INTERVENTION TABLE 12

Provision of Drinking Water

Source	Intervention Components	Study Design and Execution	Reach	Adoption, Implementation and Process Evaluation	Enforcement/ Sustainability	Impacts and Outcomes
International						
Muckelbauer, Libuda (2009) Germany	Provision of cooled, filtered, plain or optionally carbonated water through water fountains in schools ***OTHER INTERVENTION COMPONENTS:*** *Multi-component:* Not reported *Complex:* 1. Students provided plastic water bottle 2. Four 45 minute educational classroom lessons 3. Motivational unit (booster sessions) to promote sustained increase in water consumption	***DESIGN:*** Group randomized trial ***DURATION:*** August 2006-June 2007 ***SAMPLE SIZE:*** 2,950 participants from 32 elementary schools (17 intervention, 15 control) ***PRIMARY OUTCOME:*** Body mass index (BMI) ***MEASURES:*** 1. Body weight status – weight and height, converted to BMI values 2. 24-hr recall questionnaire (beverage consumption [juice, water, soft drinks] for 5 time periods over previous 24 hours) 3. Flow meters (water fountains) ***DATA COLLECTION:*** Weight and height were measured at baseline and follow-up by 2 trained professionals. 24-hr recall was self-completed under teachers' supervision at baseline and follow-up. Water flow from the fountains was measured by reading the flow meters at baseline and at 6 control visits during the follow-up period. The research team conducted the evaluation and analyzed the data. ***LIMITATIONS:*** Study was underpowered (targeted sample size was 3,600); self-reported data; 7 of 40 schools declined participation and 16% of all children had no written consent	6-10 year olds Urban Lower income ***ELIGIBILITY CRITERIA:*** Schools had to be located in deprived areas with unemployment rate of 15% or greater, proportion of social welfare recipients of 5% or greater, and proportion of non-German residents of 5% or greater and students had to have written parental consent ***EXPOSURE/ PARTICIPATION:*** 2nd and 3rd grade intervention children received the intervention. All children in the schools were exposed to the new water fountains.	***LEAD AGENCY:*** School teachers (intervention), Research team (evaluation) ***THEORY/FRAMEWORK:*** Theory of Planned Behavior ***REPLICATION/ADAPTATION:*** Not reported ***ADOPTION:*** Not reported ***IMPLEMENTATION:*** Each intervention school received one water fountain (2 for schools with >150 participants). Each child received a plastic water bottle, and teachers were encouraged to organize filling of the water bottles each morning. Teachers were given a booklet with the prepared curriculum and materials to implement four 45-minute classroom lessons promoting water consumption. A motivation unit (booster sessions) was given after 3 months that used a goal-setting strategy to reach a sustained increase in water consumption. In month 5 each student received a new water bottle with improved handling design. The research team designed the intervention and developed the curriculum materials. ***FORMATIVE EVALUATION:*** Study materials, data collection, and intervention were pilot-tested in one school. ***PROCESS EVALUATION:*** Questionnaires and oral interviews were administered to the teachers to assess which of the classroom lessons the teachers had implemented, whether they introduced the booster sessions and continued their implementation until the follow-up assessment and whether daily water provision from the fountains was organized for the entire class until follow-up.	***RESOURCES:*** 1. Personnel to provide lessons 2. Water fountains 3. Water bottles 4. Curriculum booklets ***FUNDING:*** German Federal Ministry of Food, Agriculture, and Consumer Protection (intervention & evaluation). Intervention materials (water fountains, bottles, and lesson booklets) were provided by the Association of the German Gas and Water Industries. ***STRATEGIES:*** Not reported	***OVERWEIGHT/OBESITY:*** 1. The risk of overweight was significantly reduced in the intervention group, compared with the control group (OR=0.69, 95% CI: 0.48-0.98). The intracluster correlation coefficient for the prevalence of overweight was 0.011. 2. The estimated group difference between intervention and control in BMI SDS changes of -0.004 (95% CI: -0.045-0.036) was not significant (p=0.829), with adjustment for BMI SDS at baseline. 3. Among students without an immigrational background, the risk of being overweight at follow-up was significantly reduced in the intervention group compared to the control group (OR=0.51, 95% CI: 0.31-0.83) after adjustment for baseline prevalence of overweight. There was no intervention effect detected among children with an immigrational background. 4. The incidence of overweight during the follow-up period was reduced significantly in the intervention group among students without an immigrational background (adjusted OR= 0.46, 95% CI: 0.26-0.80), but not among children with an immigrational background. ***NUTRITION:*** 5. (n=1987) Changes in water consumption were higher in the intervention group compared with the controls, with an estimated difference of 1.1 glasses per day (95% CI: 0.7-1.4, p<0.001), adjusted for baseline consumption and migrational background. 6. (n=1987) No intervention effect on juice and soft drink consumption after adjustment for baseline and migrational background (p=0.50 & p=0.406, respectively). ***OTHER:*** 7. The daily water flow (average volume of water supplied per participant per school day from the fountains) decreased from 412 mL at month 2 to 223 mL within 3 months (p<0.001). After participants received a new water bottle at measurement point 3, the daily water flow increased significantly to 400 mL (p<0.001). The daily water flow then decreased to 268 mL at the follow-up assessment (p<0.001).

Source	Intervention Components	Study Design and Execution	Reach	Adoption, Implementation and Process Evaluation	Enforcement/ Sustainability	Impacts and Outcomes
Loughridge, Barratt (2005) United Kingdom	Provision of free cooled water at school through placement of two water coolers inside the school cafeteria (both intervention schools) ***OTHER INTERVENTION COMPONENTS:*** *Multi-Component:* Not reported *Complex:* 1. Education about the benefits of drinking water (intervention school one only) 2. Promotional materials, assemblies and materials given to students (intervention school one only)	***DESIGN:*** Non-randomized trial ***DURATION:*** One month (Feb. 2003) ***SAMPLE SIZE:*** 2,965 participants from 3 secondary schools from the most deprived areas within North Tyneside, United Kingdom. (intervention school one=903, intervention school two=1,190; and control group=872) ***PRIMARY OUTCOME:*** Water consumption and purchase of soft drinks ***MEASURES:*** 1. Sales of soft drinks 2. Flow meters (water coolers) 3. Focus Groups with 8-10 children from two age groups, 7-10 and 11-13 (perceptions of water consumption) ***DATA COLLECTION:*** The sales of soft drinks and existing water provision were measured one month prior to the intervention, during the intervention month and during the two months after the intervention with support from catering staff. The total volume of water taken over a month was collected using flow meters attached to the water coolers. Focus groups were conducted after the intervention in the control school. The focus group data were analyzed using theme analysis. The research team completed the evaluation. ***LIMITATIONS:*** Short duration of the intervention and low intensity of the active promotion component; water coolers were not sited in prime positions and it was not possible to accurately record the actual number of students using the cafeterias (assumption was made that all students had access)	11-18 year olds Intervention school one = 35.6% entitled to free school meals Intervention school two = 21.2% entitled to free school meals Control school = 21.3% entitled to free school meals ***ELIGIBILITY CRITERIA:*** Not reported ***EXPOSURE/ PARTICIPATION:*** All children in the intervention schools were exposed to the intervention.	***LEAD AGENCY:*** The research team ***THEORY/FRAMEWORK:*** Not reported ***EVIDENCE-BASED:*** Not reported ***REPLICATION/ADAPTATION:*** Not reported ***ADOPTION:*** Not reported ***IMPLEMENTATION:*** In intervention school one a water cooler was placed inside the school cafeteria and students were educated about the health benefit of drinking water and how to access it. Promotional activities included placement of purposefully designed posters around the school and verbally informing the children at school assemblies about the drinking water facilities within their school. A basketball sports personality attended the assemblies to assist with promotion. Specifically designed water promotion lessons were conducted by teachers that included one 45 minute lesson that involved class discussion about the perceptions of water drinking in school, individual completion of a "water drinking habit" worksheet, feedback and discussion. Students also received promotional pencils and water bottles. Intervention school two received free cooled water only, and the control group did not receive water or promotional activities. ***FORMATIVE EVALUATION:*** Not reported ***PROCESS EVALUATION:*** Not reported	***RESOURCES:*** 1. Water coolers 2. Promotional materials (posters, pencils, worksheets, water bottles, cups). 3. A basketball sports personality 4. Personnel to deliver the health lessons ***FUNDING:*** Van den Bergh Foods Ltd. ***STRATEGIES:*** The control school placed a number of water coolers around the school after the intervention as a result of the dissemination of the focus group data and staff motivation.	***NUTRITION:*** 1. The average volume of water consumed by the students in intervention school one (water and promotion), was greater than that consumed in both intervention school two (water only) and in the control school. (p=0.05). ***SALES OF SOFT DRINKS:*** 2. The volume of soft drinks purchased by the students remained relatively constant in all three schools over time. Slightly larger volumes of soft drinks were purchased in the control school (87 mL/student/day at the end of the monitoring period) as compared with the water only school (57mL/student/day) and the water and promotion school (43mL/student/day); not statistically significant. ***OTHER:*** 3. Based on the focus groups with control children post-intervention, students viewed their existing water provision (cup and jug) as poor. Some members of the group were aware of feelings of being mildly dehydrated and were concerned that palatable water needed to be purchased.

Source	Intervention Components	Study Design and Execution	Reach	Adoption, Implementation and Process Evaluation	Enforcement/ Sustainability	Impacts and Outcomes
Haerens, Deforche (2006); Haerens, De Bourdeauduij (2007); Haerens, De Bourdeauduij (2007); Haerens, Cerin (2007); Haerens, Cerin (2008); Haerens, Deforche (2006) Belgium	School policy to increase healthy food choices by: 1. Offering water for free through drinking fountains 2. Selling fruit at school for a very low price or for free at least once a week 3. Pricing water lower than soft drinks 4. Offering fruit for dessert during lunch ***OTHER INTERVENTION COMPONENTS:*** *Multi-Component:* 1. Physical activity (PA) component to increase levels of moderate to vigorous physical activity (MVPA) to at least 60 min/day. Activities included PA during breaks using varied content to reach all students, provision of extra sports materials, encouragement of active transportation to school, and a computer-tailored PA classroom lesson. *Complex:* 1. Computer-tailored classroom lesson on fat and fruit intake 2. Parent component including interactive meeting on healthy living, newsletters/ school paper 3 times/ yr and adult computer-tailored intervention for fat intake and PA	***DESIGN:*** Group randomized trial ***DURATION:*** 2 school years ***SAMPLE SIZE:*** 2434 7th and 8th grade students in 15 schools (5 schools= parent component; 5 schools= no parent component; 5 schools= no intervention); 2287 students included in 2 year sample ***PRIMARY OUTCOME:*** Overweight/ obesity (body mass index) ***MEASURES:*** 1. BMI- Height and weight 2. Flemish PA questionnaire (FPAQ). 3. Accelerometers (N= 258) 4. PA diary (activities done without accelerometer) 5. Self administered questionnaire (fat intake) 6. Food frequency questionnaires (fruit, water, soft drink intake) 7. Implementation questionnaire (implementation of the intervention activities) ***DATA COLLECTION:*** Students completed the questionnaires once a year. BMI was measured at baseline, 1 year, and 2 years. A subsample of students wore the accelerometer for four weekdays and two weekend days. Students recorded their activities in the diary. One workgroup member from each intervention school completed the implementation questionnaire at the end of the 2 year intervention. ***LIMITATIONS:*** Self-reported data; high attrition rate (25%); risk for clustering of outcome variables within schools due to randomization at the school level; schools not matched on key characteristics resulting in a gender disparity across conditions; accelerometers only used in a subsample of 7th graders; not possible to determine which component of the intervention had significant effects	11-18 year olds 68% lower income (evaluation sample) ***ELIGIBILITY:*** Not reported ***EXPOSURE/ PARTICIPATION:*** All children in the 10 intervention schools were exposed to the healthy eating and physical activity policies; all children in the 5 intervention with parent schools were exposed to the parent component.	***LEAD AGENCY:*** Research team ***THEORY/FRAMEWORK:*** Not Reported ***EVIDENCE-BASED:*** The study builds off previous successful interventions that targeted the environment and computer-tailored physical activity interventions. The current study combines these two approaches. ***REPLICATION/ ADAPTATION:*** Not reported ***ADOPTION:*** Not reported ***IMPLEMENTATION:*** The research team developed the intervention (including the intervention manual). In year one the research team led a work group composed of school staff that help to guide the intervention delivery. The school staff made changes to the food environment, physical activity environment, and led the parent component. ***FORMATIVE EVALUATION:*** Not reported ***PROCESS EVALUATION:*** Not reported	***RESOURCES:*** 1. Computers 2. CD-ROM for the adult computer intervention 3. Sports materials (jump ropes, balls etc.). 4. Funds for subsidizing fruit and water 5. Materials for meetings with parents 6. Newsletters for parents ***FUNDING:*** Federal Flemish government funds ***STRATEGIES:*** Not reported	***OVERWEIGHT/OBESITY:*** *After Two Years* 1. For all analyses, variance at the school level was not significant (all z< 1.59). 2. For girls there was a significantly lower increase in BMI (from 20.23 ± 3.95 to 21.34 ± 3.83) in the intervention with parent group compared to control (from 19.12 ± 3.50 to 20.78 ± 3.66), F=12.52, p<0.05. 3. For girls there was a significantly lower increase in BMI z score (from 0.24 ± 1.11 to 0.24 ± 1.06) in the intervention with parent group, compared to control (from -0.03 ± 1.05 to 0.14 ± 1.00), F=8.61, p<0.05. 4. In addition, there was a significantly lower increase in BMI z score (from 0.24 ± 1.11 to 0.24 ± 1.06) in the intervention with parent group, compared to intervention no parent group (from 0.28 ± 0.97 to 0.35 ± 0.96), F= 2.68, p=0.05. 5. In boys, no significant positive intervention effects were found. 6. BMI z-score increased significantly more in schools with low levels of implementation, when compared with schools with medium (F=5.03, p<0.05) and high (F=2.80, p<0.05) levels of implementation. After 2 years of the intervention, BMI z-score increased with 0.12 units in the schools with low levels of implementation and with 0.06 and 0.09 units, respectively, in schools with medium and high levels of implementation. ***NUTRITION:*** *After One Year* 7. The intervention was not effective in increasing self reported fruit intake and water consumption or decreasing soft drink consumption. 8. Fat intake decreased significantly more in girls in the intervention with parent group, compared to the intervention no parent group (F=6.1, p<0.05) and control group (F=17.3, p<0.001). 9. Percentage of energy from fat also decreased significantly more in girls in the intervention with parent group, compared to the intervention no parent group (F=3.9, p<0.05) and control group (F=16.7, p<0.001). 10. No significant effect for fat intake or percentage of energy from fat among boys. *(continued next page)*

(Continued from previous study)						
						After Two Years 11. In year 2 for girls, decreases in fat intake were higher in the intervention groups (-20g/day) when compared to control group (-10g/day), F=5.8, p<0.05. Percentage of energy from fat decreased by 9% in the intervention group and 5% in the control group (F=13.3, p<0.001). ***PHYSICAL ACTIVITY:*** *After One Year* 12. Based on the physical activity questionnaire, the intervention with parent group increased their total physical activity by 9.0 min/day (95% CI: 2.9, 15.2; p=0.004) more than did the control group. 13. Based on the physical activity questionnaire, school related PA increased significantly in the two intervention groups (+6.4 min/day, d=0.40 with parent support group; +4.5 min/day, d=0.29 without parent support group) compared to controls (no change), p<0.05 for both. 14. Based on the physical activity questionnaire, girls leisure time active transportation remained stable in the no parent intervention group, while it decreased on average 4 minutes daily in the control group (F=12.1, p<0.001, d=0.28). In boys, there were no significant differences. 15. Based on the physical activity questionnaire, significant differences were also found between the intervention with parent group and the control group on changes in active transportation to/from school (2.1 min day-1, 95% CI: 0.6, 3.6; p=0.006) and changes in school-related sporting activities (2.1 min day-1, 95% CI: 0.5, 3.7; p=0.012). No significant differences were found between the control group and intervention with no parent group. 16. Based on accelerometry data, MVPA increased an average of 4 min. daily in the intervention with parent group, and decreased 7 min. daily in the control group (F=5.1, p≤ 0.05; d=0.46). 17. Based on accelerometer data, PA of light intensity decreased an average of 21 min daily in the intervention with parent group and decreased by 57 min on average daily in the control group (F=5.1, p≤ 0.05; d=0.54). *After Two Years* 18. In boys, school-related physical activity increased significantly more in the intervention groups (from 18.3 ± 18.7 to 25.2 ± 21.4) compared with the control group (from 22.6 ± 14.8 to 23.8 ± 16.5), F=3.4, p<0.05. 19. For boys, accelerometer data revealed a trend for significant lower decreases in physical activity of light intensity in the intervention groups (-6 min/day) compared with the control group (-39 min/day), F=8.6, p<0.001. 20. Based on accelerometer data for boys, MVPA remained stable in the intervention group, but significantly decreased (-18 min/day) in the control group (F=3.5, p<0.08). 21. In girls, time spent in physical activity of light intensity decreased significantly less in the intervention groups (-2 min/day) compared with the control group (-20 min/day), F=4.6, p<0.05.

Source	Intervention Components	Study Design and Execution	Reach	Adoption, Implementation and Process Evaluation	Enforcement/ Sustainability	Impacts and Outcomes
Laurence, Peterken (2007) Melbourne, Australia	Fresh Kids Program – Encouragement to drink water during class (and prohibition of sweet drinks), students were provided water bottles ***OTHER INTERVENTION COMPONENTS:*** *Multi-component:* 1. School policy providing scheduled class-time fruit breaks *Complex:* 1. Nutrition education in association with seasonal "Fresh Fruit Weeks" 2. Monthly nutrition newsletter distributed to parents	***DESIGN:*** Time series study ***DURATION:*** 2 years ***SAMPLE SIZE:*** The number of students participating in the study over the 2 years ranged from 94-260 in School A, 146-175 in School B, 325-360 in School C, and 71-84 in School D. Schools A and B were followed 3 years post-baseline, while Schools C and D were only followed 1 year post-baseline. ***PRIMARY OUTCOME:*** Fruit, water and sweet drink consumption ***MEASURES:*** 1. Lunchbox audits (valid and reliable, detected changes in students dietary intake) ***DATA COLLECTION:*** Teachers performed the lunchbox audits by using a simple audit template with written instructions as designed by the program coordinator. Teachers directly observed the students' lunch boxes at the beginning of the day or before recess, and recorded the frequency of children observed with the following food and drink items: fruit (fresh, not dried or fruit bars), water (not including flavored mineral waters or water that was consumed from water fountains) and sweet drinks (fruit juice, soft drinks, flavored mineral waters). The researchers performed the evaluation and analyzed the data. ***LIMITATIONS:*** Lack of a control group; actual fruit and drink consumption was not measured; limited capacity to monitor reliability of audits; school A's baseline audit used a convenience sample not a survey of all eligible students in the school as designed	5-10 year olds Urban Lower income Schools A,B & D were 60-90% culturally/ linguistically diverse (mainly Vietnamese) ***ELIGIBILITY:*** Not reported ***EXPOSURE/ PARTICIPATION:*** All children in the 4 primary schools were exposed to the intervention.	***LEAD AGENCY:*** Western Region Health Centre (intervention and evaluation), lead teacher at each school (intervention) ***THEORY/FRAMEWORK:*** The Health Promoting Schools (HPSs) framework ***EVIDENCE-BASED:*** Not reported ***REPLICATION/ ADAPTATION:*** Not reported ***ADOPTION:*** Not reported ***IMPLEMENTATION:*** The intervention included formal school fruit and water policies developed in consultation with school staff and formalized by school management/ council, class-time fruit breaks where children consumed fresh F&V brought from home, along with encouragement of drinking water during class (and prohibition of sweet drinks) and nutrition education activities initiated by teaching staff in association with seasonal "Fresh Fruit Weeks." A community dietician was appointed to coordinate the program planning, implementation and evaluation. ***FORMATIVE EVALUATION:*** Not reported ***PROCESS EVALUATION:*** Not reported	***RESOURCES:*** 1. Dietician to coordinate the program 2. Teachers to implement the class breaks and deliver the curriculum 3. Nutrition education materials 4. Newsletters 5. Water bottles ***FUNDING:*** The intervention and evaluation was supported through the National Child Nutrition Programme, Commonwealth Dept. of Health and Ageing and the Telstra Foundation ***STRATEGIES:*** Fresh Kids continues to be supported by the Telstra Foundation. Fresh Kids program has been expanded to over 35 primary schools across Melbourne's west suburbs.	***NUTRITION:*** 1. 41% mean increase (increases between 25-50%) in proportion of children bringing fresh fruit for up to 2 years after initial implementation of Fresh Kids program ($p<0.001$), across all schools observed. 2. All schools recorded increases between 15% and 60% in the proportion of children bringing filled water bottles to school for up to 2 years ($p<0.001$). 3. The increases in the proportion of children drinking water were inversely related to the reductions observed in the proportion of children with sweetened drinks, including cordials, soft drinks, and fruit juices. Reductions between 8% and 38% were observed among all schools in proportion of children bringing sweet drinks or ordering them through canteen lunch (School A and D: $p<0.001$; School C: $p<0.01$; School B: not significant).

Source	Intervention Components	Study Design and Execution	Reach	Adoption, Implementation and Process Evaluation	Enforcement/ Sustainability	Impacts and Outcomes
Kaushik, Mullee (2007) United Kingdom	"Water is Cool in School" campaign - School policies to increase access to water during class. Three policies were compared: 1. 'Free access.' Water permitted on desk at arms' length. 2. 'Limited access.' Water available in class (i.e., located in water cooler) but children were required to actively request drinks. 3. 'Prohibited access.' Drinking in class not permitted. ***OTHER INTERVENTION COMPONENTS:*** *Multi-component:* Not reported *Complex:* Not reported	***DESIGN:*** Cross-sectional study ***DURATION:*** Not reported ***SAMPLE SIZE:*** 298 children from Year 2 (age 6-7) and Year 5 (age 9-10) classes in six primary schools (free access group=87, limited access group=91, prohibited access group =120) ***PRIMARY OUTCOME:*** Water consumption ***MEASURES:*** 1. Weight of fluid containers used by children (fluid intake). 2. Number of visits to restroom 3. % Expected Fluid Intake (%EFI) 4. Teacher questionnaire (beliefs about children's access to water in school) 5. Direct observation ***DATA COLLECTION:*** Children were studied in groups of 10 over a full school day from January to March 2003. A single observer was used throughout to avoid inter-observer variability of observations. Fluid containers were weighed on electronic scales before and after use. Intake of water was differentiated from the intake of other fluids. At water fountains intake was estimated from mean 'gulp' volume, multiplied by number of gulps. % Expected Fluid Intake (%EFI) was calculated within a 6h school day to represent the absolute minimum fluid requirement for homeostasis over 6 daytime hours. The researchers were responsible for observing drinking habits, collecting the data and administering teacher questionnaires. The research team also analyzed the data. ***LIMITATIONS:*** Presence of research team may have influenced drinking habits; researcher was not blinded to policy; environmental confounders were not recorded; %EFI assumed normally distributed weight among the children; EFI calculations assumed a 6/24-hour requirement for children in the study, but children generally drink their 24-hour fluid requirement during daytime hours; 26 of the children allocated to prohibited or limited access settings were exposed to a more liberal classroom water access policy on the day of the study	6-10 year olds ***ELIGIBILITY:*** Schools were recruited to obtain balanced representation of classroom policy with respect to access to drinking water in the classroom. ***EXPOSURE/ PARTICIPATION:*** All children in the schools were exposed to the water access policies.	***LEAD AGENCY:*** The research team from University of Southampton ***THEORY/FRAMEWORK:*** Not reported ***EVIDENCE-BASED:*** Not reported ***REPLICATION/ ADAPTATION:*** Not reported ***ADOPTION:*** Not reported ***IMPLEMENTATION:*** Not reported ***FORMATIVE EVALUATION:*** Not reported ***PROCESS EVALUATION:*** Not reported	***RESOURCES:*** 1. Water 2. Water bottles ***FUNDING:*** Not reported ***STRATEGIES:*** Not reported	***NUTRITION:*** 1. Only 29% of children achieved a minimum desired fluid intake. 2. Year 2 (ages 6-7) free access schools had higher total fluid intake (ratio of geometric means = 1.55, 95% CI: 1.01-2.38, p=0.046) compared with prohibited access schools. 3. Year 5 (ages 9-10) free access schools had higher total fluid intake compared with prohibited access schools (ratio of geometric means = 2.38, 95% CI: 1.36-4.15, p=0.001) and limited access schools (ratio of geometric means = 2.23, 95% CI: 1.26-4.00, p=0.003). 4. For water intake alone, Year 2 (ages 6-7) and Year 5 (ages 9-10) children had higher intakes both in free access (p=0.001) and limited access (p<0.001) schools compared to prohibited access schools. 5. Year 5 (ages 9-10) free access schools had decreased consumption of flavored alternatives compared with prohibited access schools (p=0.019). ***OTHER:*** 6. A potential objection to the free availability of water in class is that children may need to leave class more frequently to use the restroom. However, no trend was observed between water access and frequency of restroom visits (p=0.605).

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