



# Bringing Free Drinking Water Back to California Schools



In schools throughout California, the drinking fountains we might remember from our youth have become all but relics of the past. But drinking fresh water during the day can help students improve their overall health and willingness to learn – and because children spend most of their day at school, school policies and programs can have a major impact on encouraging water consumption.

California recently passed legislation requiring schools to provide fresh, free drinking water to students during meal times,<sup>1</sup> a requirement that now applies nationwide with the passage of the Healthy, Hunger-Free Kids Act of 2010.<sup>2</sup> But schools face many barriers to making free water readily accessible, including deteriorating infrastructure and other costs, poor perceptions of tap water, and the prevalence of competing beverages.

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To help California schools comply with new requirements and support student health, this fact sheet highlights strategies to make drinking water more readily available, including ways for parents and community members to get involved.



## Why Water?

About a third of children and adolescents in the United States are overweight or obese, and studies link rising obesity rates to the consumption of soda, sports drinks, sweetened teas, and other sugar-sweetened beverages.<sup>3</sup> Drinking fresh water instead of sugary beverages can help limit excess weight gain among children and adolescents.<sup>4</sup>

Water consumption also improves students' readiness to learn by reducing irritability and distraction from thirst. Children who are dehydrated tend to experience a drop in their cognitive performance, particularly short-term memory and concentration.<sup>5</sup>

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### Access Issues

How much students drink at school depends on the accessibility and appeal of drinking facilities. Locating a drinking fountain, especially one

that is inviting, can be a challenge. In 2009 California Project LEAN surveyed school districts across the state on a number of health-related issues, including water access.<sup>6</sup> About 40 percent reported that their schools did not offer free drinking water in cafeterias during school meals.<sup>7</sup>

The California building code requires only that schools have one drinking fountain for every 150 students.<sup>8</sup> The code does not require schools to refrigerate drinking water or to have drinking fountains in the cafeteria.<sup>9</sup>

## A Community's Assessment

Advocates in California's North Coast region assessed 131 school drinking fountains and found that about a quarter did not have adequate pressure, making the fountains essentially unusable.<sup>10</sup> Meanwhile, a survey of student drinking habits found that a quarter of respondents avoid water fountains because the machines are dirty or broken, or because the water is unappealing.<sup>11</sup> Also, when asked what drinks they bring to or buy at school, 64 percent of students reported bottled water and 38 percent named a sugar-sweetened beverage.<sup>12</sup>

School policies can serve a crucial role in making drinking water more accessible, but only a handful of schools have such policies in place.<sup>13</sup> Some schools may even have policies that discourage water consumption: banning reusable water bottles, prohibiting drinking water in classrooms, or refusing to offer tap water at the lunch counter.<sup>14</sup> And other schools only prioritize certain days or events for providing potable water, offering it on examination dates to improve performance.

Many schools rely on vending machine sales to help fund school activities, leading to a proliferation of sports drinks and bottled water on campuses.<sup>15</sup> But sports drinks, which do provide electrolytes and energy, can also have high sugar content.<sup>16</sup> Sports drinks are typically for students engaged in vigorous physical activity for at least an hour.<sup>17</sup> And at \$1 or more a bottle, bottled water can also become costly for students, in addition to being environmentally wasteful.<sup>18</sup>

### Safety and Appeal

The failure to regularly test school drinking water has left students and parents with a bad taste in their mouths, sometimes literally. To make tap water safer and more appealing, schools can implement policies to test their drinking water, correct any problems, and disclose reports to the public. Also, schools can apply hygiene standards for drinking fountains, restore deteriorating infrastructure, or provide alternate drinking water dispensers.

Due to concerns about tap water safety and the mass market appeal of packaged water, bottled water has been growing in popularity.<sup>19</sup> Despite poor perceptions of tap water safety and quality, bottled water is not necessarily safer.<sup>20</sup> Bottled water may be the only option for schools with high levels of lead and other contaminants in tap water from solder, plumbing, or fixtures. But ultimately, bottled water should be a temporary solution to the challenge of providing safe drinking water in schools.





## New Legislation

Recognizing the importance of drinking water availability and consumption, California passed legislation (SB1413) requiring that schools provide fresh, free drinking water to students during meal times in school food service areas as of July 2011.<sup>21</sup> Although “food service area” is not defined in regulation or law, the California Department of Education (CDE) guidance states that the “food service area” is anywhere on campus where meals are served or eaten.<sup>22</sup>

Making drinking water available in varied locations, not just in eating areas, gives students and staff access to safe, palatable water throughout the school day. CDE allows school districts discretion and encourages schools to be proactive in increasing water access and consumption.<sup>23</sup> Schools can provide chilled and filtered drinking stations, supply water dispensers and pitchers, and maintain school drinking fountains.

SB1413 gives schools an opt-out provision for fiscal constraints or health and safety concerns.<sup>24</sup> But schools receiving federal dollars through the National School Lunch Program (NSLP) will need to make potable water available during meal times at no cost to students under the Healthy, Hunger-Free Kids Act of 2010.<sup>25</sup>

The USDA does not consider potable water as part of the NSLP reimbursable meal, and there is no separate funding available for it. However, necessary and reasonable costs associated with providing drinking water, such as pitchers and paper cups, are allowable expenses that food services can charge to its nonprofit food services account (which holds revenue from all food services operations; the funds can be used to operate



and improve school food service). For more information about USDA guidance, see USDA Memo 28-2011: *Water Availability During National School Lunch Program Meal Services*, available at [www.fns.usda.gov/cnd/Governance/Legislation/CNR\\_schoolprograms.htm](http://www.fns.usda.gov/cnd/Governance/Legislation/CNR_schoolprograms.htm).

## Promising Practices

School wellness policies can include provisions that promote drinking water availability as an essential component of student wellness by improving access to free, safe drinking water in various locations on school campuses and encouraging student consumption of water throughout the school day. An example of a school district wellness policy with clear, specific language promoting water access is the Earlimart School District, located in California’s Central Valley. The district’s wellness policy requires that water be made available throughout the school day and during, before, and after school activities. The district must provide periodic maintenance of water fountains and testing of water sources. Also, the policy allows students to take water in capped containers into the classroom.<sup>26</sup>

Strategies for increasing access to drinking water can be as simple as providing pitchers or dispensers and cups to students. The Berkeley Unified School District, for instance, provides tap water by placing a five-gallon water jug and cups in school cafeterias for students during lunch. The water containers are chilled and refilled each day, and the costs and labor are minimal.<sup>27</sup> The Newark Unified School District, also in the San



Francisco Bay Area, provides water dispensers and cups to students, and even flavors the water with lemons the district receives free of charge from the USDA.<sup>28</sup>

*Schools can partner with parents, advocates, and local government to raise funds to improve drinking water access for students.*

Other schools have hydration stations or water jets, similar to commercial water and ice dispensers used in restaurants, to deliver cold-filtered water into paper cups or reusable water bottles.<sup>29</sup> In Stanislaus County, for

example, the Ceres Unified School District leased water stations at three elementary schools to dispense chilled, filtered water. Due to the positive feedback from students, the district purchased water stations for the rest of the schools.<sup>30</sup> In Sacramento County, the Folsom Cordova Unified School District has a hydration station in the cafeteria; the area features a mural backplash with water promotion messages to encourage students to drink more water.<sup>31</sup>

### Funding Opportunities

There are costs associated with providing drinking water to students, such as the installation and maintenance of a filtration device, the labor needed to manage drinking water dispensers, and any repairs needed for drinking water infrastructure. Qualifying school districts may be able to access state funds to construct and modernize facilities.<sup>32</sup> Schools that contract out their food service program to food service management companies may consider including in their contracts a requirement to provide drinking water.

Schools also can partner with parents, community advocates, and local government to help raise awareness and funds to improve drinking water access for students. Some examples:

- A parent in Oakland obtained funding from the PTA and matching funds from the city council to pay for a hydration station at one school.<sup>33</sup> Oakland city high schools have also used food services funds to provide free bottled water as part of the school meal.<sup>34</sup>
- Fresno Unified School District has partnered with local health and nutrition organizations to promote drinking water access by placing large water dispensers and paper cups in all the schools.<sup>35</sup>

- One school district in California purchased reusable water bottles for students with funding from the California Nutrition Network, a collective of local, state, and national partners.<sup>36</sup>

Schools can partner with industry, too, to reduce the expenses associated with increasing students' access to drinking water. A pilot program at the Los Angeles Unified School District brought a five-gallon water dispenser to a school cafeteria, and during lunch students had access to filtered, chilled tap water and paper cups.<sup>37</sup> Students also received reusable water bottles to encourage water consumption throughout the school day.<sup>38</sup> A well-known maker of reusable bottles donated the water bottles to the pilot program.<sup>39</sup>

Research shows that students will drink more water if it is available, appealing, and perceived to be beneficial.<sup>40</sup> In Mendocino County, for example, the Ukiah Unified School District conducted a pilot intervention where 150 students in six classrooms were provided with water, and results showed an increase in water consumption.<sup>41</sup>

Getting children to drink more water promotes their overall health and readiness to learn. To comply with new legislation requiring schools to provide students with safe, free drinking water, California schools can work with students, parents, local government, and the private sector to implement new policies and practices.



## For more information on improving drinking water access in schools:

The *National & Legal Policy Analysis Network to Prevent Childhood Obesity* (NPLAN), a project of Public Health Law & Policy, has developed a policy package for schools and community advocates to help promote access to free drinking water at schools. The package also highlights examples of how schools across the country have partnered with other agencies and private companies to fund drinking water programs, and features a set of model goals and actions for schools to incorporate into their wellness policies.

[www.phlpnet.org/childhood-obesity/products/water-access](http://www.phlpnet.org/childhood-obesity/products/water-access)

*California Food Policy Advocates* (CFPA) is a statewide public policy and advocacy organization dedicated to improving the health and well-being of low-income Californians by increasing their access to nutritious and affordable food. CFPA has a report highlighting challenges with providing free, clean, and appealing tap water in schools as well as strategies to promote consumption.

<http://cfpa.net/water-in-schools>

*Water in Schools Toolkit* is an online resource that contains background information, fact sheets, case studies, and other resources to help communities promote water consumption in schools.

<http://waterinschools.org>

**Community Water Center** is a nonprofit organization that provides legal assistance to low-income, communities of color facing local water challenges in San Joaquin Valley.

[www.communitywatercenter.org/index.php](http://www.communitywatercenter.org/index.php)

The *California Department of Education* (CDE) has guidance on drinking water for students in schools.

[www.cde.ca.gov/ls/nu/he/water.asp](http://www.cde.ca.gov/ls/nu/he/water.asp)

The *Northcoast Nutrition and Fitness Collaborative* (NNFC) represents the North Coast Region, which consists of six counties (Del Norte, Humboldt, Lake, Mendocino, Napa, and Sonoma). The NNFC is a community-based collaborative providing leadership and coordination in the areas of nutrition, physical activity, and food access in the region's schools and communities. The NNFC released a water issue brief, "Water Woes: Recommendations for Creating Healthier School Environments." [www.northcoastnutrition.org/NorthcoastNutritionandFitnessCollaborative-i-109-109.html](http://www.northcoastnutrition.org/NorthcoastNutritionandFitnessCollaborative-i-109-109.html)

[www.northcoastnutrition.org/media/files/Water%20Woes\\_for%20web%5b1%5d.pdf](http://www.northcoastnutrition.org/media/files/Water%20Woes_for%20web%5b1%5d.pdf)

The *United States Department of Agriculture* (USDA) issued guidance on the Healthy, Hunger-Free Kids Act of 2010 (reauthorized federal child nutrition programs) requirement that schools participating in the National School Lunch Program make drinking water available in food services areas during mealtimes and at no cost to students. See USDA "Memo 28-2011: Water Availability During National School Lunch Program Meal Services (Revised 7/12/2011)."

[www.fns.usda.gov/cnd/Governance/Legislation/CNR\\_schoolprograms.htm](http://www.fns.usda.gov/cnd/Governance/Legislation/CNR_schoolprograms.htm)

The *American Journal of Public Health* published "Encouraging Consumption of Water in School and Child Care Settings: Access, Challenges, and Strategies for Improvement."

<http://ajph.aphapublications.org/cgi/content/abstract/AJPH.2011.300142v1>



[phlpnet.org](http://phlpnet.org)

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- <sup>1</sup> Cal. Educ. Code § 38086 (West 2011).
- <sup>2</sup> Healthy, Hunger-Free Kids Act of 2010, Pub. L. No. 111-296, 124 Stat 3183. Available at: [www.fns.usda.gov/cnd/governance/legislation/CNR\\_2010.htm](http://www.fns.usda.gov/cnd/governance/legislation/CNR_2010.htm).
- <sup>3</sup> Malik VS, Schulze MB and Hu FB. "Intake of sugar-sweetened beverages and weight gain: a systematic review." *The American Journal of Clinical Nutrition*, 84(2): 274-288, 2006. See also Malik VS, Popkin BM, Bray GA, et al. "Sugar-sweetened beverages, obesity, type 2 diabetes mellitus, and cardiovascular disease risk." *Circulation*, 121(11): 1356-1364, 2010.
- <sup>4</sup> Wang YC, Ludwig DS, Sonneville K and Gortmaker SL. "Impact of change in sweetened caloric beverage consumption on energy intake among children and adolescents." *Archives of Pediatrics & Adolescent Medicine*, 163(4): 336-343, 2009.
- <sup>5</sup> Edmonds CJ and Jeffes B. "Does having a drink help you think? 6-7-Year-old children show improvements in cognitive performance from baseline to test after having a drink of water." *Appetite*. 53(3): 469-472, 2009. See also D'Anci KE, Constant F and Rosenberg IH. "Hydration and cognitive function in children." *Nutrition Reviews*, 64(10 Pt 1): 457-464, 2006. See also Benton D and Burgess N. "The effect of the consumption of water on the memory and attention of children." *Appetite*. 53(1): 143-146, 2009.
- <sup>6</sup> Chandran K. *Improving Water Consumption in Schools: Challenges, Promising Practices, and Next Steps*. Oakland: California Food Policy Advocates, 2009. Available at: <http://cfpa.net/ChildNutrition/Water/CFPAPublications/WaterInSchools-FullReport-2009.pdf>.
- <sup>7</sup> *Id.*
- <sup>8</sup> California Department of Education SFPD Advisory 99-09. August 16, 1999. Available at: [www.cde.ca.gov/ls/fa/sf/sfpd9902sanicode.asp](http://www.cde.ca.gov/ls/fa/sf/sfpd9902sanicode.asp).
- <sup>9</sup> *Id.*
- <sup>10</sup> Northcoast Nutrition and Fitness Collaborative. *Water Woes Recommendations for Creating Healthier School Environments*. 2010. Available at: [www.northcoastnutrition.org/media/files/Water%20Woes\\_for%20web%5b1%5d.pdf](http://www.northcoastnutrition.org/media/files/Water%20Woes_for%20web%5b1%5d.pdf).
- <sup>11</sup> *Id.*
- <sup>12</sup> *Id.*
- <sup>13</sup> According to a national study of school wellness policy content, during 2007-2008 only 12 percent of students were enrolled in a district with a policy that included language regarding the availability of free drinking water throughout the school day. See Chriqui J SL, Ide K, Pugach O, et al. *Local Wellness Policies: Assessing School District Strategies for Improving Children's Health*. Chicago: Robert Wood Johnson Foundation, 2009. Available at: [www.rwjf.org/files/research/20090728bridgingthegapfull.pdf](http://www.rwjf.org/files/research/20090728bridgingthegapfull.pdf).
- <sup>14</sup> Kaushik A, Mulle MA, Bryant TN, et al. "A study of the association between children's access to drinking water in primary schools and their fluid intake: can water be 'cool' in school?" *Child: Care, Health and Development*. 33: 409-15, 2007. See also Molloy CJ, Gandy J, Cunningham C, et al. "An exploration of factors that influence the regular consumption of water by Irish primary school children." *Journal of Human Nutrition Dietetics*, 21: 512-5, 2008. See also Brander N. "Drinking water in schools." *Nursing Times*. 99: 50-1, 2003.
- <sup>15</sup> Patel AI, Bogart LM, Uyeda KE, et al. "Perceptions about availability and adequacy of drinking water in a large California school district." *Preventing Chronic Disease*, 7(2): A39, 2010. Available at: [www.cdc.gov/pcd/issues/2010/mar/09\\_0005.htm](http://www.cdc.gov/pcd/issues/2010/mar/09_0005.htm). See also Center for Science in the Public Interest and Public Health Advocacy Institute. *Raw Deal: School Beverage Contracts Less Lucrative Than They Seem*. December 2006. Available at: [www.cspinet.org/beveragecontracts.pdf](http://www.cspinet.org/beveragecontracts.pdf).
- <sup>16</sup> Committee on Nutrition Standards for Foods in Schools, Stallings VA and Yaktine AL (eds). *Nutrition Standards for Food in Schools: Leading the Way Toward Healthier Youth*. Washington: The National Academic Press, 2007.
- <sup>17</sup> *Id.*
- <sup>18</sup> Patel AI and Hampton KE. "Encouraging Consumption of Water in School and Child Care Settings: Access, Challenges, and Strategies for Improvement." *American Journal of Public Health*, August 2011. Available at: [www.northcoastnutrition.org/media/files/PatelArticleOct2011.pdf](http://www.northcoastnutrition.org/media/files/PatelArticleOct2011.pdf).
- <sup>19</sup> *Id.*
- <sup>20</sup> *Id.*
- <sup>21</sup> Cal. Educ. Code § 38086 (West 2011).
- <sup>22</sup> US Department of Agriculture. *National School Lunch Program/School Breakfast Program: Foods of Minimal Nutritional Value*. USDA APB: SP-01-04. Available at: [www.cde.ca.gov/ls/nu/sn/mb05110att2.asp](http://www.cde.ca.gov/ls/nu/sn/mb05110att2.asp). See also California Department of Education. *Foods of Minimal Nutritional Value*. CDE MB 05-110. Available at: [www.cde.ca.gov/ls/nu/sn/mb05110.asp](http://www.cde.ca.gov/ls/nu/sn/mb05110.asp).
- <sup>23</sup> California Department of Education. *Drinking Water for Students in Schools*. 2011. Available at: [www.cde.ca.gov/ls/nu/he/water.asp](http://www.cde.ca.gov/ls/nu/he/water.asp).
- <sup>24</sup> Cal. Educ. Code § 38086 (West 2011).
- <sup>25</sup> Healthy, Hunger-Free Kids Act of 2010, Pub. L. No. 111-296, 124 Stat 3183. Available at: [www.fns.usda.gov/cnd/governance/legislation/CNR\\_2010.htm](http://www.fns.usda.gov/cnd/governance/legislation/CNR_2010.htm).
- <sup>26</sup> California School Policy Advocates. *Water In Schools Case Studies*. Available at: [www.waterinschools.org/case\\_studies/](http://www.waterinschools.org/case_studies/).
- <sup>27</sup> Patel AI, Bogart LM, Uyeda KE, et al. "Perceptions about availability and adequacy of drinking water in a large California school district." *Preventing Chronic Disease: Public Health Research, Practice & Policy*, 7(2): A39, 2010. Patel AI (Pediatrics, University of California at San Francisco). Oral communication. July 2010.
- <sup>28</sup> California School Policy Advocates. *Water In Schools Case Studies*. Available at: [www.waterinschools.org/case\\_studies/](http://www.waterinschools.org/case_studies/).
- <sup>29</sup> Patel AI and Hampton KE "Encouraging Consumption of Water in School and Child Care Settings: Access, Challenges, and Strategies for Improvement." *American Journal of Public Health*, August 2011. Available at: [www.northcoastnutrition.org/media/files/PatelArticleOct2011.pdf](http://www.northcoastnutrition.org/media/files/PatelArticleOct2011.pdf).
- <sup>30</sup> California School Policy Advocates, *supra* note 28.
- <sup>31</sup> *Id.*
- <sup>32</sup> California Department of Education, *supra* note 23.
- <sup>33</sup> Patel AI, Bogart LM, Uyeda KE, et al., *supra* note 27.
- <sup>34</sup> Oakland Unified School District. *Clinton Salutes OUSD Advances in School Nutrition*. 2010. Available at: <http://publicportal.ousd.k12.ca.us/1994101420355857/Blog/Browse.asp?A=398&C=57160&PostID=57>.
- <sup>35</sup> California School Policy Advocates, *supra* note 28.
- <sup>36</sup> Patel AI, Bogart LM, Uyeda KE, et al., *supra* note 27.
- <sup>37</sup> Patel AI, Bogart LM, Klein DJ, et al. "Increasing the Availability and Consumption of Drinking Water in Middle Schools: A Pilot Study." *Preventing Chronic Disease*, 8(3): A60, 2011
- <sup>38</sup> *Id.*
- <sup>39</sup> *Id.*
- <sup>40</sup> Patel AI and Hampton KE, *supra* note 29.
- <sup>41</sup> Northcoast Nutrition and Fitness Collaborative. *Water Woes Recommendations for Creating Healthier School Environments*. 2010. Available at: [www.northcoastnutrition.org/media/files/Water%20Woes\\_for%20web%5b1%5d.pdf](http://www.northcoastnutrition.org/media/files/Water%20Woes_for%20web%5b1%5d.pdf).