



The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
250 Washington Street, Boston, MA 02108-4619

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD
SECRETARY

JOHN AUERBACH
COMMISSIONER

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

FROM: Lauren Smith, M.D., Medical Director

DATE: February 9, 2011

RE: Informational Briefing on Proposed Regulations, 105 CMR 225.000: Nutrition
Standards for Competitive Foods in Public Schools

Introduction

Recently enacted M.G.L. c. 111, s. 223 requires the Department to promulgate regulations establishing standards for competitive foods and beverages sold or provided in public schools. In response, Department staff, in cooperation with the Massachusetts Department of Elementary and Secondary Education (DESE), now proposes regulations included as Attachment A, Nutrition Standards for Competitive Foods in Public Schools, 105 CMR 225.000.

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. Department staff also has drawn from a variety of source materials, including recommendations of Massachusetts Public Health Association, Massachusetts Action for Healthy Kids, Alliance for a Healthier Generation and other national and state standards.

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. The proposed regulations are part of the Commonwealth's broad-based, collaborative initiative to reduce childhood obesity. For example, this initiative complements Massachusetts' regulations for BMI screening in public schools (105 CMR 200.000: Physical Examination of School Children), adopted earlier this year.

Background

Overweight/obesity is a public health issue that has reached epidemic proportions in the Commonwealth, and has become a strategic priority for the Department. Negative trends in nutrition and physical activity behaviors are at the center of the growing epidemic (*The Health of Massachusetts*, 2010). Of special concern is the rise in childhood obesity in Massachusetts. Among low- to moderate-income families, more than one-third of children between the ages of two and five years who participate in the WIC Program are overweight (15.4%) or at risk of becoming overweight (18.4%).ⁱ The 2009 Youth Health Survey (YHS) shows that 17% of middle school students were overweight and 10% are obese.ⁱⁱ In the same year, 11% of high school students were reported to be obese and 15% were overweight.ⁱⁱⁱ These rates far exceed the national *Healthy People* goal of 5%.

State data show that the burden of obesity and its underlying risk factors disproportionately affect Black and Hispanic and low income youth and adolescents throughout Massachusetts. For example, at the high school level, 18% of Black and 15% of Hispanic students are obese, as compared to 9% of their White counterparts^{iv}.

The YHS and YRBS data is obtained through self report. Analysis of actual Body Mass Index (BMI) screening data demonstrates that the problem is even more prevalent. Of the 109,674 public school students in grades 1, 4, 7 and 10 who were screened in 2008-2009, 16.9% were overweight, and 17.3% were obese. The rates of overweight and obesity varied substantially by town and were strongly correlated with median family income at the city or town level.^v

Diet appears to be a significant factor in these trends. In 2009, only 19% of middle school students reported consuming the CDC recommended three or more servings of vegetables each day, and more than one in four reported consuming no vegetables. In MA high schools that same year, only 14% of students ate five or more servings of fruits and vegetables daily.^{vi}

Finally, of particular note is the concern for children with disabilities and special health care needs. While this special segment of children have experienced dramatic improvements in health status in recent years, thanks to advances in medical care and improved access to quality health services, the obesity epidemic has the potential to slow the advances that children with special health care needs have made.^{vii}

Proposed Standards

The proposed nutrition standards are spelled out in Attachment A. 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);
- alternatives for 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.

Conclusion

This is to notify the Public Health Council of the proposed regulations governing Nutrition Standards for Competitive Foods and Beverages in Public Schools, 105 CMR 225.000. The proposed regulations would establish nutrition standards for competitive foods in public schools. A resource tool to provide guidance and to help implement the standards has also been prepared. The Department of Public Health staff expects to take these proposed regulations to a public hearing in March, 2011.

ⁱ PedNSS, 2007

ⁱⁱ Massachusetts Youth Health Survey (YHS), MDPH, Bureau of Community Health Access and Promotion, 2009

ⁱⁱⁱ Massachusetts Youth Risk Behavior Survey (YRBS), MA Department of Education, 2009

^{iv} Massachusetts YRBS 2009

^v *The Status of Childhood Weight in Massachusetts, 2009*, MA Department of Public Health

^{vi} Massachusetts YHS and YRBS 2009

^{vii} Aviva Must, Ph.D., Department of Public Health and Family Medicine, Tufts University School of Medicine

ATTACHMENT A

105 CMR: DEPARTMENT OF PUBLIC HEALTH

105 CMR 225.000: Nutrition Standards for Competitive Foods and Beverages in Public Schools

225.001: Purpose

The purpose of 105 CMR 225.000 is to establish nutrition standards for competitive foods and beverages sold or provided in public schools. The goal of the regulations is to ensure that students are offered nutritious food and beverage choices that will enhance learning, contribute to healthy growth and development, and cultivate lifelong healthy eating behaviors.

225.002: Scope and Application

In accordance with section 223 of Chapter 111 of the General Laws, 105 CMR 225.000 establishes nutrition standards for competitive foods and beverages sold or provided in public schools. These standards shall take effect on August 1, 2012.

225.003: Definitions

A la carte entrée means a single food or combination of foods offered as a main course or central focus of a meal, generally a protein source.

Artificial sweeteners means substances added to food or beverages to provide a sweet taste while providing few or no additional calories, including aspartame, sucralose, acesulfame-K, neotame, sugar alcohols and saccharin.

Competitive foods or beverages means all foods or beverages sold or provided in public schools, other than non-sweetened carbonated water and those items sold or provided as part of federal nutrition programs such as the School Breakfast Program, School Lunch Program, and the Child and Adult Care School Breakfast Program, including those offered in:

- (1) school cafeterias;
- (2) school stores;
- (3) school snack bars;
- (4) vending machines;
- (5) concession stands;
- (6) booster sales;
- (7) fundraising activities;
- (8) school-sponsored or school-related events; and
- (9) any other location in public schools.

Fresh means not being altered by processing or preserving, and retaining original properties, without spoilage.

Grain-based products means food products whose primary ingredient is grain, including pasta, crackers, granola bars, chips and bakery items.

Low-fat means 3 grams or less per Reference Amount Customarily Consumed (RACC) standards established by the federal Food and Drug Administration.

Natural flavorings means the essential oil, oleoresin, essence or extractive, protein hydrolysate, distillate, or any product of roasting, heating or enzymolysis, which contains the flavoring constituents derived from a spice, fruit or fruit juice, vegetable or vegetable juice, edible yeast, herb, bark, bud, root, leaf or similar plant material, meat,

seafood, poultry, eggs, dairy products, or fermentation products thereof, whose significant function in food is flavoring rather than nutritional.

Nutrition standards means the minimum standards for beverage and food nutrition established in these regulations.

Public school means an elementary, middle, high, charter, innovation or comparable school operated by a public school district or board of trustees pursuant to Chapter 71 of the General Laws.

Reduced fat means at least 25% less fat per Reference Amount Customarily Consumed (RACC) than an appropriate reference food.

School day means the hours of the day that students must attend school.

Sweetener means a substance derived from natural products that is added to food or beverages to provide a sweet taste. Such a substance may be nutritive or nonnutritive. A nutritive sweetener may be either naturally occurring, such as honey, or refined from plants, such as sugar from sugar cane. Nonnutritive sweeteners include products that may be regarded as natural, such as stevia.

Trans fat-free means less than 0.5 grams of trans fat per item, or as otherwise specified by the federal Food and Drug Administration.

Whole grains means grains or the foods made from them that contain all the essential parts and naturally occurring nutrients of the entire grain seed. If the grain has been processed, the food product should deliver approximately the same balance of nutrients found in the original grain seed. For purposes of these regulations, whole grains shall include grains which are at least 51% whole grain or which have whole grain as the first ingredient on the label.

225.100: General Nutrition Standards for Public Schools

(A) All competitive foods and beverages sold or provided in public schools shall comply with the nutrition standards of 105 CMR 225.000; provided, however, that unless otherwise determined by the public school district or board of trustees, these standards shall not apply to competitive foods and beverages sold on school grounds up to 30 minutes before the beginning of the school day or 30 minutes after the end of the school day. This exception shall not apply to competitive foods sold through vending machines, which shall comply with these standards at all times.

(B) Public schools shall, in accordance with applicable guidelines of the Department:

- (1) make readily available plain, potable water to all students during the day, at no cost to the students;
- (2) offer for sale fresh fruit and non-fried vegetables at any location where food is sold, but not including non-refrigerated vending machines and vending machines dispensing only beverages; provided, however, that the Department may establish through guidelines products made from fresh fruits and vegetables which may be sold or provided as fresh fruits and vegetables for purposes of these regulations;
- (3) make nutrition information available for students for non-prepackaged competitive foods and beverages by August 1, 2013. This requirement shall not apply to the sale or provision of fresh fruits or fresh vegetables, and foods or beverages sold during the school day at booster sales, concession stands and other school-sponsored or school-related fundraisers and events;
- (4) prohibit the use of fryolators in the preparation of competitive foods; and
- (5) ensure that food preparation and all foods and beverages sold or provided to students meet all applicable state and federal food safety requirements.

225.200: Specific Nutrition Standards for Competitive Foods in Public Schools(A) Beverages(1) Juice

- (a) All juice shall be made of 100% fruit or vegetable juice, with no added sugar.
- (b) Servings of juice for students in elementary and middle schools shall be no more than four (4) ounces. Servings of juice for students in high schools shall be no more than eight (8) ounces.

(2) Milk and Milk Substitutes

- (a) All milk and milk substitutes, which include alternative milk beverages such as lactose-free and soy milk, shall be fat free or low-fat (1% or less).
- (b) All milk and milk substitutes shall meet the USDA definitions and standards for fluid milk and milk substitutes.
- (c) Servings of milk and milk substitutes shall be no more than eight (8) ounces.
- (d) Flavored milk and flavored milk substitutes shall have no more than 22 grams of sugar per 8 ounces.

(3) Water

Water shall contain no added sugars, sweeteners or artificial sweeteners, but may contain natural flavorings and/or carbonation.

(4) Beverages with added sugar or sweeteners

Any beverages with added sugar or sweeteners not already prohibited in section 225.200 will be phased out by August 1, 2013; provided, however, that a public 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.

(5) Other Beverages

No beverages other than juice, milk, milk substitutes and water shall be sold or provided.

(B) Food(1) Calories

Foods shall not exceed 200 calories per item, with the exception of a la carte entrées, which shall not exceed the calorie count of comparable National School Lunch Program entrée items.

(2) Fat

No food shall contain more than 35% of its total calories from fat, except as provided in 105 CMR 225.200 (B)(4) below.

(3) Saturated Fat

No food shall contain more than 10% of its total calories from saturated fat, except as provided in 105 CMR 225.200(B)(4) below.

(4) Exceptions to standards on fat and saturated fat content

Regardless of the limits established above in 105 CMR 225.200(B) for fat and saturated fat content, schools may provide or sell up to one (1) ounce of nuts, nut butters, seeds or reduced fat cheese.

(5) Trans Fat

All foods shall be trans fat-free.

(6) Sugar

No food shall contain more than 35% of its total calories from total sugars; provided, however, that a public school may provide or sell:

- (a) non-fat or low-fat yogurt, including drinkable yogurt, which contains a maximum of 30 grams of total sugars per 8 ounce packaged serving;
- (b) 100% fruit with no added sugar.

(7) Sodium

No food shall contain more than 200 mg of sodium per item, with the exception of a la carte entrées, which shall not contain more than 480 mg of sodium per item.

(8) Grains

All bread and other grain-based products shall be comprised of whole grains.

(C) Food and Beverages

(1) Artificial sweeteners

No food or beverage shall contain an artificial sweetener.

(2) Caffeine

No food or beverage shall contain more than trace amounts of caffeine.