

# Whole Grains in School Nutrition



Nourishing the Whole Student Body

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# Areas of Discussion

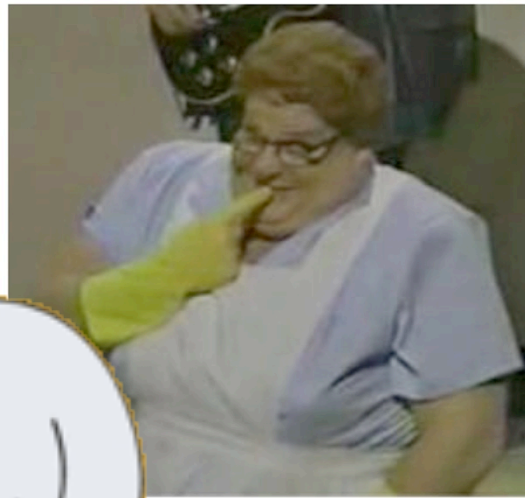


- **Overview of Child Nutrition**
- **Cambridge Operations**
- **Boston Operations**
- **Questions**

# The Perception of School Food Service

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- Poor Customer Service
  - ▣ See Media images
    - Compliments of Google image search



# The *Perception* of School Food Service

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- Unhealthy Food
  - ▣ Brown & Soggy
  - ▣ Canned Fruit & Vegetables





# The *Perception* of School Food Service

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- Unhealthy Food
  - ▣ Brown & Soggy
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# The *Perception* of School Food Service

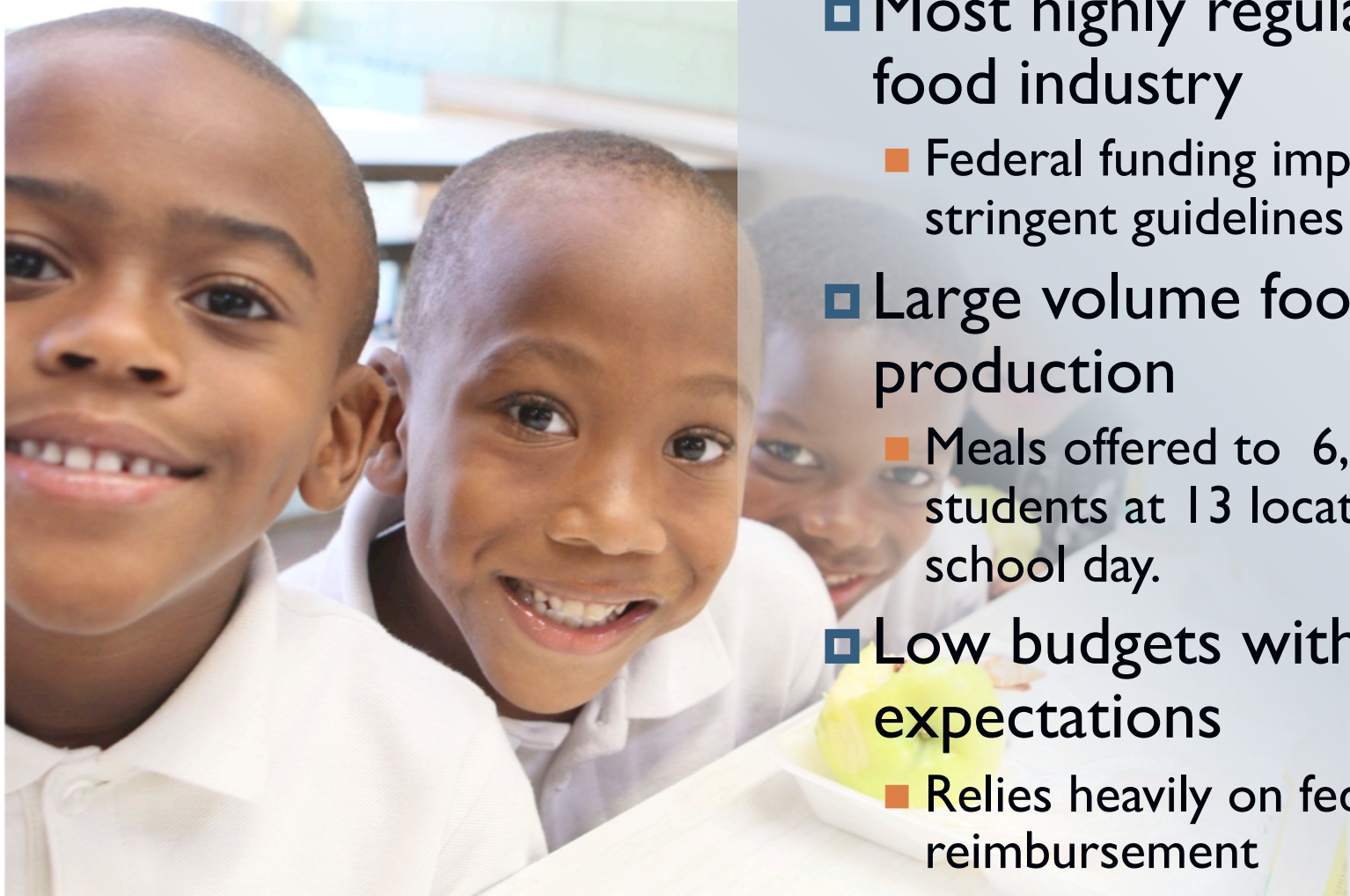
6

- Contributing to Obesity
  - ▣ High in Fat & Sugar



# The Reality of School Food Service

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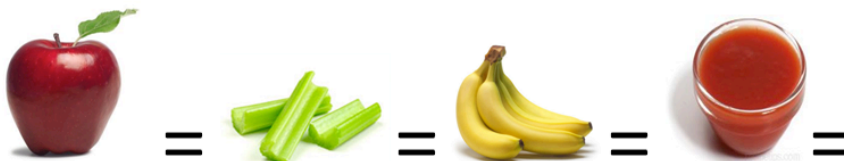
- ▣ Most highly regulated food industry
  - ▣ Federal funding imposes stringent guidelines
- ▣ Large volume food production
  - ▣ Meals offered to 6,000 students at 13 locations each school day.
- ▣ Low budgets with high expectations
  - ▣ Relies heavily on federal reimbursement

# Regulation THEN and NOW

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## Former Standards

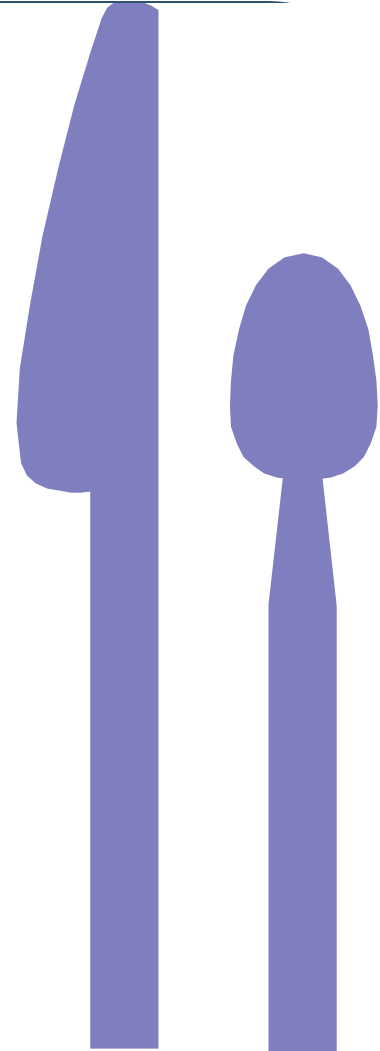
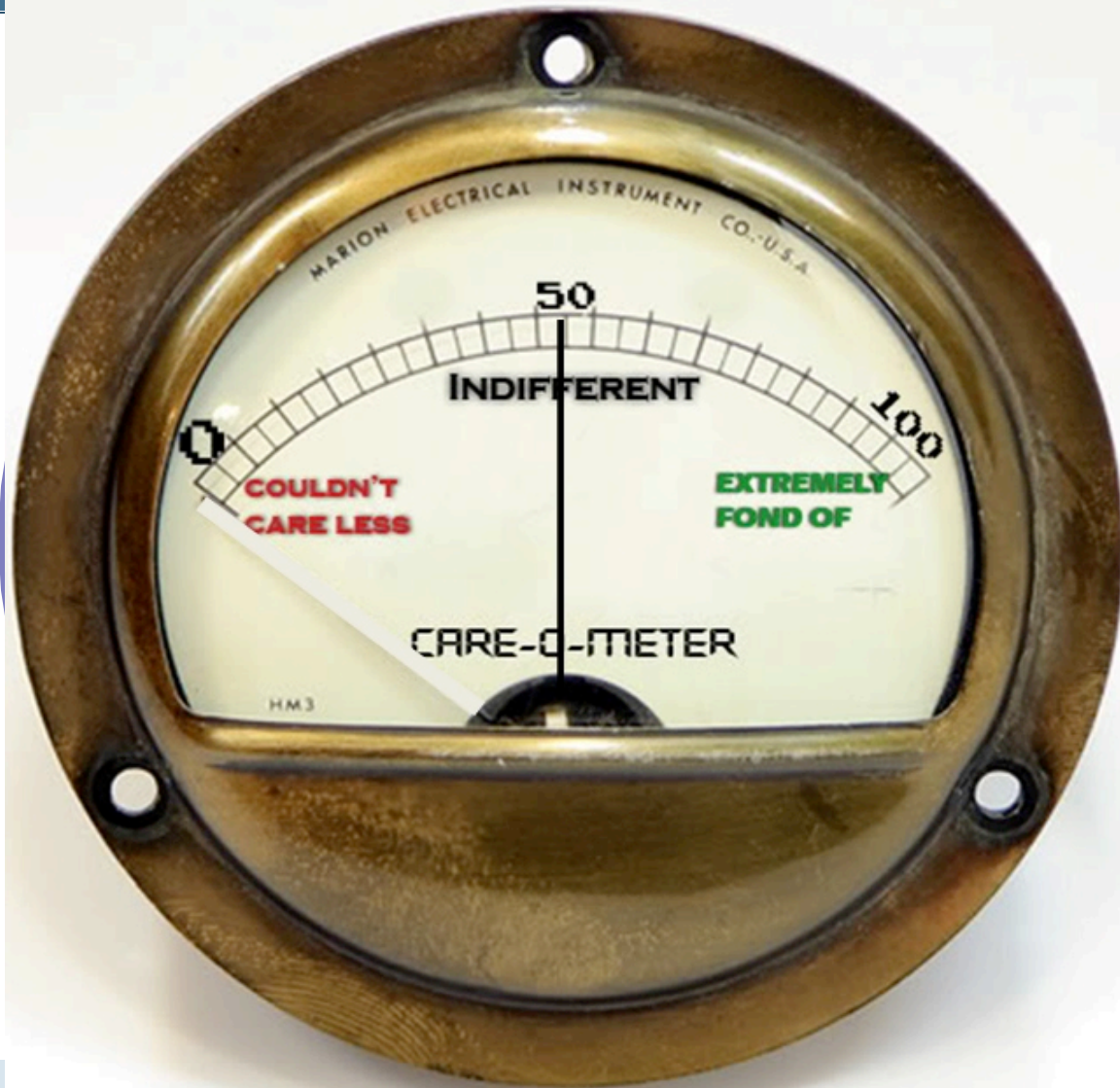
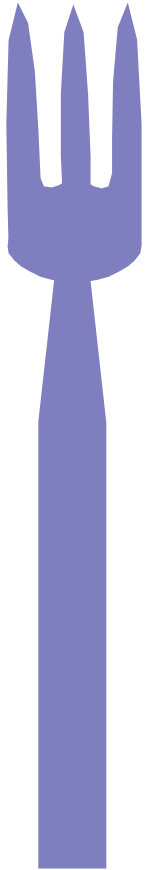
- Food Based/Nutrient Analysis
- Fruit = Vegetable
- Whole Grains... meh





# Regulation THEN and NOW

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# Regulation THEN and NOW

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## Current Standards

- Food Based Only
- Fruits & Veg Separate with Subgroups
- All grains **MUST** be whole grain rich

# Regulation THEN and NOW

## Breakfast

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- Grains: Cereal, Toast, Muffin, Bagel, etc
- Meat/Meat Alternate as grain: eggs, yogurt, etc
- All grains **MUST** be whole grain rich



### Grain Requirement

Grade Level	K-5	6-8	9-12
Daily Requirement	1 oz eq required daily	1 oz eq required daily	1 oz eq required daily
Weekly Requirement	At least 7 oz eq/week	At least 8 oz eq/week	At least 9 oz eq/week

# Regulation THEN and NOW

## Lunch

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- Grains: Rice, Pasta, Tortillas, Breads, etc
- All grains MUST be whole grain rich



### Grain Requirement

Grade Level	K-5	6-8	9-12
Daily Requirement	1 oz eq required daily	1 oz eq required daily	2 oz eq required daily
Weekly Requirement	At least 8 oz eq/ week	At least 8 oz eq/ week	At least 10 oz eq/week



# Regulation THEN and NOW

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## Sample Product 1:

### Whole-Grain Bread

- One slice weighs 0.9 oz
- Ingredient statement lists whole-wheat flour first. All other grains are enriched.
- Manufacturer documentation states that each slice contains 17 grams of creditable grain and no noncreditable grains

#### 1. Calculating based on total weight of creditable product:

Because this product contains the required 16 grams of creditable grain per ounce equivalent for Groups A-G of the revised Exhibit A, we may credit it using the Exhibit A weight. The weight of the bread slice is divided by the standard weight listed for Group B products (see page 23).

Calculation:  $0.9 \text{ oz} \div 1.0 \text{ oz} = 0.9 \text{ oz}$

0.9 oz rounds down to **0.75 oz eq grains** per slice.



#### 2. Calculating based on grams of creditable grain ingredient:

The same slice of bread may be credited using the amount of creditable grain. Manufacturers must provide documentation on company letterhead (or schools may retain a copy of their standardized recipe). Sample product formulation statements are provided starting on page 25.

For this calculation, divide the grams of creditable grain by the standard of 16 grams per oz equivalent.

Calculation:  $17 \text{ g} \div 16 \text{ g} = 1.06$

1.06 rounds down to **1.0 oz eq grains** per slice.

# Regulation THEN and NOW

## Attachment A

### Exhibit A: School Lunch and Breakfast

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#### Whole Grain-Rich Ounce Equivalency (Oz Eq) Requirements for School Meal Programs<sup>1,2</sup>

GROUP A	OZ EQ FOR GROUP A
<ul style="list-style-type: none"> <li>• Bread type coating</li> <li>• Bread sticks (hard)</li> <li>• Chow mein noodles</li> <li>• Savory crackers (saltines and snack crackers)</li> <li>• Croutons</li> <li>• Pretzels (hard)</li> <li>• Stuffing (dry) Note: Weights apply to bread in stuffing.</li> </ul>	<p>1 oz eq = 22 g or 0.8 oz            3/4 oz eq = 17 g or 0.6 oz            1/2 oz eq = 11 g or 0.4 oz            1/4 oz eq = 6 g or 0.2 oz</p>
GROUP B	OZ EQ FOR GROUP B
<ul style="list-style-type: none"> <li>• Bagels</li> <li>• Batter type coating</li> <li>• Biscuits</li> <li>• Breads (sliced whole wheat, French, Italian)</li> <li>• Buns (hamburger and hot dog)</li> <li>• Sweet crackers<sup>4</sup> (graham crackers - all shapes, animal crackers)</li> <li>• Egg roll skins</li> <li>• English muffins</li> <li>• Pita bread (whole wheat or whole grain-rich)</li> <li>• Pizza crust</li> <li>• Pretzels (soft)</li> <li>• Rolls (whole wheat or whole grain-rich)</li> <li>• Tortillas (whole wheat or whole corn)</li> <li>• Tortilla chips (whole wheat or whole corn)</li> <li>• Taco shells (whole wheat or whole corn)</li> </ul>	<p>1 oz eq = 28 g or 1.0 oz            3/4 oz eq = 21 g or 0.75 oz            1/2 oz eq = 14 g or 0.5 oz            1/4 oz eq = 7 g or 0.25 oz</p>
GROUP C	OZ EQ FOR GROUP C
<ul style="list-style-type: none"> <li>• Cookies<sup>3</sup> (plain - includes vanilla wafers)</li> <li>• Cornbread</li> <li>• Corn muffins</li> <li>• Croissants</li> <li>• Pancakes</li> <li>• Pie crust (dessert pies,<sup>3</sup> cobbler,<sup>3</sup> fruit turnovers,<sup>4</sup> and meat/meat alternate pies)</li> <li>• Waffles</li> </ul>	<p>1 oz eq = 34 g or 1.2 oz            3/4 oz eq = 26 g or 0.9 oz            1/2 oz eq = 17 g or 0.6 oz            1/4 oz eq = 9 g or 0.3 oz</p>

<sup>1</sup> The following food quantities from Groups A-C, must contain at least 16 grams of whole grain or can be made with 8 grams of whole grain and 8 grams of enriched meal and/or enriched flour to be considered whole grain-rich.

<sup>2</sup> Some of the following grains may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to serve them.

<sup>3</sup> Allowed only as dessert at lunch as specified in §210.10.

<sup>4</sup> Allowed for desserts at lunch as specified in §210.10, and for breakfasts served under the SBP.

# Regulation THEN and NOW

## Whole Grain-Rich Ounce Equivalency (Oz Eq) Requirements for School Meal Programs<sup>1,2</sup> (continued)

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GROUP D	OZ EQ FOR GROUP D
<ul style="list-style-type: none"> <li>Doughnuts<sup>4</sup> (cake and yeast raised, unfrosted)</li> <li>Cereal bars, breakfast bars, granola bars<sup>4</sup> (plain)</li> <li>Muffins (all, except corn)</li> <li>Sweet roll<sup>4</sup> (unfrosted)</li> <li>Toaster pastry<sup>4</sup> (unfrosted)</li> </ul>	1 oz eq = 55 g or 2.0 oz 3/4 oz eq = 42 g or 1.5 oz 1/2 oz eq = 28 g or 1.0 oz 1/4 oz eq = 14 g or 0.5 oz
GROUP E	OZ EQ FOR GROUP E
<ul style="list-style-type: none"> <li>Cereal bars, breakfast bars, granola bars<sup>4</sup> (with nuts, dried fruit, and/or chocolate pieces)</li> <li>Cookies<sup>3</sup> (with nuts, raisins, chocolate pieces and/or fruit purees)</li> <li>Doughnuts<sup>4</sup> (cake and yeast raised, frosted or glazed)</li> <li>French toast</li> <li>Sweet rolls<sup>4</sup> (frosted)</li> <li>Toaster pastry<sup>4</sup> (frosted)</li> </ul>	1 oz eq = 69 g or 2.4 oz 3/4 oz eq = 52 g or 1.8 oz 1/2 oz eq = 35 g or 1.2 oz 1/4 oz eq = 18 g or 0.6 oz
GROUP F	OZ EQ FOR GROUP F
<ul style="list-style-type: none"> <li>Cake<sup>3</sup> (plain, unfrosted)</li> <li>Coffee cake<sup>4</sup></li> </ul>	1 oz eq = 82 g or 2.9 oz 3/4 oz eq = 62 g or 2.2 oz 1/2 oz eq = 41 g or 1.5 oz 1/4 oz eq = 21 g or 0.7 oz
GROUP G	OZ EQ FOR GROUP G
<ul style="list-style-type: none"> <li>Brownies<sup>3</sup> (plain)</li> <li>Cake<sup>3</sup> (all varieties, frosted)</li> </ul>	1 oz eq = 125 g or 4.4 oz 3/4 oz eq = 94 g or 3.3 oz 1/2 oz eq = 63 g or 2.2 oz 1/4 oz eq = 32 g or 1.1 oz
GROUP H	OZ EQ FOR GROUP H
<ul style="list-style-type: none"> <li>Cereal grains (barley, quinoa, etc)</li> <li>Breakfast cereals (cooked)<sup>5,6</sup></li> <li>Bulgur or cracked wheat</li> <li>Macaroni (all shapes)</li> <li>Noodles (all varieties)</li> <li>Pasta (all shapes)</li> <li>Ravioli (noodle only)</li> <li>Rice (enriched white or brown)</li> </ul>	1 oz eq = 1/2 cup cooked or 1 ounce (28 g) dry
GROUP I	OZ EQ FOR GROUP I
<ul style="list-style-type: none"> <li>Ready-to-eat breakfast cereal (cold, dry)<sup>5,6</sup></li> </ul>	1 oz eq = 1 cup or 1 ounce for flakes and rounds 1 oz eq = 1.25 cups or 1 ounce for puffed cereal 1 oz eq = 1/4 cup or 1 ounce for granola

<sup>5</sup> Refer to program regulations for the appropriate serving size for supplements served to children ages 1 through 5 in the National School Lunch Program; and meals served to children ages 1 through 5 and adult participants in the Child and Adult Care Food Program. Breakfast cereals are traditionally served as a breakfast menu item but may be served in meals other than breakfast.

<sup>6</sup> Cereals must be whole grain, or whole grain and enriched or fortified cereal.

# Cambridge Operations

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- District by the Numbers
  - ▣ 13 Kitchens, 6,000 students
  - ▣ Around 45% of students qualify for Free/Reduced Meals



## □ District Assets

### ▣ *Fully Equipped Kitchens*

- Increased Cooking Capabilities

### ▣ *Partnership with City Health Department*

- Early Implementation

### ▣ *Garden at Every School*

- Increased student awareness

# Cambridge Operations

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# Boston Operations

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## □ District by the Numbers

- 128 Schools, over 57,000 students
- 93 CACFP Supper Programs
- 44 Full Preparation Kitchens, 84 satellite kitchens
- 31 Fresh Fruit & Vegetable Program Sites
- Community Eligibility Provisions



# Boston Operations

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## □ Orchard Gardens

- ▣ 44 Full Preparation Kitchens, 84 satellite kitchens



20



# Boston Operations

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## □ Orchard Gardens

- ▣ 44 Full Preparation Kitchens, 84 satellite kitchens



# Boston Operations

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- Henderson Inclusion Uppers
  - ▣ 44 Full Preparation Kitchens, 84 satellite kitchens





# Boston Operations

23

- Henderson Inclusion Uppers
  - ▣ 44 Full Preparation Kitchens, 84 satellite kitchens



23

# Boston Operations

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## □ Perry School

- ▣ 44 Full Preparation Kitchens, 84 satellite kitchens



# Boston Operations

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## □ Perry School

- ▣ 44 Full Preparation Kitchens, 84 satellite kitchens





# Thank You So Much



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# The Reality of School Food Service

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# Questions?



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Moderator