntary business change agreements with beverage companies to innovate, reformulate, and/or promote zero to low-calorie beverage options.”  “Encourage the dairy industry to use less sugar in flavored milks. (Do NOT use artificial sweeteners as a substitute).” |

**Supplemental Table 2.** Water Strategies Codebook from Survey 1

|  |  |  |  |
| --- | --- | --- | --- |
| **Strategy** | **Sub-Strategies** | **Definition** | **Example Quotes** |
| **1. Education** | **Behavior Change Techniques** | Increase water consumption using behavior change techniques. This included changing social norms (e.g., make drinking water normal/cool), role modeling of water drinking behaviors (e.g., by parents, providers or siblings), self-monitoring of water consumption or cost savings, goal-setting, and repeated exposure to water. | “Modeling good behavior in child care centers - encourage staff to drink water.”  “Make tracking water intake a fun game for kids and parents (encourage families to do this together so parents increase their water intake too).”  “Set a daily, weekly, and monthly H-2-O goal for the child and parent.” |
| **Passive, Written Education** | Educate through passive, written materials either as stand-alone education or in conjunction with another strategy. Topics of education included cost, health benefits and safety of water. This strategy includes handouts/flyers, signage to promote water consumption (e.g., at point of purchase), traffic light guides, labels (e.g., attached to a sippy cup promoting use of water and discouraging SSBs), printed news releases, visual aids and books. Some of these strategies also centered on the dissemination of water quality testing results using written communication techniques. | “Put up infographics in pediatrician offices saying kids are made up of 75% water - so they need water!”  “Have water municipalities to mail flyers about the safety of their water and highlighting the importance of drinking tap water for a variety of reasons (save $, oral health, no calories, no waste)…”  “Complete the necessary water testing at ECE settings and post for parents and staff to see.” |
| **Counseling, Screening** | Healthcare professionals (e.g., pediatricians, dentists) counsel children and parents on increasing water consumption during check-up visits. Education in this setting often emphasized the importance of choosing water for health and well-being. | “Make anti-SSB and pro-water messages part of every well child doctor's visit.”  “Share simple messages that oral health professionals can use with children and families to help them reduce consumption of SSBs and choose healthier beverages (e.g., water, plain milk).” |
| **Technology-delivered Education** | Education on water consumption delivered through online/mobile technology platforms (e.g., text message, smartphone application, educational videos). Topics of education included cost, health benefits and safety of water. Some of these strategies also centered on the dissemination of water quality testing results using online/technology platforms. | “Send text messages to parents with reminders about the importance of water intake for their kids.”  “Develop educational, short cartoon videos on health benefit of water intake. It can be used to educate children.”  “Develop a mobile app that assesses parents’ concerns over water consumption and provide them information that may be related to their concerns--- i.e. water quality information in their zipcode or other linked data.” |
| **Provider Training, Education** | Education and training of providers working with children (e.g., healthcare, early childhood education) on water and how to best increase water consumption in children. | “Incorporate nutrition education about water into state-administered trainings for CACFP-participating sponsors and providers.”  “Share clear guidelines with early care and education professionals about how to make access to tap water safe and sanitary in the ECE setting.” |
| **Unspecified Education** | Unspecified/general strategies to educate and promote consumption of water. The form of education was often unspecified, but could include techniques such as tours of local water systems and education for children and parents in ECC. Education often emphasized water cost, health benefits and safety. Many strategies also centered on the dissemination of water quality testing results in an unspecified/general manner. | “Provide field trip to see local water source and learn about the watershed that their water comes from.”  “Education on tap water - give parents resources about the safety/risks of the tap water in their area and how to safely filter if necessary.” |
| **2. Campaigns** | **Public Awareness Campaigns** | Refers to community-wide campaigns and initiatives aimed to increase public awareness about water, disseminated across a variety of platforms and settings. | “Invest in mass media and social media education campaigns promoting tap water with a kid focus. Include campaigns for adults demonstrating how bottled water is more expensive.” |
| **Competitions, Contests, Challenges** | Influence the consumption of water using competitions, contests, or challenges. | “Promote and facilitate water breaks teaching/learning a variety of songs about healthy drinking water, informative games using the subject of water: names/places of oceans, rivers, lakes, islands, ounces in a cup, quart, liter, mixing water and oil, etc. and rotating the person, who asks the water question and drinks first.”  “Make tracking water intake a fun game for kids and parents (encourage families to do this together so parents increase their water intake too).” |
| **3. Marketing and Advertising Changes** | **Counter Advertising** | Use competitive branding to promote water awareness and purchasing of water in the retail environment. Create appealing characters or use existing characters and celebrities to promote water consumption among children. | “Encourage all levels of government to use water bottles as a sponsorship/advertising mechanism (instead of balloons, bags, etc.)”  “Develop a superhero character who drink and water to become powerful and whose role is to protect the water supply.”  “Have celebrities (with young kids) make commercials, announcements to promote water.” |
| **Choice Architecture** | Refers to environmental strategies to increase water choice and purchasing by manipulating displays and offerings. | “Work with grocery chains to have more visible water drinking stations accessible for your children and/or bottle filling stations.”  “Promote inclusion and better advertisement of water fountains at places frequented by young children, like parks and museum.” |
| **4. Price Changes** | **Monetary, Coupon Incentives** | Provide monetary or non-monetary (e.g., coupon) incentives to reward or incentivize individuals to purchase water. Most of these strategies focused on providing WIC and SNAP participants with increased benefits/incentives to purchase water. This doesn’t include strategies which provide bottles or filtering devices as an incentive to WIC and SNAP participants. | “Provide add-ons to SNAP and WIC benefits that allow for greater purchasing of water for drinking.”  “Right now, lots of grocery stores offer free oranges or bananas to children under 10 when they walk in. They should also offer small bottles of water.” |
| **Direct Price Decreases** | Make water less expensive through various methods including taxation. | “Eliminate sales tax on drinking water.”  “If tap water is unsafe or perceived to be unsafe, alter pricing structure so that bottled water costs less than SSBs.” |
| **5. Increase Physical Access to Water** | **Water Availability, Accessibility, Provision** | Increase the availability and access to water. This includes unspecified/general strategies such as increasing water fountains and stations. Some strategies were more specific and included mention of policy, regulation and licensing requirements associated with water availability. Provide children with vessels (e.g., bottles, cups) in order to promote regular consumption of water. Modify drinking stations or bottles by making them size/developmentally appropriate and also look fun and inviting | “Develop policies mandating drinking stations in federal and state facilities, including national parks.”  “Promote installing water fountains and other water-dispensing stations throughout communities.”  “Pilot distribution of free age-appropriate reusable water bottles at pediatrician well child visit to encourage water consumption.”  “Make water bottle filling stations fun for kids - bright colors, popular characters, make music when water comes out, etc. and put in locations where young children often visit.” |
| **Kid’s Meals, Menus** | Reduce access to SSBs by making water the default beverage choice at places where children are being served meals. Place water on menu so children and adults are aware of it. | “Make water available, in every child care center, and promote it as beverage of choice at each meal occasion for those ≥6 months.”  “Require restaurants to eliminate drinks (aka, only provide water) from kids’ meals.”  “Specifically list water on menus for child care centers (require that centers offer cups of water with meals/snacks).” |
| **6. Water Quality/Safety** | **Water Tests** | Regularly test quality of tap water from spaces where children spend time including childcare, parks and healthcare settings. | “Require water testing in licensed child care settings AND provide resources (financial and TA [technical assistance] from county/state) for remediation.” |
| **Quality/Safety** | Improve the quality/safety of water through a number of methods including: infrastructure (e.g., updating piping), repairs, use of filters, fluoride and decreasing pollution of water supplies. | “Improve low income housing that has rusty pipes creating brown tap water-- no amount of parent education is going to convince a parent to give their child brown water.”  “Providing water filters to use at home and reusable bottles of water for use in child care centers.” |
| **Taste** | Improve the quality of water. Most strategies focused on infusion with fruit/vegetable flavor. | “Provide "spa water" options. I.e. water with sliced fruit, cucumbers, mint, etc., to make a more flavorful, healthy and fun option for children.” |
| **7. Improve Setting, Program Capacity** | **Recognition, Rating Systems** | Implement strategies such as recognition programs and ratings to incentivize settings to increase water consumption. | “Create national recognition for sites with innovative self-serve water stations.” |
| **Resources, Funding, Incentives** | Improve setting or program capacity through technical assistance, capacity building and funding. This often included providing resources and funding to conduct water quality testing and remediation. | “Fund safe drinking water infrastructure programs for cities and counties for the water infrastructure.”  “Provide technical assistance for cities and counties in transparency and reporting campaigns for residents regarding water quality and safety.” |

**Supplemental Table 3.** Ratings of strategies to reduce SSB consumption and increase access/consumption of safe drinking water among 0–5-year-olds by domain, from Survey 2

|  | **Overall Importance** | **Feasibility** | **Reach** | **Health Equity** | **Effective-ness** |
| --- | --- | --- | --- | --- | --- |
|  | Mean (SD) | Mean (SD) | Mean (SD) | Mean (SD) | Mean (SD) |
| **Strategies to Reduce SSB Consumption** |  |  |  |  |  |
| **Mean score across all SSB strategies** | **3.2 (1.1)** | **3.4 (1.1)** | **3.3 (1.0)** | **3.3 (1.1)** | **3.1 (1.0)** |
| **Education** |  |  |  |  |  |
| 1. Train providers to screen children for SSB consumption and educate parents on reducing consumption during office visits | 3.5 (1.0) | 3.7 (1.0) | 3.3 (1.0) | 3.3 (1.1) | 3.3 (1.0) |
| 1. Provide counseling to parents/caregivers in healthcare settings to reduce SSB consumption, often using behavior change techniques | 3.4 (1.0) | 3.9 (0.9) | 3.1 (1.0) | 3.4 (1.0) | 3.2 (1.0) |
| 1. Educate children on the importance of eliminating SSBs using popular, culturally appropriate TV shows and radio, or celebrity endorsement of healthy beverages to target parents | 3.4 (1.0) | 3.4 (1.0) | 3.6 (1.0) | 3.4 (1.0) | 3.3 (1.1) |
| 1. Educate pregnant mothers to reduce their SSB consumption during pregnancy and to restrict SSBs for the child | 3.3 (1.1) | 3.9 (1.0) | 2.9 (1.1) | 3.2 (1.1) | 3.1 (1.1) |
| 1. Teach children and parents/caregivers about reducing SSB consumption in non-clinical settings, often using behavior change techniques | 3.2 (1.1) | 3.6 (1.1) | 3.1 (1.1) | 3.3 (1.1) | 3.1 (1.0) |
| 1. Leverage technology targeting children and parents/caregivers to reduce SSB consumption | 2.9 (1.1) | 3.4 (1.1) | 3.0 (1.0) | 2.8 (1.1) | 2.9 (1.0) |
| 1. Teach children and parents/caregivers about reducing SSB consumption using passive education methods | 2.3 (1.2) | 3.7 (1.2) | 2.6 (1.1) | 2.6 (1.2) | 2.0 (1.1) |
| **Public Awareness Campaigns and Contests** |  |  |  |  |  |
| 1. Launch public awareness media campaigns to educate communities on the importance of reducing SSB consumption using various media outlets | 3.5 (1.0) | 4.2 (0.9) | 3.8 (1.0) | 3.5 (1.1) | 3.0 (1.0) |
| 1. Organize campaigns, challenges, and contests to reduce SSB consumption in child/daycare settings | 2.4 (1.2) | 3.6 (1.3) | 2.5 (1.1) | 2.7 (1.1) | 2.4 (1.0) |
| **Marketing & Advertising Changes** |  |  |  |  |  |
| 1. Modify advertising and promotion of SSBs | 3.8 (1.0) | 2.7 (1.1) | 4.2 (0.9) | 4.0 (0.9) | 3.7 (1.0) |
| 1. Eliminate increased marketing for SSBs during days of the month when SNAP benefits are issued | 2.6 (1.2) | 2.4 (1.2) | 2.8 (1.1) | 2.9 (1.3) | 2.6 (1.1) |
| **Price Changes** |  |  |  |  |  |
| 1. Make SSBs more expensive | 3.9 (1.2) | 3.1 (1.1) | 4.3 (0.9) | 3.4 (1.3) | 3.8 (1.1) |
| **Reduce Physical Access to SSBs** |  |  |  |  |  |
| 1. Prohibit serving, marketing, or selling SSBs in any child care center, school, or government agency receiving or distributing federal funds | 4.1 (0.9) | 3.9 (1.0) | 3.9 (0.9) | 4.0 (1.1) | 4.0 (0.9) |
| 1. Prohibit all licensed Early Childhood Education homes and centers (not just federally funded) from serving SSBs to children as part of licensing regulations | 3.8 (1.1) | 3.6 (1.2) | 3.7 (1.1) | 3.8 (1.1) | 3.9 (1.1) |
| 1. Prohibit purchase of SSBs with SNAP benefits | 3.4 (1.3) | 3.2 (1.2) | 3.4 (1.1) | 3.0 (1.4) | 3.6 (1.2) |
| 1. Prohibit the sale of SSBs within a certain radius of child-oriented settings, schools, government facilities, public spaces to reduce density of SSB vendors | 3.0 (1.2) | 2.5 (1.2) | 3.3 (1.1) | 3.4 (1.1) | 3.1 (1.1) |
| **Labeling & Packaging of SSBs** |  |  |  |  |  |
| 1. Change SSB labeling and packaging to deter purchasing/consumption | 3.2 (1.1) | 2.8 (1.0) | 3.8 (1.1) | 3.4 (1.2) | 3.0 (1.1) |
| **Improve Setting & Program Capacity** |  |  |  |  |  |
| 1. Train providers & improve setting capacity to reduce SSB consumption | 3.3 (1.0) | 3.6 (1.0) | 3.2 (1.0) | 3.2 (1.0) | 3.1 (1.0) |
| 1. Establish a recognition or "star" rating program for any organization that doesn't serve SSBs, and make this easily accessible via an online platform | 2.2 (1.2) | 3.6 (1.3) | 2.4 (1.1) | 2.5 (1.2) | 2.1 (1.0) |
| **Strategies to Increase Access to/Consumption of Safe Drinking Water** |  |  |  |  |  |
| **Mean score across all Water strategies** | **3.1 (1.1)** | **3.5 (1.1)** | **3.1 (1.0)** | **3.3 (1.1)** | **3.2 (1.1)** |
| **Education** |  |  |  |  |  |
| 1. Educate providers who work with children on importance of water consumption | 3.4 (1.1) | 3.9 (1.0) | 3.2 (1.1) | 3.3 (1.1) | 3.3 (1.1) |
| 1. Teach children and parents about increasing water consumption using in-person education sessions | 2.6 (1.1) | 3.2 (1.2) | 2.3 (1.0) | 2.8 (1.2) | 2.8 (1.3) |
| 1. Leverage technology to educate children & parents on water consumption | 2.6 (1.1) | 3.3 (1.1) | 2.8 (1.0) | 2.6 (1.0) | 2.8 (1.3) |
| 1. Teach children and parents/caregivers about increasing water consumption using passive education methods | 2.2 (1.1) | 3.6 (1.3) | 2.4 (1.1) | 2.4 (1.2) | 1.9 (1.0) |
| 1. Develop a peer-to-peer support group for exchange of information related to water consumption for parents/caregivers | 2.0 (1.0) | 3.0 (1.3) | 2.1 (1.0) | 2.3 (1.1) | 2.1 (1.0) |
| **Public Awareness Campaigns and Contests** |  |  |  |  |  |
| 1. Launch public awareness media campaigns to educate communities on the importance of drinking water | 3.3 (1.1) | 3.8 (1.0) | 3.7 (1.0) | 3.4 (1.1) | 3.1 (1.3) |
| 1. Use games or competitions to make water consumption fun and enjoyable for children | 2.3 (1.1) | 3.3 (1.2) | 2.5 (1.0) | 2.5 (1.0) | 2.4 (1.1) |
| **Marketing & Advertising Changes** |  |  |  |  |  |
| 1. Use popular, culturally appropriate cartoon characters or celebrities to promote water consumption among children | 3.3 (1.0) | 3.7 (1.0) | 3.4 (1.0) | 3.3 (1.0) | 3.5 (1.1) |
| 1. Increase visibility of water in the food/beverage retail environment to increase purchasing and consumption | 3.1 (1.1) | 3.4 (1.1) | 3.4 (1.0) | 3.2 (1.1) | 3.1 (1.1) |
| **Price Changes** |  |  |  |  |  |
| 1. Decrease price of water relative to SSBs | 3.9 (1.2) | 3.3 (1.2) | 4.0 (1.0) | 4.0 (1.1) | 3.9 (1.1) |
| 1. Promote water consumption among WIC and SNAP participants by providing greater benefit allotments for water purchases | 3.3 (1.2) | 3.3 (1.2) | 3.2 (1.1) | 3.8 (1.1) | 3.4 (1.3) |
| **Increase Physical Access to Water** |  |  |  |  |  |
| 1. Increase the availability of safe drinking water | 4.3 (0.9) | 3.6 (1.0) | 4.1 (0.9) | 4.3 (0.9) | 4.3 (0.9) |
| 1. Make water the default beverage choice (over SSBs) at places where children are being served meals | 4.1 (1.0) | 3.7 (1.1) | 3.9 (1.0) | 4.0 (1.0) | 4.5 (1.0) |
| 1. Implement policy specifying the types of beverages served and provided to children in Early Childhood Education sites | 4.0 (1.0) | 3.9 (1.0) | 3.8 (1.0) | 3.9 (1.0) | 4.4 (1.1) |
| 1. Create a program which sends safe drinking water home with children, especially in areas with known unsafe water sources | 3.4 (1.2) | 2.9 (1.2) | 2.9 (1.2) | 4.0 (1.1) | 3.5 (1.2) |
| **Provision & Modification of Drinking Vessels** |  |  |  |  |  |
| 1. Increase the intake of water through the provision of drinking vessels that are developmentally appropriate for young children | 3.0 (1.2) | 3.4 (1.2) | 2.9 (1.1) | 3.1 (1.2) | 3.0 (1.2) |
| 1. Promote water consumption with fun/attractive designs on self-serve water stations & vessels | 2.8 (1.1) | 3.9 (0.9) | 3.1 (1.1) | 3.2 (1.2) | 3.1 (1.4) |
| **Water Quality** |  |  |  |  |  |
| 1. Provide resources, technical assistance and training for water quality testing, communication and remediation | 3.3 (1.3) | 3.4 (1.1) | 3.0 (1.2) | 3.4 (1.3) | 3.0 (1.2) |
| 1. Infuse water with fruit in order to improve taste and palatability for children | 2.3 (1.2) | 3.3 (1.3) | 2.4 (1.1) | 2.4 (1.2) | 2.7 (1.2) |
| **Improve Setting & Program Capacity** |  |  |  |  |  |
| 1. Organizational strategies to promote water consumption in schools, government facilities, and public spaces | 3.6 (1.1) | 3.7 (1.0) | 3.6 (1.1) | 3.6 (1.1) | 3.7 (1.2) |

Note: Strategies were ranked from 1 (lowest) to 5 (highest) for each domain. SD = Standard Deviation.

**Supplemental Table 4.** Ratings of overall impact of strategies to reduce SSB consumption and increase access/consumption of safe drinking water among 0–5-year-olds from Survey 2, by respondent primary sector

|  | **By Sector** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Academia**  **(n=64)** | **Government**  **(n=39)** | | **NGO**  **(n=38)** | | **Education**  **(n=12)** | | **Health Care**  **(n=9)** | | **Other**  **(n=20)** | | **P-value** |
|  | Mean (SD) | Mean (SD) | | Mean (SD) | | Mean (SD) | | Mean (SD) | | Mean (SD) | |
| **Strategies to Reduce SSB Consumption** |  |  | |  | |  | |  | |  | |  |
| **Mean score across all SSB Strategies** | **3.2 (1.1)** | **3.1 (1.1)** | | **3.4 (1.1)** | | **3.5 (1.1)** | | **3.3 (0.81)** | | **3.1 (1.1)** | | **-** |
| **Education** |  |  | |  | |  | |  | |  | |  |
| 1. Train providers to screen children for SSB consumption and educate parents on reducing consumption during office visits | 3.3 (1.2) | 3.3 (1.1) | | 3.8 (0.9) | | 3.8 (0.7) | | 3.3 (0.9) | | 3.5 (1.1) | | 0.20 |
| 1. Provide counseling to parents/caregivers in healthcare settings to reduce SSB consumption, often using behavior change techniques | 3.2 (1.0) | 3.3 (1.0) | | 3.5 (1.1) | | 3.8 (0.9) | | 3.7 (0.5) | | 3.2 (1.2) | | 0.47 |
| 1. Educate children on the importance of eliminating SSBs using popular, culturally appropriate TV shows and radio, or celebrity endorsement of healthy beverages to target parents | 3.2 (1.0) | 3.4 (1.2) | | 3.6 (1.1) | | 3.5 (0.9) | | 3.3 (1.0) | | 3.4 (1.0) | | 0.68 |
| 1. Educate pregnant mothers to reduce their SSB consumption during pregnancy and to restrict SSBs for the child | 3.1 (1.2) | 3.3 (1.1) | | 3.4 (1.1) | | 3.9 (1.1) | | 3.4 (0.7) | | 3.1 (1.0) | | 0.17 |
| 1. Teach children parents/caregivers about reducing SSB consumption in non-clinical settings, often using behavior change techniques | 3.0 (1.1) | 3.1 (1.1) | | 3.6 (1.3) | | 3.8 (1.1) | | 3.3 (0.7) | | 3.1 (1.0) | | 0.07 |
| 1. Leverage technology targeting children and parents/caregivers to reduce SSB consumption | 2.9 (1.1) | 2.5 (1.0) | | 3.2 (1.1) | | 2.9 (1.1) | | 2.9 (1.3) | | 2.7 (1.1) | | 0.17 |
| 1. Teach children and parents/caregivers about reducing SSB consumption using passive education methods | 2.1 (1.1)d | 2.3 (1.1) | | 2.5 (1.4) | | 3.2 (1.3)ae | | 1.6 (0.7)d | | 2.1 (1.1) | | 0.02\* |
| **Public Awareness Campaigns and Contests** | | |  | |  | |  | |  | |  | |
| 1. Launch public awareness media campaigns to educate communities on the importance of reducing SSB consumption using various media outlets | 3.3 (1.0)c | 3.4 (0.9) | | 4.0 (1.1)a | | 4.0 (0.7) | | 3.7 (0.7) | | 3.4 (0.9) | | 0.01\* |
| 1. Organize campaigns, challenges, and contests to reduce SSB consumption in child/daycare settings | 2.3 (1.2) | 2.3 (1.1) | | 2.4 (1.3) | | 2.9 (1.4) | | 2.3 (0.5) | | 2.3 (1.1) | | 0.67 |
| **Marketing & Advertising Changes** | | |  | |  | |  | |  | |  | |
| 1. Modify advertising and promotion of SSBs | 3.9 (0.9) | 3.7 (1.1) | | 3.8 (1.0) | | 3.8 (1.0) | | 3.8 (0.7) | | 3.7 (1) | | 0.94 |
| 1. Eliminate increased marketing for SSBs during days of the month when SNAP benefits are issued | 2.7 (1.3) | 2.4 (1.2) | | 2.7 (1.1) | | 2.6 (1.3) | | 2.6 (1.0) | | 2.7 (1.1) | | 0.88 |
| **Price Changes** | | |  | |  | |  | |  | |  | |
| 1. Make SSBs more expensive | 4.0 (1.1) | 3.4 (1.2)c | | 4.2 (1.0)b | | 3.6 (1.4) | | 4.6 (0.7) | | 3.6 (1.2) | | 0.02\* |
| **Reduce Physical Access to SSBs** | | |  | |  | |  | |  | |  | |
| 1. Prohibit serving, marketing, or selling SSBs in any child care center, school, or government agency receiving or distributing federal funds | 4.1 (1) | 4.1 (0.9) | | 4.3 (0.8) | | 4.0 (1.3) | | 4.3 (0.5) | | 4.0 (1.1) | | 0.78 |
| 1. Prohibit all licensed Early Childhood Education homes and centers (not just federally funded) from serving SSBs to children as part of licensing regulations | 3.7 (1.3) | 3.9 (1.0) | | 3.8 (1.2) | | 4.1 (0.7) | | 4.4 (0.7) | | 3.6 (1.3) | | 0.32 |
| 1. Prohibit purchase of SSBs with SNAP benefits | 3.5 (1.1) | 3.1 (1.4) | | 3.5 (1.3) | | 3.8 (1.3) | | 3.8 (1.2) | | 3.2 (1.4) | | 0.40 |
| 1. Prohibit the sale of SSBs within a certain radius of child-oriented settings, schools, government facilities, public spaces to reduce density of SSB vendors | 3.1 (1.1) | 2.9 (1.4) | | 3.3 (1.1) | | 3.1 (1.4) | | 3.6 (1.0) | | 2.5 (1.1) | | 0.11 |
| **Labeling & Packaging of SSBs** | | |  | |  | |  | |  | |  | |
| 1. Change SSB labeling and packaging to deter purchasing/consumption | 3.2 (1.0) | 2.9 (1.2) | | 3.5 (0.9) | | 3.2 (1.0) | | 3.1 (0.9) | | 3.1 (1.1) | | 0.21 |
| **Improve Setting & Program Capacity** | | |  | |  | |  | |  | |  | |
| 1. Train providers & improve setting capacity to reduce SSB consumption | 3.3 (1.1) | 3.1 (1.1) | | 3.5 (1.0) | | 3.3 (1.1) | | 3.1 (0.8) | | 3.3 (1.0) | | 0.62 |
| 1. Establish a recognition or "star" rating program for any organization that doesn't serve SSBs, and make this easily accessible via an online platform | 2.1 (1.0)d | 2.1 (1.2)d | | 2.4 (1.4) | | 3.3 (1.4)abf | | 2.1 (0.8) | | 2.0 (1.0)d | | 0.01\* |
| **Strategies to Increase Access to/Consumption of Safe Drinking Water** | | |  | |  | |  | |  | |  | |
| **Mean score across all Water Strategies** | **3.1 (1.0)** | **3.1 (1.1)** | | **3.3 (1.2)** | | **3.5 (1.2)** | | **3.2 (0.90)** | | **3.1 (1.1)** | | **-** |
| **Education** |  |  | |  | |  | |  | |  | |  |
| 1. Educate providers who work with children on importance of water consumption | 3.3 (1.1) | 3.3 (1.2) | | 3.5 (1.2) | | 3.9 (0.8) | | 3.2 (1.1) | | 3.5 (1.0) | | 0.66 |
| 1. Teach children and parents about increasing water consumption using in-person education sessions | 2.4 (1.0) | 2.6 (1.1) | | 2.7 (1.3) | | 3.3 (1.1) | | 3 (0.9) | | 2.3 (1.1) | | 0.08 |
| 1. Leverage technology to educate children & parents on water consumption | 2.6 (1.1) | 2.3 (1.1) | | 2.7 (1.2) | | 3 (1.1) | | 2.8 (1) | | 2.6 (1.2) | | 0.44 |
| 1. Teach children and parents/caregivers about increasing water consumption using passive education methods | 1.9 (0.9) | 2.1 (1.0) | | 2.4 (1.3) | | 2.9 (1.4) | | 2 (0.7) | | 2.1 (1.3) | | 0.07 |
| 1. Develop a peer-to-peer support group for exchange of information related to water consumption for parents/caregivers | 2.0 (0.9) | 1.8 (1.1) | | 2.1 (1.2) | | 2.7 (1.3) | | 2.1 (1.4) | | 2.0 (0.8) | | 0.31 |
| **Public Awareness Campaigns and Contests** | | |  | |  | |  | |  | |  | |
| 1. Launch public awareness media campaigns to educate communities on the importance of drinking water | 3.0 (1.0) | 3.4 (1.1) | | 3.6 (1.1) | | 3.8 (1.1) | | 3.1 (0.9) | | 3.5 (0.9) | | 0.04\* |
| 1. Use games or competitions to make water consumption fun and enjoyable for children | 2.4 (0.9) | 2.2 (1.2) | | 2.4 (1.2) | | 2.8 (1.2) | | 2.2 (1.1) | | 2.2 (1.1) | | 0.51 |
| **Marketing & Advertising Changes** | | |  | |  | |  | |  | |  | |
| 1. Use popular, culturally appropriate cartoon characters or celebrities to promote water consumption among children | 3.3 (0.9)d | 3.4 (1.0) | | 3.4 (1.1) | | 3.3 (1.0)ae | | 3.3 (1.0)d | | 3.3 (1.0) | | 0.97 |
| 1. Increase visibility of water in the food/beverage retail environment to increase purchasing and consumption | 3.0 (1.1) | 3.2 (1.2) | | 3.4 (1.1) | | 3.3 (1.1) | | 3.4 (1.0) | | 3 (1.2) | | 0.39 |
| **Price Changes** | | |  | |  | |  | |  | |  | |
| 1. Decrease price of water relative to SSBs | 3.8 (1.2) | 3.9 (1.1) | | 4.1 (1.1) | | 3.6 (1.8) | | 4.3 (0.7) | | 3.9 (1.3) | | 0.69 |
| 1. Promote water consumption among WIC and SNAP participants by providing greater benefit allotments for water purchases | 3.2 (1.2) | 3.3 (1.3) | | 3.1 (1.3) | | 3.7 (1.2) | | 3.7 (1) | | 3.4 (1.1) | | 0.62 |
| **Increase Physical Access to Water** | | |  | |  | |  | |  | |  | |
| 1. Increase the availability of safe drinking water | 4.5 (0.7) | 4.2 (1.0) | | 4.2 (1.1) | | 4.1 (1.2) | | 4.7 (0.7) | | 4.3 (0.9) | | 0.35 |
| 1. Make water the default beverage choice (over SSBs) at places where children are being served meals | 4.1 (0.9) | 3.9 (1.1) | | 4.3 (0.8) | | 4.2 (0.8) | | 4.1 (0.6) | | 3.8 (1.2) | | 0.29 |
| 1. Implement policy specifying the types of beverages served and provided to children in Early Childhood Education sites | 3.9 (1.1) | 3.9 (1) | | 4.3 (0.9) | | 4.2 (0.6) | | 4 (0.9) | | 4.1 (0.9) | | 0.51 |
| 1. Create a program which sends safe drinking water home with children, especially in areas with known unsafe water sources | 3.2 (1.2) | 3.5 (1.1) | | 3.6 (1.3) | | 3.8 (1.4) | | 3.1 (1.1) | | 3.5 (1.1) | | 0.36 |
| **Provision & Modification of Drinking Vessels** | | |  | |  | |  | |  | |  | |
| 1. Increase the intake of water through the provision of drinking vessels that are developmentally appropriate for young children | 3.0 (1.2)d | 2.9 (1.3)d | | 2.8 (1.2)d | | 4.1 (1.2)abc | | 2.6 (0.7) | | 2.9 (1.1) | | 0.03\* |
| 1. Promote water consumption with fun/attractive designs on self-serve water stations & vessels | 2.8 (1.1) | 2.6 (1.1) | | 3 (1.2) | | 3.5 (1.2) | | 2.9 (0.6) | | 2.8 (1.2) | | 0.21 |
| **Water Quality** | | |  | |  | |  | |  | |  | |
| 1. Provide resources, technical assistance and training for water quality testing, communication and remediation | 3.3 (1.3) | 3.1 (1.3) | | 3.5 (1.4) | | 3.3 (1.3) | | 2.7 (0.7) | | 3.4 (1.3) | | 0.53 |
| 1. Infuse water with fruit in order to improve taste and palatability for children | 2.1 (1.0) | 2.1 (1.1) | | 2.3 (1.4) | | 3.0 (1.4) | | 2.1 (0.9) | | 2.6 (1.2) | | 0.14 |
| **Improve Setting & Program Capacity** | | |  | |  | |  | |  | |  | |
| 1. Organizational strategies to promote water consumption in schools, government facilities, and public spaces | 3.6 (1.0) | 3.4 (1.4) | | 3.6 (1.1) | | 4.0 (1.1) | | 4.1 (0.8) | | 3.6 (1.1) | | 0.50 |

Note: Strategies were ranked from 1 (lowest) to 5 (highest). SD = Standard Deviation.

Statistical significance tested with ANOVA. Strategies with a significant p-value on the ANOVA underwent post-hoc testing with a Tukey test.

a indicates significant difference in overall impact score compared to Academia

b indicates significant difference in overall impact score compared to Government

c indicates significant difference in overall impact score compared to NGO

d indicates significant difference in overall impact score compared to Education

e indicates significant difference in overall impact score compared to Health care

f indicates significant difference in overall impact score compared to Other