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TO: Commissioner Auerbach and Members of the Massachusetts  
Public Health Council

FROM: Lauren Smith, MD, MPH, Medical Director

DATE: July 13, 2011

RE: Request for Final Promulgation of 105 CMR 225.000: *Nutrition  
Standards for Competitive Foods and Beverages in Public Schools*

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This memorandum summarizes the development of and recommendations for the proposed final regulations of 105 CMR 225.000: *Nutrition Standards for Competitive Foods and Beverages in Public Schools*. The final proposed regulations are based on the testimony submitted to the Massachusetts Department of Public Health (MDPH) at public hearing and during the public comment period and the subsequent assessment made by the School Nutrition Standards Work Group. This group included staff from MDPH and the Massachusetts Department of Elementary and Secondary Education (DESE), representatives from the Boston Public Health Commission, Harvard School of Public Health, and the John Stalker Institute of Food and Nutrition at Framingham University.

### **Background**

Massachusetts General Law (M.G.L.) c. 111, s. 223, adopted in July 2010, required the Department to promulgate regulations establishing standards for competitive foods and beverages sold or provided in public schools. The statute specifies many of the provisions to be contained in the regulations. In addition, the regulations are based on the *Institute of Medicine's Nutrition Standards for Foods in Schools* (2007), which contain specific recommendations for the provision of healthy foods in schools.

The standards would require all public schools to meet nutritional standards for competitive foods and beverages sold or provided to public school students during the school day. In accordance with the enabling statute, the proposed regulations would also require that public schools:

- make available water to all students, without charge;

- offer for sale 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;
- make nutrition information available to students for non-prepackaged competitive foods and beverages, in accordance with Department guidelines. This specific standard would take effect on August 1, 2013; and
- prohibit use of fryolators for competitive foods.

The proposed regulations define competitive foods as including all those sold or made available in public schools, with the exception of those foods sold as part of a federal nutrition program. The regulations are to apply to competitive foods and beverages sold or provided on school grounds, except those sold or provided up to 30 minutes before the opening of the school day or 30 minutes after the end of the school day. This exception, however, would not apply to foods and beverages sold by vending machines, which would have to comply with the standards at all times.

The proposed regulations specify the types of beverages that can be sold or provided, and establish standards for beverages with respect to sugar content and serving size. The proposed regulations also would establish limits for competitive foods with respect to calories, fat, saturated fat, and trans fat, as well as sugar, artificial sweeteners, sodium, and caffeine. The proposed regulations also would set standards for whole-grain products.

A supporting document, *Guidance for Implementing Massachusetts School Nutrition Standards*, will be published once the final regulations are approved. This document is intended to offer clarification to schools with regard to implementing the regulations and will include the following topic areas:

- an easy-to-read chart of the guidelines with examples for each category;
- a list of foods and beverages that meet the guidelines (similar to the MA Action for Healthy Kids “A List” of approved foods and beverages);
- healthy alternatives for profitable school fund-raising activities;
- recommendations to create and support a healthy school environment; and
- a rationale for selected nutrition standards.

Implementation of the Massachusetts School Nutrition Standards will be enhanced through additional state level activities, mandated by c. 111, s. 223 and coordinated between MDPH and DESE, including, but not limited to:

- training of public school nurses in childhood obesity, eating disorders, behavioral health, type 2 diabetes, BMI screening, and making nutritional/behavioral referrals;
- training in nutrition and diet for school nutrition personnel;
- assessment of a school’s capacity, resources and equipment to prepare and provide recommended foods;
- the establishment of school-based wellness committees;
- the establishment of a Governor-appointed *Commission on School Nutrition and Childhood Obesity* to provide guidance and oversight;
- promotion of, and facilitation in the procurement of locally-grown products; and
- providing technical assistance and educational resources.

To meet the statutory mandate, Department staff, in cooperation with the Massachusetts Department of Elementary and Secondary Education (DESE), developed the proposed *Nutrition Standards for*

*Competitive Foods and Beverages in Public Schools*, 105 CMR 225.000. The standards initially were presented at the meeting of the Public Health Council on February 9, 2011.

**Public Comment**

Public comments were received via the DPH website, standard mail and through testimony given at two public hearings. The first hearing was held in Boston on March 28, 2011 and the second was held in Springfield on April 5, 2011. Eighty-seven written responses were received through the website and four written responses were received directly by DPH staff. Oral testimony was received by 19 parties who also submitted their testimony in writing. Seven organizations strongly supported the regulations as presented. Issues raised in the public comments, along with Department staff responses and recommendations are summarized below.

**Massachusetts School Nutrition Regulations for Foods and Beverage  
Summary of Public Comments and Final Recommendations**

<b>Food/Beverage</b>	<b>Proposed Regulation</b>	<b>Recommended Revision</b>
<p><b>Juice – Portion Size Limit</b></p>	<p>No more than 4-ounce servings for elementary/middle schools</p> <p>No more than 8-ounce servings for high schools</p>	<p><i>Public Comment:</i></p> <p>There were a few comments (2) asking to increase the size limit for juice for middle and high schools. There were also comments (4) asking to eliminate juice.</p> <p><i>Work Group Response:</i></p> <p>The group agreed to revise the standard to <b>servings of juice shall be no more than 4 ounces.</b></p> <p><i>Rationale for new revised standard:</i></p> <p>Dietary Guidelines for Americans 2010 serving size for juice is 4 oz. for children and adults.</p> <p>American Academy of Pediatrics advises children to “eat your calories, don’t drink them.”</p> <p>American Dietetic Association says to “rethink your drinks – high calorie beverages like soft drinks, juice drinks, energy drinks...add calories...whenever possible, replace these drinks with plenty of water.”</p> <p>National School Meals Program portion size for juice is 4 oz.</p> <p><i>Potential Cons:</i></p> <p>May limit availability of vending machine products.</p>

<p><b>Milk – Portion Size Limit</b> (Including alternative milk beverages such as lactose-free and soy)</p>	<p>No more than 8-ounce servings</p>	<p><i>Public Comment:</i></p> <p>Many suggestions have been received (18) to allow 10-ounce servings for middle and high schools.</p> <p><i>Work group response:</i> Consensus among the group was to <b>maintain current standard.</b></p> <p><i>Rationale to maintain the standard:</i></p> <p>The National School Meals Program portion size for milk is 8 oz.</p> <p>Plastic containers, which are generally more desirable among students than cartons, are now available in 8 oz. sizes. Previously they were only available in 10 oz sizes.</p> <p><i>Dietary Guidelines for Americans 2010:</i> “Recommended amounts are 3 cups/day fat-free or low-fat milk and milk products for adults and children and adolescents ages 9 to 18 years, 2 ½ cups/day for children 4 to 8 years, and 2 cups for children 2 to 3 years.”</p>
<p><b>Beverages with Added Sugar or Sweeteners</b></p>	<p>Any beverages with added sugar or sweeteners not already prohibited will be phased out by August 1, 2013.</p> <p>A school may provide or sell flavored milk or milk substitutes that contain the same amount or less sugar than plain, fat-free or low-fat milk.</p>	<p><i>Public Comment:</i></p> <p>3 organizations, including the School Nutrition Association, Dairy Council and the MA Nutrition Board, and 35 individuals stated that flavored milk should be allowed.</p> <p>In addition to the 15 organizations that supported the standard, there were 6 comments specifically commending the ban of flavored milk.</p> <p><i>Work group response:</i> Consensus among the group was to <b>maintain current standard.</b></p> <p><i>Rationale to maintain the standard:</i></p> <p>According to the Centers for Disease Control and Prevention (CDC), limiting the availability and accessibility of sugar-sweetened beverages can decrease consumption of sugar-sweetened beverages and increase the consumption of more healthful drinks ... adding sugar to plain milk (flavored milk contains at least 2.5 teaspoons of added sugar per 8 ounce serving) can substantially increase the calories per serving</p>

		<p>without increasing overall nutrient value. Schools have an important opportunity to restrict the availability of sugar-sweetened beverages, and to educate and model healthy behavior.</p> <p>Although the American Academy of Pediatricians (national organization) does not support a total ban on flavored milk products, the Massachusetts Chapter of the AAP fully supports the MA regulation as stated.</p> <p><i>Cons:</i></p> <p>There are mixed study results on the short term decrease of milk consumption when flavored milk is removed from schools. There is an unpublished study and a couple of small, limited time case studies that indicated a drop in consumption of milk products when sweetened products were discontinued. On the other hand, a small number of case studies, including a school in Somerville, have found that there would be a negligible, if any, drop in consumption.</p> <p>It may be difficult to implement different standards for serving milk to students, one for competitive foods (not allowing flavored milk) and one for school meals (USDA currently allows flavored milk in their standards). However, some school districts have already chosen to eliminate flavored milk from both competitive foods and federally supported school meals.</p>
<p><b>Sugar</b></p>	<p>No more than 35 percent total calories from sugars</p>	<p><i>Public Comment:</i></p> <p>A few suggestions (6 individual, 4 organizations) were received to decrease the amount of sugar to 20% or 25%.</p> <p><i>Work group response:</i> The consensus among the group was to <b>maintain current standard.</b></p> <p><i>Rationale to maintain the standard:</i></p> <p>As there was not enough evidence to support this recommended revision, the consensus among the group was to maintain current standard.</p>

<p><b>Sugar Exemptions</b> (All other categories apply, e.g., fat and calories.)</p>	<p>100% fruit with no added sugar</p> <p>Low-fat or non-fat yogurt (including drinkable yogurt) with no more than 30 grams of total sugars, per 8-ounce serving</p>	<p><i>Public Comment:</i></p> <p>A few suggestions (3) were received to decrease the amount of sugar in yogurt to 20 grams per 8 ounces.</p> <p><i>Work group response:</i> The consensus among the group was to <b>maintain current standard.</b></p> <p><i>Rationale to maintain the standard:</i></p> <p>Currently there is no product except for plain yogurt that would meet this recommended revision; therefore, the consensus among the group was to maintain current standard in order for schools to have some flavored yogurt options to serve.</p>
<p><b>Artificial Sweeteners</b></p>	<p>No artificial sweeteners</p>	<p><i>Public Comment:</i></p> <p>There were a few comments (4 including the American Heart Association) on allowing artificial sweeteners. There were also 4 comments asking that artificial flavors and colors also be included along with the ban of artificial sweeteners.</p> <p><i>Work group response:</i> The consensus among the group was to <b>maintain current standard.</b></p> <p><i>Rationale to maintain the standard:</i></p> <p>There is little evidence on the long-term health effects of non-nutritive sweeteners, particularly from exposure initiated in childhood. Some research suggests that non-nutritive sweeteners can increase preference for sweet foods and lead to increased calorie consumption. Additionally, the objective is to encourage children to enjoy natural flavors of foods and beverages – not artificially enhanced with a sweet taste.</p>
<p><b>Fiber</b></p>	<p>There were requests to add a fiber standard.</p>	<p><i>Public Comment:</i></p> <p>There were several comments (4 individual and 3 organizations) asking to add a fiber requirement on top of a whole grains requirement.</p> <p><i>Work group response:</i> The consensus of the group was <b>not to add an additional standard.</b></p> <p><i>Rationale not to add requirement:</i></p>



	<p>There was one question in the public comments asking if the a la carte standards applied to a "whole product" or the individual components that made up the "whole product."</p>	<p>what locations around a school are covered by the standards</p> <p><i>Work group response:</i></p> <p>The group decided to change the definition to include the following words in italics:</p> <ol style="list-style-type: none"> <li>1. school cafeterias offered as à la carte items;</li> <li>2. <i>school buildings, including classrooms and hallways;</i></li> <li>3. school stores;</li> <li>4. school snack bars;</li> <li>5. vending machines;</li> <li>6. concession stands;</li> <li>7. booster sales;</li> <li>8. fundraising activities;</li> <li>9. school-sponsored or school-related events;</li> <li>10. any other location <i>on school property.</i></li> </ol> <p><i>Work group response:</i></p> <p>Will add the following under "<u>General Nutrition Standards for Public Schools</u>":</p> <p>"When applying the nutrition standards of 105 CMR 225.000, the food product should be analyzed as a whole, not by the individual ingredients that make up the product."</p>
<p><b>Other Issues</b></p>	<p>We also received public comment about issues relating to the school nutrition environment which appear to be beyond the scope of the regulations.</p>	<p>The following issues will be addressed in a guidance document and trainings on implementation of the school nutrition standards that will be developed for schools by DPH and ESE.</p> <ol style="list-style-type: none"> <li>1. having recess before lunch (2)</li> <li>2. avoiding offering food as a reward (2)</li> <li>3. restricting marketing to students(3)</li> <li>4. limiting access of outside vendors to students (3)</li> <li>5. nutrition education (7)</li> <li>6. lunch duration (7)</li> <li>7. monitoring (2)</li> <li>8. how to implement free water regulation (2)</li> <li>9. providing nutrition information regulation implementation (1)</li> <li>10. applying the standards 24/7 to promote a consistently healthy school environment (11)</li> <li>11. implementing financially successful school nutrition standards (5)</li> </ol>

	<p>Although not mentioned in public comments, the work group decided that the definition of “fresh” needed to be more specific so that schools would know exactly how to interpret the “offer for sale fresh fruit and non-fried vegetables at any location where food is sold” regulation.</p>	<p>Note: A guidance document to help implement the standards is being prepared.</p> <p><i>Work group response:</i></p> <p>After consulting several national definitions of fruits and vegetables, including <i>Produce for Better Health</i> and USDA, and considering the feasibility of implementation of this regulation, we will define “fresh” in regulation definitions as:</p> <p>“<i>Fresh</i> means fresh, frozen, dried or canned without added sugar, fat, or sodium, for the purpose of these regulations.”</p>
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**Request to Promulgate Regulations**

The regulations are mandated by M.G.L. c. 111, s.223. The goal of the proposed regulations 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 lifelong healthy eating behaviors. Department staff believe these strong standards will serve as an important step in reducing childhood obesity in the Commonwealth and supporting the Department’s broad-based wellness initiative.

Therefore, Department staff request that the Public Health Council approve final promulgation of the proposed regulations governing *Nutrition Standards for Competitive Foods and Beverages in Public Schools*, 105 CMR 225.000 (Attachment A). Please note the changes made, based on public comments and further considerations by the School Nutrition Standards Work Group, are highlighted in yellow for easy reference.