

## **FOOD AND NUTRITION SERVICES MENU AND INGREDIENT GUIDELINES**

*This Circular will remain in effect unless rescinded or superseded by a subsequent version.*

The Boston Public Schools (BPS) Food and Nutrition Services (FNS) Menu and Ingredient Guidelines are the benchmarks for food quality, food safety, nutrition, and variety. They are applied primarily to menu development and procurement and support the Nutrition Standard of Food and Nutrition Services. They pertain to all USDA programs administered by FNS.

FNS continuously monitors its work related to these guidelines and updates them annually between school years. The guidelines are informed by sources of evidence-based research, and *ad hoc* related to ingredients and standards for operation.

FNS Menu and Ingredient Guidelines align with the Good Food Purchasing Program and continuously strive to meet the Menus of Change Principles of the Culinary Institute of America. These values and principles, respectively, are embedded within the FNS Menu and Ingredient Guidelines.

The Menu and Ingredient Guidelines are grouped below under the following headings:

- A. Provide nourishing and culturally diverse food choices according to regulations
- B. Offer variety of whole, fresh, local foods
- C. Establish levels for some fats, sugar, sodium
- D. Eliminate additives
- E. Define animal welfare standards
- F. Other

**A. Provide nourishing and culturally diverse food choices that meet or exceed USDA National School Lunch and School Breakfast Program guidelines as well as guidelines of Massachusetts Department of Public Health, City of Boston, and Boston Public Schools Wellness Policy.**

FNS strictly follows or exceeds the USDA National School Lunch and School Breakfast Programs Meal Pattern for the healthy meal choices that it offers and the frequency that choices are served.

For Boston schools:

- Menus follow at least a four-week cycle and continuously evolve for diversity, updates, variety, and trends, reflecting student preferences.
- Menus for all BPS food service models are as much like each other as possible.
- Lunch menus have at least one vegetarian entrée daily and feature at least one vegan protein option per menu cycle during in-person meal service.

**B. Offer a variety of whole foods** that are fresh, high quality, emphasize local, and foods, as purchased, that retain most of their inherent physical, chemical, sensory and nutritional properties. These foods should meet the food quality requirement as noted throughout these Guidelines.

- Menus favor local, seasonal ingredients. Local items are featured based on availability, primarily on salad bars, as well as one or more additional local meal components during the week, to include whole grains, fish, and dairy, within budget parameters. Local, defined as New England, is intended to increase in volume over time for all service models.
- Menus offer a variety of fruits and vegetables.
  - FNS offers at least two fruits (minimum one fresh; may also serve unsweetened canned/frozen, packed in its own juice, and dried fruit at breakfast and lunch)
  - FNS offers at least three fresh vegetables and one fresh fruit daily at schools (MWCs) with salad bars. Schools without salad bars offer a minimum of one or more fresh fruit and/or vegetables daily.
  - Frozen and canned vegetables (salt-free or low-sodium) may be served, as appropriate.
  - Legumes/beans are offered at a minimum of once per week at all sites for lunch.
- Menus offer legumes and beans as a plant-based protein option to meet the meat alternate component requirements of meal pattern.
- Menus will provide all the weekly grains as whole grain-rich and offered in salad bars, sides, and entrees. Local

whole grain-rich items will be featured.

- Menus offer a variety of lean proteins, including animal and plant-based options (i.e., chicken, turkey, beef, fish, tofu, beans). Menus offer commercially purchased whole muscle meat or entrees made from whole muscle meat, with no fillers.
- Beef is lean, USDA Grade Choice or better, and contains 100% beef only.
- Eggs are USDA Grade A or equivalent and USDA inspected; frozen eggs are USDA inspected.
- Seafood must be U.S. Department of Commerce-inspected.
- FNS offers foods that have as little packaging as possible, with the goal of eliminating all but reasonable, necessary packaging. Packaged foods include those served selectively, at the discretion of FNS and primarily in settings that have no cooking equipment, for Breakfast in the Classroom, field trips, and occasionally for grab-and-go carts. Where possible, meals offered in the classroom, for field trips and on carts align with meals offered in dining rooms.
- FNS is moving away from unitized/packaged meals toward on-site meal preparation.

**C. Decrease the amount of saturated fat, monitor added sugar and excess sodium.**

- Menu choices favor entrees that are low in saturated fat (less than 10% based on the average for a 5-day menu week).

- Healthy oil(s) are used in most food preparation. Butter is used sparingly.
- All liquid milk is rBGH-free.
- All dairy is low fat (1%) or non-fat (skim), excluding butter.
- FNS currently observes USDA Target 1 sodium limits:
  - In line with the federal rules, on or before school year 2024-2025, FNS intends to decrease average daily sodium levels to reach Target 2 standards established by the USDA Final Rule “Nutrition Standards in the National School Lunch and School Breakfast Programs (1/26/12)”.
- Added sugar content is monitored by following the below guidelines, with the aim to decrease daily added sugar intake:
  - Cereal may contain no more than 6 gm added sugar (1.5 teaspoons) (for 1 grain equivalent) and must be identical nutritional/ingredients with retail product.
  - Breakfast grain/grain components may contain up to 8 gm (2 teaspoons) added sugar.
  - For two grain equivalents, there will be no more than 14 gm (4.5 teaspoons) added sugar.
  - Yogurt may have 15 gm of added sugar (4.5+ teaspoons) or less per serving.
- Beverages may include fruit-infused water at hydration stations in school dining rooms.

**D. Eliminate additives** and ingredients that aren't needed for product integrity.

- The following unnecessary or unnatural ingredients are *prohibited* from menu items.
- Additives and ingredients will be monitored and adjusted according to evidence-based research.
- Coloring:
  - Artificial colors (including synthetic food dyes)
  - Annatto and Cochineal extract/carmine
  - Caramel color class III and IV avoided in beverages, food, and sauces. Caramel color class IV may be featured in gravies, which are used sparingly.
- Artificial flavors: artificial synthetic flavors
- Artificial preservatives: Benzoates & benzoic acid, BHA/BHT/TBHQ; nitrates/nitrites; propyl gallate, sulfites
- Artificial sweeteners & other sugar free non-nutritive, low calorie and reduced calorie sweeteners: Sucralose, aspartame, saccharine, Neotame, acesulfame k [acesulfame potassium]
- Flavor enhancers: GMP, MSG
- Binders and Fillers: isolate vegetable proteins and hydrolyzed vegetable protein as filler
- Thickening agents: Carrageenan
- Caffeine
- Sugary syrups: High fructose corn syrup (HFCS), high maltose corn syrup, high dextrose corn syrup, tapioca syrup
- Partially hydrogenated oils; trans fats
- Emulsifiers:

- Brominated Vegetable Oil (BVO)
  - Carboxymethylcellulose (CMC) and Polysorbates
- Flour treatment agents: (azodicarbonamide, bleached flour, bromated flour [potassium bromate], potassium iodate)
- Nitrites/Nitrates and Processed Meat: Meat that has been transformed through salting., curing, fermentation, smoking, or other processes to enhance flavor or improve preservation. Examples of processed meat include hot dogs (frankfurters), deli meat, ham, sausage, corned beef, beef jerky and canned meat.
- Rendered meat, irradiated meat, meat with latent Tgf-beta binding protein (LTBP)\*
- Ammonium hydroxide, vegetable protein analogues, or extenders

**E. Work toward procurement of animals untreated with hormones, steroids, or antibiotics that serve no vital function.**

- Due to growing concerns of animal husbandry practices, FNS supports responsible use of antibiotics in animals.
  - Menu features chickens raised without the use of antibiotics ever.
    - Menu features entrees utilizing chicken products following One Health Certified (OHC) standards.<sup>37</sup> OHC addresses several important areas of animal agriculture within a sustainable continuous improvement process.
  - Menu features turkey products produced under a

USDA process verified program that includes compliance with the following Certified Responsible Antibiotic Use (CRAU) criteria:

- i. No administration of antibiotics pre-hatch
  - ii. Antibiotics with analogues in human medicine are not allowed for:
    - Disease prevention
    - Growth promotion
    - Feed efficiency, or
    - Weight gain
  - iii. Antibiotics with human analogs can only be used therapeutically to:
    - Treat disease in poultry with bacterial disease
    - Control disease in poultry exposed to infectious bacteria
- FNS is opposed to the use of hormones and steroid growth promoters in beef and dairy cattle production. FNS continues to research food products from beef or dairy cattle produced without hormone growth promoters and grass-fed products as options become available. FNS acknowledges some USDA commodity products (beef, dairy and poultry) are purchased without the transparency of animal practices, and therefore, FNS limits how often these products are served. USDA commodity proteins may be made from whole muscle meat or restructured meat\*.

**F. Other guidelines are observed as follows:**



- All school dining areas are peanut aware. No school kitchens will serve peanuts or tree nuts.
- FNS accommodates students with medically prescribed dietary requirements.

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Minneapolis Public Schools Culinary and Wellness Services True Food Nutrition Philosophy 2019-2020

([https://cws.mpls.k12.mn.us/uploads/cws\\_nutrition\\_philosophy.pdf](https://cws.mpls.k12.mn.us/uploads/cws_nutrition_philosophy.pdf)) and Culinary & Wellness Services Ingredient Guide

([https://cws.mpls.k12.mn.us/uploads/mps\\_ingredient\\_guide\\_full.pdf](https://cws.mpls.k12.mn.us/uploads/mps_ingredient_guide_full.pdf)) served as models for the Boston Public Schools Food and

Nutrition Services Menu and Ingredient Guidelines.

### Healthy School Campaign Ingredient Guidelines

<https://www.google.com/url?q=https://healthyschoolscampaign.org/dev/wp-content/uploads/2020/01/Ingredient-Guide-2021.pdf&sa=D&source=docs&ust=1689510987098278&usg=AOvVaw2a5uRgrXBkhhb6Xz9zJ6ESc>

NOTES:

\*Sugar calculation

Yogurt:

12 grams of sugar in 4 oz. of "Sweetened Yogurt"

15 grams of sugar in 4 oz. vanilla-flavored yogurt

Breakfast Condiment:

6 grams of sugar in 1 oz. "Yogurt Dipping Sauce"

8 grams of sugar in .4 oz. of table syrup individual package



## **Meal Pattern Chart- 5 Day Week (Modified to Include K-8)**

Final Rule Nutrition Standards in the National School Lunch and School Breakfast Programs – January 2012 (Rev. 7/5/2018)

Grade	Breakfast Meal Pattern—5 day week				Lunch Meal Pattern—5 day week			
	K-5	K-8	6-8	9-12	K-5	K-8	6-8	9-12
Meal Pattern	Amount of Food <sup>a</sup> Per Week (Minimum Per Day)							
Fruits (cups) <sup>b,c</sup>	5 (1)	5 (1)	5 (1)	5 (1)	2½ (½)	2½ (½)	2½ (½)	5 (1)
Vegetables (cups) <sup>b,c</sup>	0	0	0	0	3¾ (¾)	3¾ (¾)	3¾ (¾)	5 (1)
Dark green <sup>d</sup>	0	0	0	0	½	½	½	½
Red/ Orange <sup>d</sup>	0	0	0	0	¾	¾	¾	1¼
Beans/ Peas (Legumes) <sup>d</sup>	0	0	0	0	½	½	½	½
Starchy <sup>d</sup>	0	0	0	0	½	½	½	½
Other <sup>d,e</sup>	0	0	0	0	½	½	½	¾
Additional Veg to Reach Total <sup>f</sup>	0	0	0	0	1	1	1	1½
Grains (oz. equivalent) <sup>g</sup>	7 (1)	8 (1)	8 (1)	9 (1)	8 (1)	8 (1)	8 (1)	10 (2)
Meats/Meat Alternates (oz. equivalent) <sup>h</sup>	0 <sup>g</sup>	0 <sup>g</sup>	0 <sup>g</sup>	0 <sup>g</sup>	8 (1)	9 (1)	9 (1)	10 (2)
Fluid milk (cups) <sup>h</sup>	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)
<b>Other Specifications: Daily Amount Based on the Average for a 5-Day Week</b>								
Min-max calories (kcal) <sup>i,j</sup>	350-500	400-500	400-550	450-600	550-650	600-650	600-700	750-850
Saturated fat (% of total calories) <sup>j</sup>	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Daily Sodium Restrictions (mg) <sup>i,l</sup>	≤ 540	≤ 540	≤ 600	≤ 640	≤ 1230	≤ 1230	≤ 1360	≤ 1420
<i>Trans</i> fat <sup>j</sup>	Nutrition label or manufacturer specifications must indicate zero grams of <i>trans</i> fat per serving.							

<sup>a</sup> Food items included in each food group and subgroup and amount equivalents. Minimum creditable serving is ¼ cup or 0.25 oz. eq.

<sup>b</sup> One quarter-cup of dried fruit counts as ½ cup of fruit; 1 cup of leafy greens counts as ½ cup of vegetables. No more than half of the fruit or vegetable servings per week may be in the form of juice. All juice must be 100% full-strength.

<sup>c</sup> For breakfast, vegetables may be substituted for fruits, but the first two cups per week of any such substitution must be from the dark green, red/orange, beans and peas (legumes) or "Other vegetables" subgroups as defined in § 210.10(c)(2)(iii).

<sup>d</sup> Larger amounts of these vegetables may be served.

<sup>e</sup> This category consists of "Other vegetables" as defined in § 210.10(c)(2)(iii)(E). For the purposes of the NSLP, "Other vegetables" requirement may be met with any additional amounts from the dark green, red/orange, and beans/peas (legumes) vegetable subgroups as defined in § 210.10(c)(2)(iii).

<sup>f</sup> Any vegetable subgroup may be offered to meet the total weekly vegetable requirement.

<sup>g</sup> There is no separate meat/meat alternate component in the SBP. Schools may substitute 1 oz. eq. of meat/meat alternate for 1 oz. eq. of grains after the minimum daily grains requirement is met.

<sup>h</sup> Fluid milk must be low-fat (1 percent milk fat or less) or fat-free and may be unflavored or flavored for grades K-12.

<sup>i</sup> The average daily amount of calories for a 5-day school week must be within the range (at least the minimum and no more than the maximum values).

<sup>j</sup> Discretionary sources of calories (solid fats and added sugars) may be added to the meal pattern if within the specifications for calories, saturated fat, *trans* fat, and sodium.

<sup>k</sup> All grains must be whole grain-rich in both the NSLP and the SBP. For information on flexibilities, please contact your state agency. Schools may count up to 2 oz. eq. grain-based desserts per week in NSLP towards meeting the grains requirement. See [Exhibit A](#) (form PDE 732 on PEARS, Download Forms) for information on serving grain-based desserts in SBP and NSLP.

<sup>l</sup> Target 1 sodium levels went into effect July 1, 2014 and are shown on the table. Target 1 will continue as the regulatory limit in NSLP and SBP for SY 2018-2019.

<sup>m</sup> Nuts or seeds may be used to meet no more than one-half (50 percent) of the meat/meat alternates component with another meat/meat alternate to meet the full requirement.