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August 16, 2016

Mr. Steven T. James
House Clerk
State House Room 145
Boston, MA 02133

Mr. William F. Welch
Senate Clerk
State House Room 335
Boston, MA 02133

Dear Mr. Clerk,

Pursuant to Chapter 197 of the Acts of 2010, please find enclosed a report from the Department of Public Health entitled the *Implementation of the Massachusetts Nutritional Standards – 5 year review*.

Sincerely,

Monica Bharel, MD, MPH
Commissioner
Department of Public Health

Charles D. Baker
Governor

Karyn Polito
Lieutenant Governor



Marylou Sudders
Secretary

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Commissioner

Implementation of the Massachusetts Nutritional Standards – 5 Year Review

August 2016

Massachusetts Department of Public Health



Legislative Mandate

Chapter 197 of the Acts of 2010: An Act relative to school nutrition:

Every 5 years, the department, in consultation with the department of elementary and secondary education, shall conduct a review of the nutritional standards and update the nutritional standards as needed pursuant to subsection (c). In August of the last year of the 5-year period, the department shall report the findings of the review to the speaker of the house of representatives, the president of the senate, the joint committee on health care financing, the joint committee on public health and the joint committee on education. The report shall include, but not be limited to, the following information:

- (1) an assessment of the success of implementing the nutritional standards in public schools;*
- (2) the challenges or barriers experienced by public schools upon implementation of the nutritional standards and guidelines for the sale or provision of competitive foods and beverages;*
- (3) changes in revenue received from the sale of federally-reimbursable school meals;*
- (4) changes in total revenue from federally-reimbursable school meals and competitive sales combined that were lost or gained after implementation of the nutritional standards and guidelines for the sale or provision of competitive foods and beverages;*
- (5) notable changes in student participation in the federally-reimbursable school meals programs; and*
- (6) recommendations for improvement of the nutritional standards and guidelines for the sale or provision of competitive foods and beverages.*

Background

On July 30, 2010, Chapter 197 of the Acts of 2010: An Act relative to school nutrition was signed into law. This act required the Massachusetts Department of Public Health (DPH) in collaboration with the Massachusetts Department of Elementary and Secondary Education (DESE) to establish standards for competitive foods and beverages sold or provided in public schools during the school day. The goal of the standards is to ensure that public schools offer students food and beverage choices that will enhance learning, contribute to their healthy growth and development, and cultivate life-long healthy eating behaviors. The standards were developed as part of the Commonwealth's broad-based, collaborative initiative to reduce childhood obesity and prevent its complications in childhood and later in adulthood.

The Massachusetts Departments of Public Health and Elementary and Secondary Education worked with the Harvard T. H. Chan School of Public Health, the Boston Public Health Commission, the John C. Stalker Institute of Food and Nutrition at Framingham State University and other key Massachusetts educators and public health partners across the Commonwealth to develop the original nutrition standards. Chaired by DPH Medical Director Lauren Smith, the work group was charged by the state's Wellness Promotion Advisory Board to "develop the strongest school nutrition standards in the nation." Seen through a health equity lens and complementing the federal reimbursable school meals programs, the competitive food standards were developed to provide the opportunity for all children across the economic spectrum to learn about and consume whole, minimally processed, nutrient-rich foods, such as fruits, vegetables, whole grains, lean protein and low-fat dairy during the school day. The Massachusetts School Nutrition Standards for Competitive Foods and Beverages were developed, based on the Institute of Medicine's *Nutrition Standards for Foods in Schools* and the *Dietary Guidelines for Americans, 2010*. After the public comment period, the final standards were drafted and were presented to, and unanimously approved by, the Massachusetts Public Health Council on July 13, 2011. Public schools were to comply with the standards beginning August 1, 2012.

As schools worked to develop plans in anticipation of implementation over the next year, public concern was raised in the spring of 2012 about the effect the regulations would have on a school's ability to raise money for programs and activities. Through emergency legislation in June 2012, the School Nutrition Bill was amended to exclude concession stands, booster sales, and other school-sponsored or school-related fundraisers and events from the definition of competitive foods. In response, the Public Health Council approved an emergency amendment to the regulations to clarify this change in the law in time to allow schools to comply with the regulations beginning on August 1, 2012.

Alignment with USDA National Regulations

In June 2013, the USDA released the National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010 Interim Final Rule, which set minimum federal nutrition standards for competitive foods and beverages. Following the release of the federal regulations, DPH reviewed the existing state standards for competitive foods and beverages and worked to align the state standards with federal regulations. Their analysis incorporated feedback from industry experts, school nutrition personnel and the Department of Elementary and Secondary Education. Because the existing Massachusetts standards did not meet minimum federal standards in all categories, the state proposed revisions to those portions of the regulations to align DPH's regulations with the federal standards. DPH provided guidance that schools should also comply with the federal standards regarding: the definition of competitive foods in the interim rule; limiting the calories of entrée items sold à la carte; inclusion of accompaniments in the nutrient profile of items served; timing within which the standards must be observed; and requiring that low-fat milk be plain. Schools were also advised by DPH to continue to comply with all provisions of the Massachusetts regulations until final standards were approved.

Proposed revisions of the state standards were presented to the Massachusetts Public Health Council in August 2014. After a public comment period, final regulations were prepared, and the Public Health Council approved the revised Massachusetts School Nutrition Standards for Competitive Foods and Beverages on November 12, 2014. These went into effect December 5, 2014.

The standards apply to competitive foods and beverages sold or made available in public schools. These are foods and beverages sold or provided in:

- School cafeterias offered as à la carte items
- Vending machines
- School stores and snack bars

The standards apply to competitive foods and beverages sold or provided to students from midnight before the school day begins to 30 minutes after the official school day ends. However, foods and beverages sold in vending machines must comply with the standards at all times.

The standards do not apply to foods and beverages sold as part of a federal nutrition program such as the School Breakfast Program, School Lunch Program, or the Child and Adult Care Food Program (all of which follow USDA national guidelines). Per the state statute, the standards also do not apply to foods or beverages sold or provided at booster sales, concession stands, and other school-sponsored or school-related fundraisers and events. However, any school that receives federal funding is subject to USDA's regulation around fundraisers, which stipulates that the state education agency must set a limited frequency for the number of allowable exempted fundraisers. A limit on the number of exempt fundraisers has not been established; therefore, per USDA, the number of allowable exemptions is zero.

School districts have the discretion to go beyond these standards and establish local policies that apply to all settings and/or at all times to promote a healthy school environment throughout the entire day. For example, schools may determine if the standards apply to classroom lessons and parties.

Additional school nutrition food and beverage standards listed in Chapter 197 of the Acts of 2010 include:

- making water available to all students during the day without charge
- offering fresh fruits and non-fried vegetables at any location where food is sold, except in non-refrigerated vending machines and vending machines offering only beverages
- prohibiting the use of fryolators for competitive foods
- making nutrition information available to students for non-prepackaged competitive foods and beverages served in the cafeteria

Support for Schools in Implementing the School Nutrition Regulations

Since the first school nutrition regulations were released in 2011, the John C. Stalker Institute for Food and Nutrition (JSI) at Framingham State University and the Massachusetts Departments of Public Health and Elementary and Secondary Education provided a variety of technical assistance and training opportunities, including in-person and on-line training programs and presentations to school-based professional organizations (Massachusetts Association of School Committees, Regional School Health Coalitions, the Massachusetts Association of School Superintendents, the Massachusetts Elementary School Principals Association, the Massachusetts School Nutrition Association, Northeastern University School Health Institutes, and the USDA Foods Conference) to help their constituents better understand the components of the new regulations and provide them with practical solutions and applications for achieving compliance.

JSI is a partnership between the Massachusetts Department of Elementary and Secondary Education and Framingham State University that supports healthy students and schools in Massachusetts with the *A-List* (or the “acceptable list” of compliant foods and beverages). An up-to-date and ever-expanding list of vending and snack items, the *A-List* meets both the Massachusetts Nutrition Standards for Competitive Foods and Beverages in Public Schools and the USDA’s Smart Snacks nutritional standards, whichever is stricter.

JSI has created two additional online tools to help Massachusetts schools meet the state and federal competitive food and beverage requirements: (1) the Massachusetts Nutrition Evaluation Tool for Schools, *MassNETS*, helps schools determine if packaged items, not on the *A-List*, meet the nutritional standards; (2) the *JSI Recipe Tool* generates a nutrition facts panel for snack recipes served in the school cafeteria. Once analyzed, these recipes can be easily saved, shared and printed. This online tool helps schools to meet the requirement to make nutrition information available to students for non-packaged items served in the cafeteria.

The *Healthy Students, Healthy Schools* guidance document was developed and distributed to all public schools in the Commonwealth, and also provided as a downloadable file on the DPH website, to provide further guidance and resources for schools to help implement the nutrition regulations. As school districts have the authority to create regulations that go beyond the minimum state standards, the document included suggestions and ideas for schools to further enhance their school nutrition environments. Stories from the field about how local schools and school districts were implementing the changes to create healthier schools were collected and published. They included adopting multi-faceted approaches to promoting healthy lifestyles beginning with school gardens and collaborating with local farms to introduce students to farming and locally grown vegetables; offering taste testing events in school to introduce students to new foods; developing school-parent partnerships to help promote providing healthy food and beverage choices at home as well as in school; enhancing wellness policies and using them to define the types and sizes of healthier products that may be served in schools; modifying recipes to create healthier meals and snacks, e.g., making pizza with whole-wheat crusts; organizing a family 5K walk/run instead of a bake sale as a fundraiser; creation of “grab ‘n go”

breakfasts and after-school snacks, which increased revenue in food service programs; providing baskets of fresh fruit in the classrooms; participating in a community service learning project to identify the nutritional needs of, and provide healthy snacks for children who are homeless.

A prominent partner in providing healthy foods and educational opportunities to schools is the Massachusetts Farm-to-School initiative. Of the 419 school districts in Massachusetts surveyed, the 2015 USDA Farm-to-School Census reported that 68 percent of Massachusetts school districts (171 districts, in 828 schools reaching 422,072 students) said they participated in farm-to-school activities, with another 10 percent of districts surveyed planning to start farm-to-school activities in the future. Approximately \$10,262,200 has been invested in local food in Massachusetts, with the average school district spending 21 percent of their budget on local products. Sixty-two percent of Massachusetts school districts plan to increase local food purchases in the future. Local food items are sold throughout the school day – at breakfast (50 percent), at lunch (95 percent), supper (2 percent), for snacks (22 percent) and on the fresh fruit and vegetable program (14 percent). The survey also reported that there are at least 210 school gardens in Massachusetts, and in school year 2015-2016 there were 139 public school districts, 25 colleges and independent schools, and two health care facilities participating in the “Harvest of the Month” program.

There are currently 26 districts with 139 schools serving 65,070 students in Massachusetts that are participating in the USDA Fresh Fruit and Vegetable program (2015-2016 school year). This program targets schools in which more than 50 percent of students are eligible for free or reduced-price meals. The goal of the program is to provide healthier food choices by expanding the variety of free fresh fruits and vegetables made available to students throughout the school day – outside of the meal service. Participating schools offer fresh fruits and vegetables in a variety of ways, including hallway kiosks or vending carts and baskets of fruit delivered to classrooms for mid-morning or afternoon snacks as well as taste testing events.

UMASS Amherst’s Department of Nutrition and Center for Agriculture supports the UMass Extension Nutrition Education Program that has provided technical assistance and training programs to schools to “promote skills to manage their food resources effectively and enjoy healthy foods and physical activities for longer and more fulfilling lives.”

The NOURISH (*Nutrition Opportunities to Understand Reforms Involving Student Health*) Study was conducted by researchers at the Harvard T.H. Chan School of Public Health, Brandeis University and staff from DPH and DESE “to examine changes in children’s food consumption patterns and school revenue due to healthier competitive foods, as well as address critical knowledge gaps on consumption and finances through policy evaluation on a statewide level. The study provided insight into the short- and mid-term financial impacts of state legislation and also into changes in the availability of healthier foods from manufacturers.”

An Assessment of the Success of Implementing the Nutritional Standards in Public Schools

Following is excerpted from the Official Audit Report, “An Examination of the Programs and Initiatives for Addressing Childhood Obesity and Promoting Nutrition Standards For the period July 1, 2009 through June 30, 2013,” Office of the State Auditor Issued September 26, 2014:

Compliance with Nutrition Standards for Competitive Foods and Beverages

We found that all the schools in the non-statistical, judgmental sample of 60 that we visited/ surveyed have complied with state competitive food requirements and, more importantly, have striven to provide wholesome food for students. Specifically, we found that in the middle and high schools, à la carte items from the [John Stalker] “A-List” were sold in cafeterias, in school stores, and from school vending machines. Elementary school sales of à la carte items are very limited, with some schools only offering low-fat milk and bottled water. All items such as milk, water, juices, and fruit comply with state nutrition regulations. Also, all the vending machines we viewed during our visits were stocked with low-fat milk, water, 100 percent fruit juices, or other approved snacks, in accordance with regulations.

The 30 cafeterias we visited were clean, appeared adequately staffed, and prepared only non-fried foods. In addition, their schools posted nutritional information and developed wellness programs that were included in the schools’ curricula.

We also reviewed the à la carte items and found that they met DPH nutritional guidelines for the following categories: calories, sodium, whole grain, sugar, caffeine, and percentages of total fat and saturated fat. Similarly, all beverage choices available at the schools met DPH regulations and included low-fat milk and low-fat flavored milk; 100 percent fruit juice; flavored or unflavored water with no added sugar, artificial sweeteners, or caffeine; and beverages with 10 milligrams or less of caffeine per serving. In addition, officials at a number of the schools we visited told us that they have planted vegetable gardens, and others have sought out local produce to improve student nutrition. As a result, a number of the school officials we spoke with noted that students often received the most nutritious meal of the day at school.

In addition to this, the Harvard NOURISH study found an overall 46 percent increase in Massachusetts schools’ alignment with the updated competitive food standards from 2012 to 2014. Results showed that by 2014, 60 percent of competitive foods and 79 percent of competitive beverages were compliant with the competitive food law. The law’s implementation resulted in major improvements in the availability and nutritional quality of competitive foods and beverages.ⁱ

The recent Centers for Disease Control and Prevention Weekly Digest Bulletinⁱⁱ, detailing the status of “Policy and Practice Solutions” in the states, noted:

In 2014, 81.4 percent of secondary schools in Massachusetts did not sell the following items in vending machines or at school stores, canteens, or snack bars: candy, baked goods that are not low in fat, salty snacks that are not low in fat, soda pop, or fruit drinks that are not 100 percent juice.

Financial Implications

Changes in revenue received from the sale of federally-reimbursable school meals

The Massachusetts Department of Elementary and Secondary “Year in Review Trends” presented at the Healthy Kids, Healthy Programs Summit in May 2016 reported the state’s activity in the federally reimbursed National School Lunch Program between 2015 and 2014. The federal reimbursement amounts for 2014 and 2015, respectively, were \$215,000,000 and \$226,000,000, which is a 5.1 percent increase.

Changes in total revenue from federally-reimbursable school meals and competitive sales combined that were lost or gained after implementation of the nutritional standards and guidelines for the sale or provision of competitive foods and beverages

Research examining total school food revenues in Massachusetts found that after initial losses during the first year of implementing both the updated school meal standards and competitive food standards, revenues rebounded in the second year with no significant differences in revenues compared with pre-implementation of the standards. The recovery during the second year was driven by increased sales of school meals (due to increased participation in the school meal programs).ⁱⁱ

From a national perspective, in a CDC-funded studyⁱⁱⁱ on the financial impact of implementing school nutrition standards and the school meal standards conducted by the Illinois Public Health Institute, key findings included:

- Loss of profit was not the most frequently cited concern about changing nutrition standards.
- For the districts and schools in the study, “doing the right thing” was more important than profit.
- Most respondents had a positive outlook on the future profitability of competitive foods.
- Strengthening nutrition standards for competitive foods is associated with increased participation in the USDA reimbursable meal program.
- Strong competitive food and beverage standards do not have a more adverse financial impact on low-income school districts compared to higher income districts.
- Schools experienced initial declines in competitive food profits. However, schools report that over time, profits rebounded, and when measured across all food service accounts, profits remained the same or increased.

Notable changes in student participation in the federally-reimbursable school meals programs

Breakfasts served increased 4.7 percent from 28,035,426 in 2014 to 29,366,175 in 2015 while lunches served decreased by 1.6 percent from 86,197,927 in 2014 to 84,835,074 in 2015. However,

reimbursable school lunch sales rebounded from January 2015 to January 2016 with lunches served up 1,700,000 and breakfasts served were up by 1,500,000.

Recommendations for improvement of the nutritional standards and guidelines for the sale or provision of competitive foods and beverages.

In 2014, the Massachusetts standards were reviewed and now align with the latest USDA standards for competitive foods and beverages, and schools are successfully providing healthier food environments for students as a result. It is recommended that these standards remain in place as there do not appear to be overall revenue losses in implementing the healthy competitive food standards in Massachusetts schools.

While not included in the school nutrition regulations, the following are best practice recommendations for schools to consider in creating optimal school nutrition environments:

- Implement alternative school fundraising activities (for examples, see *Sweet Deals: School Fundraisers Can Be Healthy and Profitable* from the Center for Science in the Public Interest)
- Create healthy celebrations (for examples, see *Healthy School Celebrations* from the Center for Science in the Public Interest)
- Discontinue the practice of using foods and beverages as rewards or discipline for academic performance or behavior
- Restrict marketing of foods and beverages to items that meet the nutritional standards
- Prohibit street vendors from selling foods that do not meet the nutrition regulations within 200 yards from a school
- Apply the nutrition regulations at all times throughout the campus, including at evening and community events
- Provide adequate time for lunch
- Schedule recess before lunch
- Implement farm-to-school initiatives to enhance access to fresh, locally grown produce
- Provide nutrition education to students and to parents
- Expand school breakfast programs
- Re-establish the standard portion size of 100 percent juice to 4 ounces across all grades
- Phase out all sugar-sweetened beverages, including flavored non-fat milk and milk substitutes
- Promote consumption of water and plain low-fat, non-fat milk
- Charge school wellness advisory committees with the on-going assessment of practices in, and making recommendations for sustaining and enhancing healthy school nutrition environments.

These activities can include evaluating, developing, piloting and further establishing specific standards and practices to create healthier school environments.

Lessons Learned

The following are lessons learned in developing and implementing the school nutrition standards for competitive foods and beverages in Massachusetts:

- A work group that is charged to create nutrition regulations and devise an implementation strategy and timeline should include representation from a wider variety of sectors, particularly those who will be impacted the most from the new regulations, including the food and beverage industry.
- Translating legislation, such as that which mandates changes to established food systems and cultural practices within the school environment, requires extensive time to assess and develop the strategic plan. This should include providing more opportunities for regional dialogue and building community relationships, providing more targeted public education and information campaigns, and leveraging the strengths of established community partnerships that are supportive of creating healthier nutrition environments.
- As part of the strategy, pilot initiatives should be developed and implemented to test the proposed changes in all regions of the state. Consider inviting school districts and municipalities to volunteer to participate in regional pilots.
- Make modifications based on information learned from the pilots.
- Implement changes over time; establish a strategy that provides both a public education component and allows for phasing-in of the more controversial components of the regulations. For example, instead of discontinuing providing flavored milk all together, schools might experiment with serving flavored milk only with lunch, and/or then only on Fridays for six months. Then an assessment should be made of the process and impact of the changes, and next steps should be developed based on input from, e.g., the School Wellness Advisory Committee, student groups and parents.
- Collect and provide “stories from the field” to municipalities and school districts that provide practical applications or “best practices” in implementing the nutrition regulations.

Stories from Massachusetts Schools

Many of the following stories from the field show how Massachusetts schools are applying changes in the federal reimbursable meal programs, and also present the many creative ways schools are providing healthier food and beverage choices throughout the school day in response to the competitive nutrition regulations.

Cambridge delivers baskets of fresh fruits and vegetables to classrooms in four of its elementary schools. School Nutrition Services also partners with City Sprouts and Tasty Choices, which is coordinated by the Cambridge Public Health Department, to provide nutrition education.

Thirteen **Worcester** schools work closely with the Massachusetts Farm-to-School Project to provide local produce to students. Snacks are served in classrooms and health and physical education teachers provide lessons on healthy eating.

At the William Greene School in **Fall River**, fresh fruits and vegetables are made available during morning recess in the classroom, in the main office and in other rooms visited by students. This school and four others partner with UMass Extension's Nutrition Education Program to provide students with classroom nutrition education and cooking demonstrations, a monthly nutrition calendar and video segments of healthy recipes on the local education TV station.

Pittsfield schools host nutrition and wellness activities two days a week as part of their health and physical education program. Baskets and trays of fresh fruit and vegetable snacks are served in the cafeteria and nutrition information on these healthy items is provided to students. "Fresh Friday" promotes the benefits of healthy eating on weekends, encouraging families to spend time together.

In **Fitchburg** students taste tested and voted on new foods and popular items were added to the cafeteria meal line. Some students even submitted their own healthy recipes in a contest to garner kid-pleasing new menu options. Winning items added to the lunch menu include a banana split (banana cut length-wise and topped with cut fresh fruit), veggie kabob, whole wheat pita pizza and yogurt parfaits.

Plymouth's Indian Brook Elementary School created *Fear Factor Friday* for children in grades one through five to encourage children to taste new fruits and learn some interesting information. Objectives were that the students would be able to state the names of two fruits, e.g., kiwis and mangos, and then taste them and identify the characteristics of each.

The school nutrition director at **Walpole** Public Schools used *Fuel Up to Play 60* to help make nutrient-rich milk more appealing to students. She started serving low-fat and fat-free milk in individual plastic bottles and purchased signage, recycling bins, and new coolers to help promote the change across the district. As a result, milk sales have increased by about 40 percent, and she has received positive feedback from teachers, administrators, parents and, most importantly, the students!

Codman Academy Charter Public School in **Dorchester** has organized innovative school-wide celebrations that involve fitness, art, or community service. Celebrations in the winter include participation in Boston's *First Night* parade by making life-size puppets for the parade, and spring is celebrated with a school-wide community service day, and year-end activities. A student-run *Nutrition Action Club* has educated the student body about nutrition in a variety of creative ways. They also enacted a policy making Codman Academy a Junk Food-Free Campus.

Foxborough Regional Charter School celebrates MCAS by holding a “prep” rally for students before the initial testing week. Instead of a party, this prep rally includes a competition between teams in grades 3, 4, and 5 as well as a staff team of teachers. The teams compete against each other in active obstacle course races and academic challenge quizzes. The grade level winners receive extra recess time and a non-dress code day.

School leaders at West Intermediate School in **Wilmington** piloted holding recess before lunch for grade 5. During the pilot students were observed as being more settled during lunch, were eating more of their lunch and wasting less food, and students were more attentive and quicker to get back to work when they returned to class. Visits to the school nurse’s office because of headaches and stomachaches decreased significantly.

Lawrence Public Schools have had great success with their farm-to-school initiatives. Collaborating with local farms they started a garden, and students have served the vegetables from the garden as part of a summer meals program.

Ware Public Schools celebrated Massachusetts Harvest for Students Week by serving fresh, locally grown food to students. The menu for the week included locally grown produce from farms in **Chicopee** and **Warren**. Locally grown apples, salad greens, tomatoes, squash, and potatoes were among the sampling of fresh, seasonal produce that was served.

Elementary students participating in Community Service Learning in **Quincy** identified needs and problems to investigate and decided to communicate what they learned about healthy eating to other children who were less fortunate than they are. These students decided to put together healthy snacks that could be bought and given to homeless children.

As the **Framingham** School District Garden has grown and developed over the course of several years, it has also expanded both in “green concept” as well as harvest production. Student involvement now includes an entire composting program to teach and promote what it means to be “sustainable.” The best part of this initiative is that it shows how students working with students can create a legacy of involvement.

Staff from the UMASS Extension Family Nutrition Program facilitate Family Health Nights in several schools in **Fall River** and Family Cooking Nights in schools in **Brockton**. The overall nutrition goal is to make parents and children aware of simple ways to increase healthier choices such as whole grains, fruits and vegetables in their daily meal plan.

Students in the Hurd Elementary School in **Woburn** took a 30-question grade-level math test developed by their teachers and collected pledges for their correct answers. To help with the answers, students participated in scavenger hunts, and prizes included a ride to school in a fire truck or police cruiser! The fundraiser produced over \$11,000 for the school.

Ashland Public Schools invited celebrity chef Ming Tsai to demonstrate quick, healthy and affordable recipes from his book, *Simply Ming One-Pot Meals*. The program was open to the community. Premium seats, which sold out quickly, were priced at \$50 and general admission seats were \$10. Proceeds of the event were \$7,950 which went directly to support Ashland's Food and Nutrition Department.

School nurses in **Billerica** worked with the local PTA to create a walk as a fundraiser. The students walked a course around the school grounds mapped out by the physical education teacher and educational health facts were strategically placed along the course. The event netted over \$14,000.

The **Manchester-Essex** Regional Schools began eliminating high-fat, high-sugar snacks in 2004 when the Nutrition Bill was first introduced. By 2006, the districts were all using only A-List snacks. There was an 18 percent drop in à la carte revenue the first year, 3 percent the second year and by the third year, their sales rebounded. Educating students, parents and administration on what the Food Service Department was doing and why was key to their success. Students are happy and satisfied with healthier choices and often suggest items they would like to try.

Starting in 2007, **Shrewsbury** Public Schools changed their à la carte selections to include yogurt, bagels, fresh fruit, 100 percent juices and milk, and closed the high school snack bar during lunch periods. As a result, sales in the cafeteria increased by \$400 per week.

Andover Schools' nutrition professionals have replaced high-fat, high-calorie chips and treats with hummus and pita bread, fresh produce, popcorn and fruit smoothies. To encourage kids to try the healthier cafeteria foods, Andover has made a point of getting students involved in the tasting and menu selection process. Their hard work has paid off – school meal sales have more than doubled in the past four years in the wake of improvements.

At a Glance Comparison of the USDA and Massachusetts Nutrition Standards

For a comparison of the Massachusetts and Federal school competitive food and beverage regulations, please see [At-a-Glance School Nutrition Standards for Competitive Foods and Beverages – Massachusetts and USDA Comparison](#).^{iv}

ⁱ Gorski, M. T., Cohen, J. F., Hoffman, J. A., Rosenfeld, L., Chaffee, R., Smith, L., and Rimm, E. B. (2016). Impact of Nutrition Standards on Competitive Food Quality in Massachusetts Middle and High Schools. *American Journal of Public Health*, (0), e1-e8

ⁱⁱ This report focuses on four policies and practices recommended by the Institute of Medicine, Community Preventive Services Task Force, US Surgeon General, CDC, and other expert bodies. The recommendations are based on expert judgment and/or evidence from scientific studies that the policies and practices can improve diet, increase breastfeeding, increase physical activity, or reduce obesity.

ⁱⁱⁱ The study, *Controlling Junk Food and the Bottom Line: Case Studies of Schools Successfully Implementing Strong Nutrition Standards for Competitive Foods and Beverages*, includes case studies based on interviews with school district food service staff, principals and other school staff in thirteen middle and high schools in nine school districts around the country. The districts were geographically and socio-economically diverse.

^{iv} At-a-Glance School Nutrition Standards for Competitive Foods and Beverages – Massachusetts and USDA Comparison: <http://www.mass.gov/eohhs/docs/dph/mass-in-motion/school-nutrition-glance.pdf>