



**Room Set-up** (see “Training Agenda” in section 1 of your Instructor Guide).

- Participant handout packets placed at each table.
- One set of USDA PFS samples placed on each table.
- Music playing as participants enter (use Pandora).
- Registration table with sign-in and name tags – make sure all participants sign in.
- Parking lot posted.

**Getting Started – Review Trainer Agenda**

- Welcome and presenter introductions.
- Conduct Inclusion Activity (see “Inclusion Activity” in Section 1 of your Instructor Guide).
- Provide a **brief** overview of the handout packet (see list of handouts in “Binder Contents” in Section 1 of your Instructor Guide). Emphasize that the “Resources for School Meals” handout includes a list of key Web sites and resources for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). Mention that the **bolded** resources are key resources for schools to use.

**INSTRUCTOR NOTES:** Be familiar with all participant handouts (section 4 of the Instructor Manual) and review all instructor resources (section 6 of the Instructor Manual).



**Objectives**

1. Understand the meal pattern requirements for breakfast
2. Identify noncreditable Foods
3. Understand the four dietary specifications and identify resources to implement them
4. Understand how to implement Offer versus Serve (OVS) and identify reimbursable meals
5. Gain confidence in ability to provide staff training and communicate information about SBP requirements

Connecticut State Department of Education • Revised November 2015 2

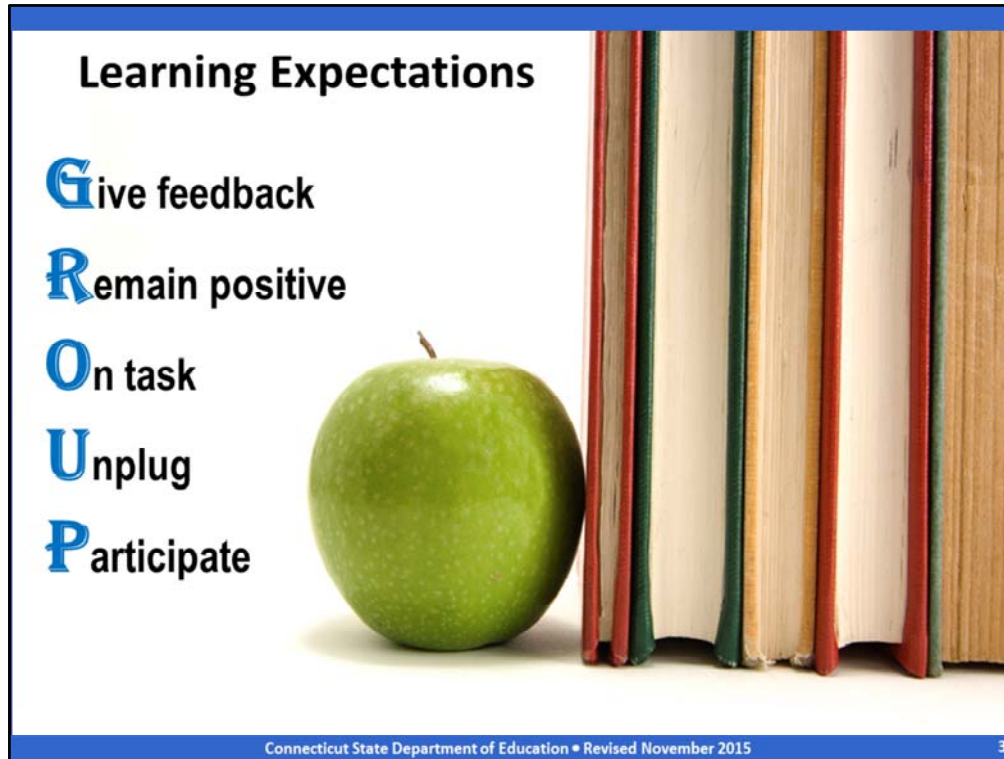
The slide features three photographs of children in a school cafeteria. The top photo shows three young girls smiling and eating. The middle photo shows three girls sitting at a table, eating and talking. The bottom photo shows two boys, one holding a sandwich, both smiling.

Take a look at your agenda. We have five main objectives for today's workshop. This workshop is intended to help you:

- understand the meal pattern requirements for breakfast including the meal pattern components, serving sizes and specific crediting criteria;
- identify noncreditable foods, i.e., foods that do not contribute to the meal pattern;
- understand the four dietary specifications (nutrition standards) that school breakfasts must meet and resources to help to implement them;
- understand how to implement Offer versus Serve (OVS) and identify reimbursable meals; and
- gain confidence in your ability to provide staff training and communicate information about the SBP requirements to food service colleagues, school staff, students and families.

Throughout the workshop, we will have several interactive activities to help you understand and apply the concepts you are learning today. We will also show you where to find resources that provide additional information.

**INSTRUCTOR NOTES:** Have participants take out their agenda handout.



To help everyone get the most from this workshop, we would like to set some learning expectations for the group.

**Give feedback:** Let us know if you have a question, need more information, if we are going too quickly or if you need a break. We want you to have a comfortable learning experience.

**Remain positive.** We understand that the USDA requirements can be challenging and that change is difficult. We ask that you keep a positive attitude and remember the reasons for the meal pattern changes – to improve the health and learning of our nation's children.

**On task:** Please stay on task. We ask that you please refrain from side conversations that are not related to the workshop content or activities, so as not to disrupt the learning environment for your colleagues. We will allow plenty of time for questions and conversation during the activities and throughout the workshop. We will also provide a “parking lot” if there are questions we don't have time to address or if we don't know the answers.


**Unplug:** Please silence your cell phones and refrain from texting. If you need to text or make a call, please step outside so as not to be distracting to others.

**Participate:** Be involved in the workshop and activities and take charge of your own learning. We encourage you to ask questions.

Let's get started!

## Test Your School Breakfast Meal Pattern IQ!

- Group 1: Milk and Noncreditable Foods
- Group 2: Grain
- Group 3: Fruits
- Group 4: Dietary Specifications (Nutrition Standards)



Connecticut State Department of Education • Revised November 2015

4

We're going to start with an activity to test your school breakfast meal pattern IQ. This activity focuses on what we know about the meal pattern requirements for the SBP.

### INSTRUCTOR NOTES:

- Write the group number and topic on chart paper (Group 1 Milk and Noncreditable Foods, Group 2 Grains, Group 3 Fruits, Group 4 Dietary Specifications). Post each paper in different sections of the room. Have markers available in each section.
- Divide participants into four groups by counting off by fours. Each group goes to the corner with their flip chart paper.
- Ask participants to leave all their handouts on the table.
- As a group, participants have 5 minutes to identify everything they know about their topic. The person with the brightest color top is the recorder and writes all information on chart paper. The person with the longest hair is the reporter.
- When the chimes ring, time is done and each group brings their list to post next to each other in the front of room or a visible location that all participants can see. Everyone sits back down at their original table.
- At the beginning of each section, ask the group reporter to present their information then share the slides that apply to that section.




Let's look at an overview of the SBP meal pattern.

**INSTRUCTOR NOTES:** Ask participants to take out their handout on the breakfast meal pattern.

## **SBP Meal Pattern Overview**

- Food-based menu planning approach
- Three age/grade groups (K-5, 6-8 and 9-12)
- Daily and weekly requirements
- Weekly dietary specifications (nutrition standards)



Connecticut State Department of Education • Revised November 2015 6

Let's look at a brief overview of the general requirements for breakfast.

There is one food-based menu planning approach. This approach simplifies menu planning, serves as a teaching tool to help children choose a balanced meal and ensures that students nationwide have access to key food groups recommended by the Dietary Guidelines.


Schools use three same age/grade groups for planning breakfasts and lunches: grades K-5, 6-8 and 9-12. These age/grade groups provide age-appropriate meals.

There are daily and weekly serving size requirements for each food component in the meal patterns.

There are also weekly dietary specifications (nutrition standards) for calories, saturated fat and sodium. In addition, all foods must contain zero trans fat.

## SBP Meal Pattern Overview

- All grains must be whole grain-rich (WGR)
- Fruits component is at least 1 cup
- Vegetable substitution rules
- Limits on juice



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This slide shows an overview of the general meal pattern requirements for breakfast that took effect in school year 2014-15 (July 1, 2014). We will discuss each of these in more detail throughout today's workshop.

- All grains offered at breakfast must be WGR.
- The fruits component requires at least 1 cup of fruits daily to all age/grade groups.
- Schools may offer vegetables in place of fruits at any time, but must comply with certain requirements. Starchy vegetables may be offered on any day if the weekly menu includes at least 2 cups of non-starchy vegetables (dark green, red/orange, beans and peas or other vegetable subgroups).
- Full-strength juice (fruit and vegetable) is limited to no more than half of the weekly fruits component.



### **SBP Meal Pattern Overview**

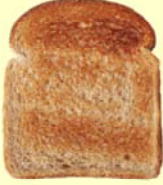


- Students must take at least  $\frac{1}{2}$  cup of fruit (or vegetable) for offer versus serve (OVS)
- Target 1 sodium restriction (through school year 2015-16)



Connecticut State Department of Education • Revised November 2015 8

- If a school implements offer versus serve, students are required to take at least  $\frac{1}{2}$  cup of fruit, or vegetable substitution, to make a meal reimbursable.
- Schools must meet the first sodium target for school meals based on the average weekly sodium content of daily breakfast menus. This target is through school year 2015-16.

## Minimum DAILY Requirements (All Grades)

Grains	Fruits	Milk *
1 ounce equivalent (oz eq)	1 cup	1 cup
		

\* Low-fat unflavored or fat-free unflavored or flavored milk

Connecticut State Department of Education • Revised November 2015 9

Each breakfast must contain daily and weekly amounts of three components: grains, fruits and milk. The chart on this slide provides an overview of the required **daily** meal components and amounts for both five-day and seven-day weeks. We will review each of the meal pattern components individually in a few minutes.




The minimum **daily** requirements are the same for all three grade groups: 1 ounce equivalent of grains, 1 cup of fruits and 1 cup of milk, which must be low-fat unflavored or fat-free unflavored or flavored milk.

**INSTRUCTOR NOTES:** All meals patterns are available on the CSDE's Meal Patterns Web page (<http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=333770> for five-day weeks and <http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=334100> for seven-day weeks):

- Five-day week: <http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/sbp/breakfast.pdf>
- Seven-day week:  
<http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/sbp/7daybreakfast.pdf>

One Connecticut school operates on a four-day week. The four-day week meal patterns are found at <http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=334318>.

## Minimum WEEKLY Requirements

Five-day Week			
Food Components	Grades K-5	Grades 6-8	Grades 9-12
Grains (oz eq) 	7-10*	8-10*	9-10*
Fruits (cups) 	5	5	5
Milk (cups) 	5	5	5




\* No maximum weekly grain limit

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This slide shows the **weekly** amounts for a five-day week. The weekly amounts for fruits and milk are simply the sums of the minimum daily amounts.

The weekly amounts for grains include minimums that are greater than the sum of the minimum daily amounts. However, the maximum limit is not required.

### Minimum WEEKLY Requirements

Seven-day Week			
Food Components	Grades K-5	Grades 6-8	Grades 9-12
Grains (oz eq) 	10-14*	11-14*	12.5-14*
Fruits (cups) 	7	7	7
Milk (cups) 	7	7	7

\* No maximum weekly grain limit

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This slide shows the weekly amounts for a seven-day week. The weekly amounts are more since there are two more days in the week.

**INSTRUCTOR NOTES:** When you do the inclusion activity at the beginning of the workshop, you will find out if anyone is from residential child care institutions (RCCIs). Let participants know that this presentation includes the meal pattern requirements for both five-day and seven-day weeks. If there are no RCCIs, tell participants that since no one is using seven-day menus, we will skip the information and slides for seven-day weeks.

If there are no participants from RCCIs, skip this slide.

## Calculating Minimum WEEKLY Requirements for Grains

- Weekly total is calculated based on the **SMALLEST SERVING** offered each day
- When menus offer a variety of daily grain choices with **DIFFERENT SERVING SIZES** (ounce equivalents), must consider weekly minimums



Connecticut State Department of Education • Revised November 2015 12

The weekly serving of grains at breakfast is determined by adding the ounce equivalents of all daily offerings. **Menu planners must calculate the weekly total based on the smallest grain serving (ounce equivalents) offered each day.**

For example, if the menu offers two daily grain choices that include a 1 ½-ounce equivalent item and a 2-ounce equivalent item, the menu planner must count the 1 ½-ounce equivalent item toward the weekly total.

It is important to review all grain choices over the week for compliance with the minimum weekly requirements.

When offering **different serving sizes** of grains or meat/meat alternates each day or over the week, menu planners must pay careful attention to the daily choices.


## Example of Weekly Grain Calculation

**Acceptable Breakfast Menu for Grains**

**GRAINS FOR ALL GRADES 6-8**

**DAILY REQUIREMENT: 1 ounce equivalent**  
**WEEKLY REQUIREMENT: 8 ounce equivalents**

Daily Choices	OUNCE EQUIVALENTS OFFERED						Meets Minimum Weekly Requirement?
	Monday	Tuesday	Wednesday	Thursday	Friday	TOTAL	
Choice 1	2	1.5	1.5	2	2	8	YES
Choice 2	1.5	1	1.75	2	2		
Choice 3	1.75	2	2	2	2.5		



Connecticut State Department of Education • Revised November 2015
13

This slide shows an example of a breakfast menu that meets the weekly requirements for grains for grades 6-8. The menu planner offers three different sizes of grains each day. Each choice provides at least the minimum **daily** requirement of 1 ounce equivalent and the weekly total provides the minimum **weekly** requirement.

Remember that the weekly total is calculated based on the **smallest serving** (ounce equivalents) offered each day. In this example, the weekly total of the smallest daily serving (1.5 ounce equivalents on Monday, 1 ounce equivalent on Tuesday, 1.5 ounce equivalents on Wednesday, 2 ounce equivalents on Thursday and 2 ounce equivalents on Friday) is 8 ounce equivalents, which is the same as the minimum required 8 ounce equivalents of grains for grades 6-8.


### Example of Weekly Grain Calculation

**Unacceptable Breakfast Menu for Grains**

**GRAINS FOR GRADES 9-12**

**DAILY REQUIREMENT: 1 ounce equivalent**  
**WEEKLY REQUIREMENT: 9 ounce equivalents**

Daily Choices	OUNCE EQUIVALENTS OFFERED						Meets Minimum Weekly Requirement?
	Monday	Tuesday	Wednesday	Thursday	Friday	TOTAL	
Choice 1	2	1.5	1.5	2	2	8	NO
Choice 2	1.5	1	1.75	2	2		
Choice 3	1.75	2	2	2	2.5		



Connecticut State Department of Education • Revised November 2015 14

This slide shows an example of a breakfast menu that does not meet the weekly requirements for grains for grades 9-12. The menu planner offers three different sizes of grains each day. While each choice provides at least the minimum **daily** requirement of 1 ounce equivalent, the weekly totals do not provide the minimum **weekly** requirement.

Remember that the weekly total is calculated based on the **smallest serving** (ounce equivalents) offered each day. In this example, the weekly total of the smallest daily serving (1.5 ounce equivalents on Monday, 1 ounce equivalent on Tuesday, 1.5 ounce equivalents on Wednesday, 2 ounce equivalents on Thursday and 2 ounce equivalents on Friday) is 8 ounce equivalents, which is less than the minimum required 9 ounce equivalents of grains for grades 9-12.

<b>Dietary Specifications (Nutrition Standards) for Breakfast</b>			
<b>School Years 2014-15 through 2016-17</b>			
<b>Daily Amount Based on Weekly Average</b>			
<b>NUTRIENTS</b>	<b>GRADES K-5</b>	<b>GRADES 6-8</b>	<b>GRADES 9-12</b>
<b>Calories</b>	<b>350-500</b>	<b>400-550</b>	<b>450-600</b>
<b>Saturated Fat</b>	<b>&lt; 10 %</b>	<b>&lt; 10 %</b>	<b>&lt; 10 %</b>
<b>Sodium *</b>	<b>≤ 540 mg</b>	<b>≤ 600 mg</b>	<b>≤ 640 mg</b>
<b>Trans Fat</b>	<b>Nutrition label or manufacturer specifications must indicate <b>zero grams</b> of trans fat per serving</b>		

\* First sodium target through June 30, 2017

Connecticut State Department of Education • Revised November 2015 15

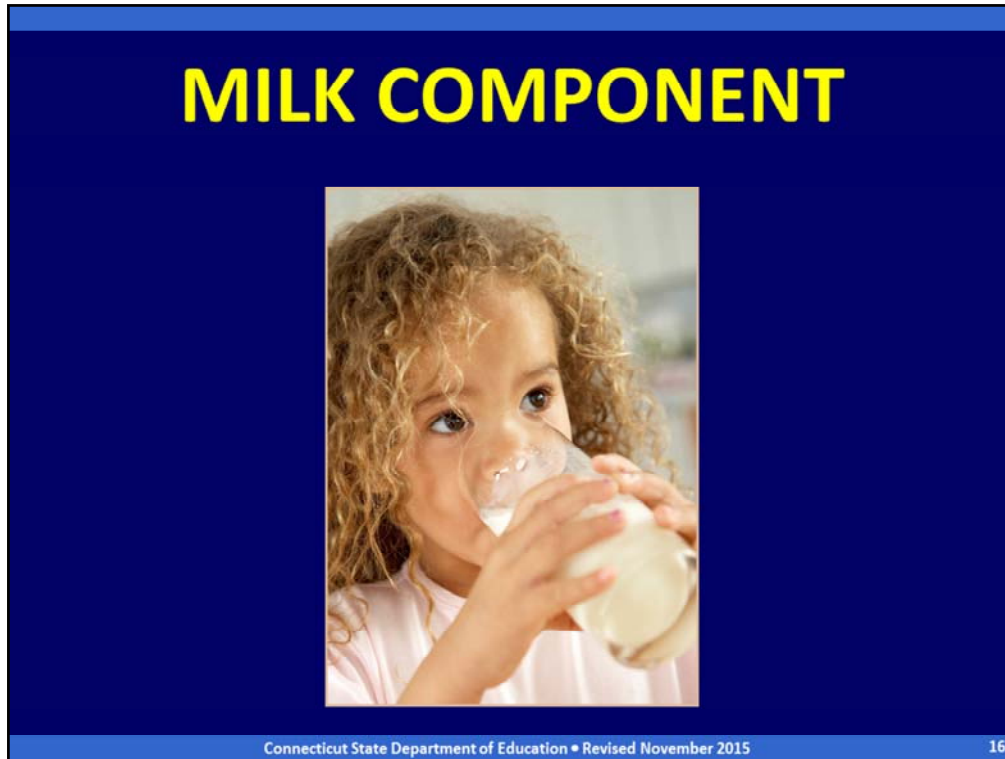
In addition to the required meal pattern components, lunches must also meet what the USDA calls dietary specifications (**nutrition standards**). This chart shows the dietary specifications for breakfast. These nutrition standards are based on the **weekly average** of all meals served, whether for a five-day or seven-day week.

The weekly dietary specifications include calories, saturated fat and sodium. In addition, all foods and ingredients used in school meals must contain zero grams of trans fat.

We will look at these nutrition standards in more detail later on, but we need to keep them in mind as we think about the types of food served in each meal pattern component.

**INSTRUCTOR NOTES:** Do not review this slide in any detail. It will be addressed later on.





Let's look at each of the meal pattern components for breakfast in more detail, starting with milk.

<b>Milk Component</b>				
<b>Milk at Breakfast (cups) *</b>				
<b>Grades</b>	<b>FIVE-DAY WEEK</b>		<b>SEVEN-DAY WEEK</b>	
	<b>Daily</b>	<b>Weekly*</b>	<b>Daily</b>	<b>Weekly*</b>
<b>K-5</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>7</b>
<b>6-8</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>7</b>
<b>9-12</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>7</b>

\* At least two different varieties of low-fat (1%) unflavored or fat-free unflavored or flavored

Connecticut State Department of Education • Revised November 2015 17

This chart shows the daily and weekly milk requirements for each grade group over a five-day and seven-day week.

The **daily** requirement is 1 cup for all grades. The **weekly** milk quantity is 5 cups for a five-day week and 7 cups for a seven-day week. These are the minimum requirements. Larger amounts of milk may be served if meals do not exceed the weekly limits for calories, saturated fat and sodium.

Schools must offer at least **two different** milk choices, which include flavor variety and fat content. For example:

- fat-free milk and fat-free chocolate milk;
- low-fat milk and skim milk; or
- nonfat milk, low-fat plain milk and fat-free chocolate and strawberry milk.

**INSTRUCTOR NOTES:** If there are no participants from RCCIs, do not review the information for seven-day weeks.

## Allowable Milk Options

- **Must offer AT LEAST TWO different choices**
  - ▶ **FAT-FREE (unflavored or flavored)**
  - ▶ **LOW-FAT (unflavored only)**
  - ▶ **Lactose-reduced or lactose-free FAT-FREE (unflavored or flavored)**
  - ▶ **Lactose-reduced or lactose-free LOW-FAT (unflavored only)**



Connecticut State Department of Education • Revised November 2015 18

The **daily** requirement is 1 cup for all grades. The **weekly** milk quantity is 5 cups for a five-day week and 7 cups for a seven-day week. These are the minimum requirements. Larger amounts of milk may be served if meals do not exceed the weekly limits for calories, saturated fat and sodium.

Schools must offer at least **two different** milk choices, which include flavor variety and fat content. For example:

- fat-free milk and fat-free chocolate milk;
- low-fat milk and skim milk; or
- nonfat milk, low-fat plain milk and fat-free chocolate and strawberry milk.

Allowable milk options for school meals include:

- Fat-free (unflavored or flavored), also called “nonfat” or “skim” milk;
- Low-fat (unflavored only);
- Lactose-reduced or lactose-free fat-free (unflavored or flavored); and
- Lactose-reduced or lactose-free low-fat (unflavored only).

Whole milk and reduced fat (2%) milk **cannot** be served. The only exemption is dietary accommodations for disabled children whose disability results in a special dietary need, documented by a medical statement signed by a licensed physician.

The milk requirements also apply to children ages 3-4 (preschoolers) in the NSLP.

## Milk Substitutions

- **REQUIRED** for children with disabilities  
(medical statement from physician)
- **OPTIONAL** for children without disabilities  
(written parent request)
  - ▶ lactose-free or lactose-reduced milk (unflavored low-fat or unflavored/flavored fat-free)
  - ▶ nondairy milk substitutes that meet the USDA nutrition standards for fluid milk substitutes



[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/milk\\_sub.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/milk_sub.pdf)

Connecticut State Department of Education • Revised November 2015

19

As a reminder, milk substitutions are **required** for children with disabilities, based on a medical statement from a recognized medical authority. These substitutions do **not** need to meet the meal pattern requirements for milk.

Schools have the **option** to offer milk substitutions for children without disabilities based on a **written parent/guardian request** that identifies the medical or other special dietary need that restricts the child's diet. If schools choose to allow milk substitutions for children without disabilities, they must offer one or more of the following:

- lactose-free or lactose-reduced milk (unflavored low-fat or unflavored/flavored fat-free); and
- nondairy milk substitutes that meet the USDA nutrition standards for fluid milk substitutes.

Milk substitutes **must** meet the USDA nutrition standards for fluid milk substitutes. They must also be included in the weekly averages for the dietary specifications.

Schools should have a **written policy** for milk substitutions that is communicated to parents. Implementation of this policy must be consistent throughout the district.

**INSTRUCTOR NOTES:** A recognized medical authority is a state-licensed health care professional authorized to write medical prescriptions under state law, and recognized by the State Department of Public Health. In Connecticut, recognized medical authorities include physicians, physician assistants, doctors of osteopathy and advanced practice registered nurses (APRNs), i.e., nurse practitioners, clinical nurse specialists and certified nurse anesthetists who are licensed as APRNs. Child Nutrition Programs cannot accept medical statements that are not signed by one of the preceding recognized medical authorities. More information on the requirements for milk substitutions is available in the CSDE's handout, *Allowable Milk Substitutions for Nondisabled Children in the USDA School Nutrition Programs*. It is available on the Web site shown on the bottom of this slide. Remind participants that the yellow bar at the bottom of the slide indicates a link to a resource reading the content addressed in that slide.

## Milk Substitutions

- Juice and water **CANNOT** be offered as milk substitutes for nondisabled children



Connecticut State Department of Education • Revised November 2015

20

As a reminder, juice and water cannot be offered as milk substitutes for nondisabled children. They do not have the same nutritional value as milk.



That concludes our review of the milk component.

**Ask participants:** Before we move on to the fruits component, are there any questions about the milk component?

<b>Fruits Component</b>				
<b>Fruits at Breakfast (cups) *</b>				
<b>Grades</b>	<b>FIVE-DAY WEEK</b>		<b>SEVEN-DAY WEEK</b>	
	<b>Daily</b>	<b>Weekly*</b>	<b>Daily</b>	<b>Weekly*</b>
<b>K-5</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>7</b>
<b>6-8</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>7</b>
<b>9-12</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>7</b>

\* Includes vegetable substitutions that comply with requirements

Connecticut State Department of Education • Revised November 2015 22

This chart shows the daily and weekly fruits requirements for each grade group over a five-day and seven-day week.

The **daily** fruits requirement is 1 cup for all grades.

The **weekly** fruits quantity is 5 cups for a five-day week and 7 cups for a seven-day week. These are the minimum requirements.

Larger amounts of fruits may be served if meals do not exceed the weekly limits for calories, saturated fat and sodium.

The fruits component at breakfast includes vegetable substitutions, if they meet specific requirements.

## Allowable Fruits

- Fresh
- Frozen (with or without added sugar)
- Canned in juice/light syrup
- Dried



Connecticut State Department of Education • Revised November 2015 23

Fruit may be offered in several different forms. These forms include fresh, frozen with or without added sugar, canned in juice or light syrup, and dried.

Frozen fruits with added sugar should be used in moderation to keep the average school meal within the weekly calorie ranges.


**INSTRUCTOR NOTES:**

The USDA regulations previously required that that frozen fruit was without added sugar, with an exemption allowed through school year 2014-15. However, in January 2014, the USDA made this exemption permanent (79 FR 327). Frozen fruit can contain added sugar.



## Serving Sizes of Fruits

- Menu planner determines **SERVING SIZES** and **NUMBER** of servings
- Minimum of  $\frac{1}{8}$  CUP to count toward daily total



Connecticut State Department of Education • Revised November 2015 24

The menu planner determines the **servicing sizes** and the **number** of servings of fruits needed to meet the meal pattern requirement ( $\frac{1}{2}$  cup of fruits daily for grades K-5 and 6-8, and 1 cup of fruits daily for grades 9-12).

A minimum of  $\frac{1}{8}$  cup must be served to count toward the total requirements, with the rest of the minimum required portion coming from other fruits in the meal.

When we talk about offer versus serve later on, you will see that you may want to consider using  $\frac{1}{2}$ -cup serving sizes as the basis for all fruits.

## Serving Sizes of Fruits

- Can offer **COMBINATION** of various fruits to meet daily total
- All servings based on **ACTUAL VOLUME SERVED**, except dried fruit



Connecticut State Department of Education • Revised November 2015

25


You can serve smaller portions of fruits to meet the total fruits requirement. For example, for grades K-5 and 6-8, you can choose to offer a combination of various fruits to total the required  $\frac{1}{2}$  cup serving of fruits, e.g.,  $\frac{1}{4}$  cup of peaches and  $\frac{1}{4}$  cup of applesauce.

The menu planner determines the number of fruits offered, keeping in mind that the smallest creditable amount is  $\frac{1}{8}$  cup.

All servings are based on the **actual volume served** except for dried fruit. Volume is the **measure** of the space of food in a container (e.g., tablespoons, cups, pints, gallons) versus **weight** (e.g., ounces and pounds).

## Dried Fruit

- Credits at **TWICE** the volume served
  - ▶  $\frac{1}{4}$  cup of dried fruit equals  $\frac{1}{2}$  cup of the fruits component
  - ▶  $\frac{1}{2}$  cup of dried fruit equals 1 cup of the fruits component



Connecticut State Department of Education • Revised November 2015 26

Dried fruit credits based on **twice** the volume served, e.g.,  $\frac{1}{4}$  cup of dried fruit equals  $\frac{1}{2}$  cup of the fruit component and  $\frac{1}{2}$  cup of dried fruit equals 1 cup of the fruit component.

## Serving Sizes of Fruits

- Larger amounts may be served if meals meet weekly **DIETARY SPECIFICATIONS** (limits for calories, saturated fat and sodium)



The image shows three small, colorful bowls (yellow, red, and green) filled with fresh fruit (strawberries, raspberries, and blueberries) placed on a wooden cutting board. Each bowl has a small plastic spoon resting in it. The background is a solid dark blue.

Connecticut State Department of Education • Revised November 2015


27

Larger amounts of fruits may be served if the average weekly meals meet the dietary specifications (nutrition standards) for the specific grade group, including limits for calories, saturated fat and sodium and zero trans fat.

We will review the dietary specifications for school breakfasts in more detail later on.

## Crediting Considerations for Fruits

- Pureed Fruits
- Fruit Juice
- Fruit Smoothies





Connecticut State Department of Education • Revised November 2015 28

There are some additional considerations for determining how to count fruits toward the meal pattern requirements. Let's look at the requirements for pureed fruits, fruit juice and fruit smoothies.

## Pureed Fruits

- Must be **RECOGNIZABLE**, e.g., pureed foods made from **ONE** fruit such as applesauce
- Do **NOT** credit when used to improve the **NUTRIENT PROFILE** of a food, e.g., applesauce used to replace oil in muffins



Connecticut State Department of Education • Revised November 2015 29

Pureed foods made from **one fruit** such as applesauce are recognizable creditable fruits and can count toward the fruits component if the serving size is at least  $\frac{1}{8}$  cup of fruit (the minimum creditable amount). Pureed fruit credits based on the **actual volume** served.


For example, we measure applesauce based on the amount that fills up  $\frac{1}{2}$  cup by volume, not the amount of apples needed to make the applesauce.

Pureed fruit does **not** credit toward the fruits component when it is used to improve the **nutrient profile** of a food, such as applesauce used to replace the oil in muffins.

The USDA emphasizes the importance of the **nutrition education aspect** of school nutrition programs, which includes the goal of helping children easily recognize the key food groups that contribute to a healthy meal.

## Fruit Juice

- Must be pasteurized **100% FULL-STRENGTH** fruit juice without added sugar
  - ▶ 100% juice (not from concentrate)
  - ▶ 100% juice from concentrate
- Juice concentrates cannot credit when used as an **INGREDIENT** in foods or beverages



Connecticut State Department of Education • Revised November 2015 30

Fruit juice must be pasteurized 100 percent full-strength juice and can be either 100% juice not from concentrate or 100 percent juice from concentrate.


**Ask participants:** How do you know that a juice is 100 percent? Look for the name of the full-strength fruit juice on the label to include the words “juice” or “full-strength juice” or “100 percent juice” or “reconstituted juice” or “juice from concentrate.”

Juice concentrates can be used only when reconstituted with water to 100 percent full-strength juice and can be credited in the forms of liquid or frozen juice only. Therefore, juice **cannot** credit toward the fruits component when used as an ingredient in another food or beverage product.

For example, gelatin made with juice concentrate and water does **not** credit as juice since the fruit juice is no longer in the form of liquid or frozen juice. The *Food Buying Guide* provides additional crediting information.

## Weekly Juice Limit for Breakfast

- Limited to no more than **HALF** of weekly fruit offerings
- $\frac{1}{2}$  cup can be served **DAILY**



All Grades		
Length of Week	Required Weekly Fruit Servings	Maximum Weekly Juice Contribution *
<b>Five Days</b>	<b>5 cups</b>	<b>2 <math>\frac{1}{2}</math> cups</b>
<b>Seven Days</b>	<b>7 cups</b>	<b>3 <math>\frac{1}{2}</math> cups</b>

\* Includes all fruit and vegetable juice

Connecticut State Department of Education • Revised November 2015 31

No more than **half** of the weekly fruit offerings may be in the form of juice. This chart shows the maximum weekly contribution of fruit juice for all grade groups based on the daily meal pattern requirement for 1 cup of fruits.

- For a five-day week, juice cannot count for more than 2  $\frac{1}{2}$  cups.
- For a seven-day week (e.g., residential child care institutions), juice cannot count for more than 3  $\frac{1}{2}$  cups.

Since the minimum daily fruits requirement is 1 cup for all grades, this means that schools can offer  $\frac{1}{2}$  cup of juice **daily** as part of assorted fruit choices at breakfast. However, remember that **whole fruits and vegetables** provide more nutrition than juice and should be served most often, as recommended by the Dietary Guidelines.

If a school served **more than 1 cup of fruits** daily, the maximum amount of juice that can be served also increases. For example:


- if the menu planner offers 1  $\frac{1}{2}$  cups of fruits daily, then  $\frac{3}{4}$  cup (6 fluid ounces) of juice could be served daily; and
- if the menu planner offers 2 cups of fruits daily, then 1 cup (8 fluid ounces) of juice could be served daily.

**INSTRUCTOR NOTES:** If there are no participants from RCCIs, do not review the information for seven-day weeks.



### Juice Limit Includes

- Fresh, frozen and made from concentrate
- Frozen juice pops made from 100 percent juice
- Pureed fruits/vegetables in fruit/vegetable smoothies
- Juice from canned fruit served in 100 percent juice, unless the canned fruit is drained



Connecticut State Department of Education • Revised November 2015 32

The weekly juice limit is calculated based on the amount of fruits that students are allowed to select at a given meal, regardless of the number of options or variety of fruits available.

Menu planners must calculate the menu's compliance with the weekly juice limit separately for fruits by dividing the total weekly amount of fruit juice that students can select by the total weekly fruit offerings.

When calculating the total amount of juice that students can select, menu planners must count all sources of 100 percent juice served during the week. This includes:

- juice that is fresh, frozen or made from concentrate;
- frozen juice pops made from 100 percent juice;
- pureed fruits or vegetables in fruit/vegetable smoothies; and
- juice from canned fruit served in 100 percent juice, unless the canned fruit is drained.

Canned fruit in light syrup or water does not count toward the weekly juice limit.

## Crediting Juice

National School Lunch Program (NSLP) and School Breakfast Program (SBP)

**CREDITING JUICE**

To be served in the U.S. Department of Agriculture's (USDA) school nutrition programs, juice must be pasteurized 100 percent, 10 percent juice. At lunch, fruit juice cannot exceed half of weekly fruit offerings and vegetable juice cannot exceed half of weekly vegetable offerings. At breakfast, fruit juice together with vegetable juice cannot exceed half of the weekly fruit offerings.

Juice does not provide the same nutritional benefits as whole fruits and vegetables. Whole fruits and vegetables should be served most often, as recommended by the Dietary Guidelines for Americans. If juice is served, schools must comply with the weekly juice limits for each meal and grade group (see charts below).

**WEEKLY JUICE LIMITS AT LUNCH**

At lunch, fruit juice cannot exceed half of the total amount of fruits offered during the week and vegetable juice cannot exceed half of the total amount of vegetables offered during the week. The charts below show the maximum weekly contribution of juice at lunch based on the meal pattern requirements for fruits and vegetables.

Crediting Fruit Juice at Lunch						
Grade Group	FIVE-DAY WEEK			SEVEN-DAY WEEK		
	Required Weekly Beverage	Maximum Weekly Juice Contribution	Maximum Weekly Juice Beverage	Required Weekly Beverage	Maximum Weekly Juice Contribution	Maximum Weekly Juice Beverage
K-4	2 1/2 OZS	1 1/4 OZS	2	3 1/2 OZS	1 1/2 OZS	3
5-8	2 1/2 OZS	1 1/4 OZS	2	3 1/2 OZS	1 1/2 OZS	3
9-12	5 OZS	2 1/2 OZS	5	7 OZS	3 1/2 OZS	7

Crediting Vegetable Juice at Lunch						
Grade Group	FIVE-DAY WEEK			SEVEN-DAY WEEK		
	Required Weekly Beverage	Maximum Weekly Juice Contribution	Maximum Weekly Juice Beverage	Required Weekly Beverage	Maximum Weekly Juice Contribution	Maximum Weekly Juice Beverage
K-4	2 1/2 OZS	1 1/4 OZS	3	3 1/2 OZS	2 1/2 OZS	5
5-8	2 1/2 OZS	1 1/4 OZS	3	3 1/2 OZS	2 1/2 OZS	5
9-12	5 OZS	2 1/2 OZS	5	7 OZS	3 1/2 OZS	7

Connecticut State Department of Education • Revised August 2015 • Page 1 of 4


[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/credit\\_juice.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/credit_juice.pdf)

Connecticut State Department of Education • Revised November 2015 33

The CSDE's Crediting Juice handout provides guidance on crediting juice in the NSLP and SBP. It is available on the CSDE's Meal Patterns Web page, at the link indicated on the slide.

## School-made Fruit Smoothies

- Milk must be low-fat (1%) unflavored or fat-free unflavored or flavored
  - ▶ Credits as fluid MILK if 1 cup
  - ▶ Must still offer MILK VARIETY on serving line
- Pureed fruits/vegetables credit only as JUICE, based on volume of pureed fruits/vegetables
  - ▶ Counts toward weekly juice limit



Connecticut State Department of Education • Revised November 2015 34

**Ask participants:** How many of you currently serve school-made smoothies as part of reimbursable school meals or would like to serve them in the future?


There are specific crediting requirements for school-made smoothies, which can be either pre-made or made to order. If school-made smoothies consist of pureed fruits/vegetables mixed with **milk**, it must be low-fat (1%) unflavored or fat-free unflavored or flavored. The milk may credit toward the fluid milk requirement at lunch if it is the **full serving (1 cup)**. **Amounts less than 1 cup do not credit.** When smoothies are offered on the serving line in school meal programs, the fluid milk component must also be offered on the serving line to meet the requirement for a variety of milk options for the NSLP.

Pureed fruits/vegetables in school-made smoothies credit only as **juice** toward the daily and weekly meal pattern requirements for fruits/vegetables. Crediting is based on the actual volume of pureed fruits/vegetables per serving, as documented by the standardized recipe. Menu planners must count pureed fruits/vegetables in beverages with all other juices toward the weekly juice limit (no more than half of the weekly fruits/vegetables component).

**INSTRUCTOR NOTES:** If no one serves smoothies as part of reimbursable meals, skip the next three slides on smoothies and let participants know they can refer back to these slides if they choose to serve smoothies in the future. CSDE Operational Memorandum 13-154, February 10, 2015, describes the requirements for crediting smoothies. It is available on the CSDE's Operational Memo Web page, at the link indicated on the slide.

## School-made Fruit Smoothies

- Yogurt and soy yogurt credit as **MEAT ALTERNATE**
- Other ingredients **CANNOT** credit but must count toward weekly dietary specifications
  - ▶ Grains such as oatmeal
  - ▶ Other M/MA, e.g., peanut butter




Operational Memorandum 13-15: [www.sde.ct.gov/sde/LIB/sde/pdf/DEPS/Nutrition/OPmemos/15/OM\\_13-15.pdf](http://www.sde.ct.gov/sde/LIB/sde/pdf/DEPS/Nutrition/OPmemos/15/OM_13-15.pdf)  
Questions and Answers Regarding Crediting of Smoothies in Child Nutrition Programs  
[www.sde.ct.gov/sde/LIB/sde/pdf/deps/nutrition/nslp/crediting/QASmoothies.pdf](http://www.sde.ct.gov/sde/LIB/sde/pdf/deps/nutrition/nslp/crediting/QASmoothies.pdf)  
Connecticut State Department of Education • Revised November 2015 35

Yogurt and soy yogurt in school-made smoothies credit as a meat alternate at **breakfast and lunch**.

Grains and meat/meat alternates (except yogurt during breakfast service) cannot credit when served in smoothies.

Schools can include additional ingredients in smoothies such as grains (e.g., oatmeal) and meat/meat alternates (e.g., peanut butter) to improve flavor and consistency. While these ingredients cannot count toward the meal pattern requirements they must count toward the dietary specifications. They must contain zero trans fat and their inclusion cannot cause the menu to exceed the average weekly limits for calories, saturated fat and sodium.

## Smoothie Recipe Booklet



### create-a-smoothie



**STEP 1** Choose fluid milk, fruit and vegetable. Select yogurt. Add choices to blender and cover.

**STEP 2** Pulse until smooth. Pour into cups.

**STEP 3** Refrigerate until service. Hold for cold service at 41 F° or below.

Milk, yogurt, fruit and vegetables in smoothies can be credited at breakfast and lunch. Smoothies must be prepared by program operators and use ingredient quantities that meet meal pattern requirements. Fruit and vegetables in smoothies are credited as juice. USDA SP10 OACFP05 SFS10-2014 (v2)

Adapted from Western Dairy Association

NewEnglandDairyCouncil.org

**fluid milk**

- Fluid Milk
- Fat-free or Low-fat, unflavored
- Flavored Fat-free
- Lactose-free, low-fat unflavored or fat-free (unflavored or flavored)

**yogurt**

- Low-fat or Fat-free Yogurt
- Plain      Fruit-flavored
- Vanilla      Greek Style

**fruit and vegetables**

Use frozen for best consistency

<input type="checkbox"/> Bananas	<input type="checkbox"/> Kiwi	<input type="checkbox"/> Kale
<input type="checkbox"/> Beets	<input type="checkbox"/> Mango	<input type="checkbox"/> Melons
<input type="checkbox"/> Berries	<input type="checkbox"/> Papaya	<input type="checkbox"/> Pineapple
<input type="checkbox"/> Carrots	<input type="checkbox"/> Peaches	<input type="checkbox"/> Pumpkin
<input type="checkbox"/> Cherries, pitted		<input type="checkbox"/> Spinach

**extras (optional)**

<input type="checkbox"/> Cinnamon	<input type="checkbox"/> Mint
<input type="checkbox"/> Cocoa powder	<input type="checkbox"/> Nutmeg
<input type="checkbox"/> Ginger	<input type="checkbox"/> Vanilla

[www.newenglanddairyCouncil.org/media/SmoothieRecipeBooklet2015.pdf](http://www.newenglanddairyCouncil.org/media/SmoothieRecipeBooklet2015.pdf)

Connecticut State Department of Education • Revised November 2015 36


The New England Dairy & Food Council (NEDFC) has a smoothie recipe booklet with useful information and recipes for creating your own school-make smoothies. You can download this information from the link indicated on this slide.

## School-made Fruit Smoothies

- **Must INFORM** students about the components included by listing the type of smoothie on the menu and serving line signage

**TODAY'S MENU**

**Strawberry and yogurt smoothie**



Connecticut State Department of Education • Revised November 2015 37


The school meal regulations require schools to identify the food components offered to students. Schools serving smoothies should inform students about the components included by listing the type of smoothie on the menu and serving line signage, e.g., “strawberry and yogurt smoothie.”

**INSTRUCTOR NOTES:**

Commercial smoothies do not meet the USDA requirements for fluid milk or yogurt because they do not comply with the FDA's standard of identity for milk or yogurt. Commercial smoothies made with **pureed fruit** may credit only toward the **fruits** component, counting only as juice. The product label should include a statement regarding the “percent juice content,” which is required by the Food and Drug Administration(FDA) for beverages made with fruit puree.

## Vegetable Substitutions

- May be substituted for fruit if at least **2 CUPS** per week are from
  - ▶ dark green subgroup
  - ▶ red/orange subgroup
  - ▶ beans and peas (legumes) subgroup
  - ▶ "other" subgroup
- May offer starchy vegetables if weekly menu includes **AT LEAST 2 CUPS** of nonstarchy vegetables



Connecticut State Department of Education • Revised November 2015 38

Vegetables may be substituted for fruits at breakfast if at least two cups per week are from the dark green, red/orange, beans and peas (legumes) or "other" vegetable subgroups.

Starchy vegetables may be offered on any day if the weekly menu includes at least two cups of nonstarchy vegetables.

These are the same five subgroups found in the lunch meal pattern.

### INSTRUCTOR NOTES:

If the breakfast menu meets all meal pattern requirements, schools may offer starchy vegetables (such as hash browns) as an extra if the menu fits within the weekly dietary specifications. Vegetables offered as extras (not as a substitute for fruits) do not need to meet the SBP requirement to offer at least two cups of nonstarchy vegetables when substituting vegetables for fruits. In addition, vegetables that are offered as extras do not count as a food item for OVS. This means that students who choose hash browns as an extra item must have three other breakfast items on the tray for a reimbursable meal, including at least ½ cup of fruits.

## Vegetables at Breakfast Sample Menu

Monday	Tuesday	Wednesday	Thursday	Friday
CHOOSE 1	CHOOSE 1	CHOOSE 1	CHOOSE 1	CHOOSE 1
Hard-boiled egg with whole-wheat toast  OR Whole-grain cereal and mini corn muffin	WGR French toast Sticks with syrup  OR Whole-grain cereal and graham Crackers	Breakfast burrito  OR Whole-grain pancakes with strawberry sauce	Peach smoothie* with whole-grain muffin  <i>*Try our new breakfast smoothie made with fruit, milk and yogurt!</i>  OR Whole-grain cereal and whole-wheat toast	Whole-wheat sesame bagel with cream cheese  OR Apple cinnamon oatmeal
CHOOSE 1 OR 2 (Limit of 1 juice)	CHOOSE 1 OR 2 (Limit of 1 juice)	CHOOSE 1 OR 2 (Limit of 1 juice)	CHOOSE 1 OR 2 (Limit of 1 juice)	CHOOSE 1 OR 2 (Limit of 1 juice)
Orange juice Assorted fruits <b>Hash brown potatoes</b>	Fruit cup Orange wedges <b>Carrot sticks</b>	<b>Salsa</b> Banana Apple juice	Applesauce Raisins <b>Celery sticks with hummus dip</b>	<b>Cucumber slices</b> Melon wedge Assorted fruit juice
Take at least one fruit or vegetable each day to make a meal!				
CHOOSE 1	CHOOSE 1	CHOOSE 1	CHOOSE 1	CHOOSE 1
Milk Choice *	Milk Choice *	Milk Choice *	Milk Choice *	Milk Choice *
* Low-fat (1%) unflavored or fat-free unflavored or flavored milk				

Connecticut State Department of Education • Revised November 2015 39

This slide shows an example of a breakfast menu that includes vegetable substitutions.

Notice in this example that the hash brown potatoes (starchy vegetables) are offered on Monday and the nonstarchy vegetables are offered on Tuesday through Friday.

You can offer starchy vegetables on any day of the week as long as the remaining days of the week include at least 2 cups of nonstarchy vegetables.





## Crediting Information for Fruits

**Food Buying Guide**  
for Child Nutrition Programs

**Section 2**  
**Vegetables/  
Fruits**

Revised online sections to separate  
fruits and vegetables

[www.fns.usda.gov/tn/food-buying-guide-school-meal-programs](http://www.fns.usda.gov/tn/food-buying-guide-school-meal-programs)

Connecticut State Department of Education • Revised November 2015

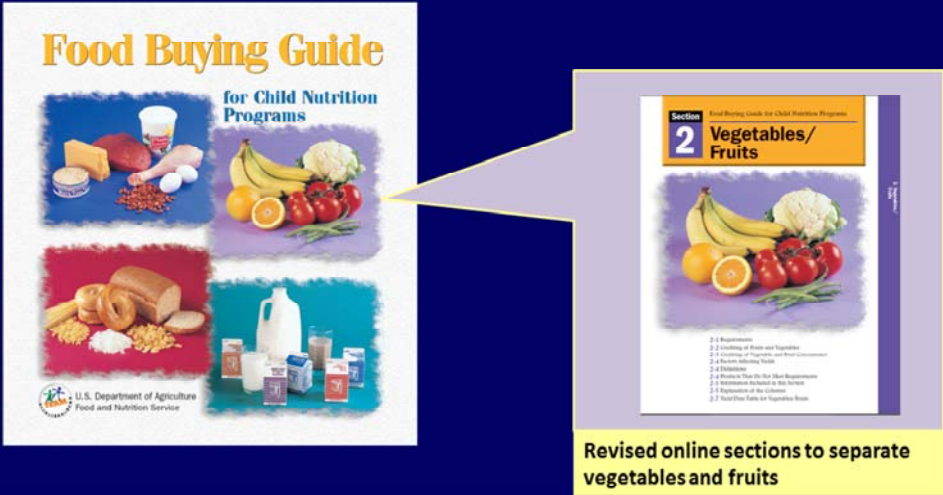
41

Menu planners should use the USDA's *Food Buying Guide for Child Nutrition Programs* to determine how to credit fruits.

**Ask participants:** For example, how do you know how much of an orange to serve to provide  $\frac{1}{2}$  cup of fruit? If you put orange wedges in a 5.5-ounce souffle cup you are NOT meeting the  $\frac{1}{2}$  cup requirement unless you are serving the **entire** orange and it is the correct size.

One orange is not necessarily  $\frac{1}{2}$  cup of fruit. It depends on the size of the fruit. The *Food Buying Guide* tells us that a 138-count orange equals  $\frac{1}{2}$  cup of fruit and a 125-count orange or 113-count orange equals  $\frac{5}{8}$  cup of fruit. The *Food Buying Guide* also tells us that there is no whole orange that provides a full 1 cup of fruit.

## Crediting Information for Vegetables



The image displays the cover of the 'Food Buying Guide for Child Nutrition Programs' on the left, which is divided into four quadrants representing different food groups: grains, fruits and vegetables, dairy, and protein. A callout box on the right highlights 'Section 2 Vegetables/Fruits', showing a revised table of contents for that section. The table of contents lists various sub-sections such as '2.1 Requirements', '2.2 Crediting of Beans and Legumes', '2.3 Crediting of Potatoes and Root Crops', '2.4 Bread and Bakery Items', '2.5 Other Items', '2.6 Breaded Items (e.g. Fish and Chicken)', '2.7 Substitutes Allowed in This Section', '2.8 Requirements of the Guidelines', and '2.9 Total Daily Intake for Vegetables and Fruits'.

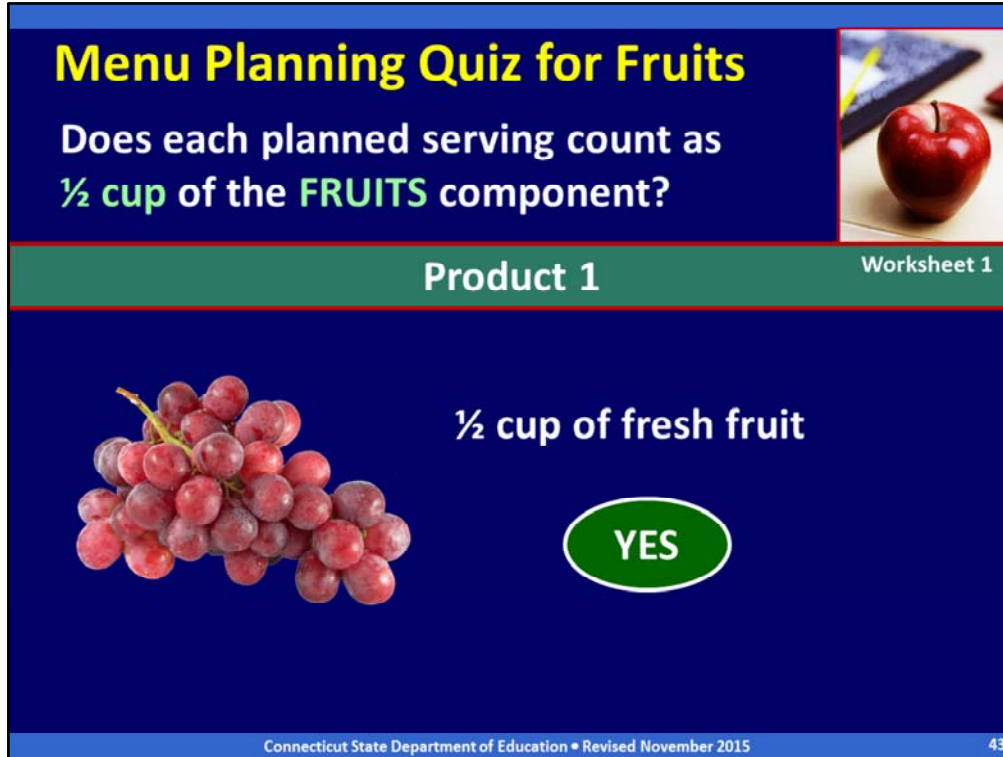
**Revised online sections to separate vegetables and fruits**

[www.fns.usda.gov/tn/food-buying-guide-school-meal-programs](http://www.fns.usda.gov/tn/food-buying-guide-school-meal-programs)

Connecticut State Department of Education • Revised November 2015

42

Remember that menu planners should use the USDA's *Food Buying Guide for Child Nutrition Programs* to determine how to credit vegetables.



The slide features a dark blue background. At the top left, the title "Menu Planning Quiz for Fruits" is written in yellow. Below it, the question "Does each planned serving count as 1/2 cup of the FRUITS component?" is displayed in white, with "FRUITS" in green. A small inset image in the top right shows a red apple on a white surface next to a blue notebook and a yellow pencil. A green horizontal bar across the middle contains the text "Product 1" in white, and "Worksheet 1" is written in white in the top right corner of this bar. The main content area shows a cluster of red grapes on the left, the text "1/2 cup of fresh fruit" in white in the center, and a green oval with the word "YES" in white on the right. At the bottom, a blue bar contains the text "Connecticut State Department of Education • Revised November 2015" on the left and the number "43" on the right.

Take out worksheet 1 – Menu Planning Quiz for Fruits and Vegetables. For this activity, we are only working with Part 1 (fruits). We will get to part 2 (vegetables) later on. We will take this quiz together as a group.


For each 1/2-cup serving of fruit listed, indicate whether it counts as 1/2 cup of fruit.

**INSTRUCTOR NOTES:**


- Do this activity with all participants together as one large group. Read each item, e.g., "1/2 cup of fresh fruit," then wait for participants to answer. After they have answered, click to bring in the answer on the slide.
- Refer to answer key for worksheet 1.

## Menu Planning Quiz for Fruits

Does each planned serving count as  $\frac{1}{2}$  cup of the **FRUITS** component?



**Product 2** Worksheet 1




$\frac{1}{2}$  cup of canned fruit in juice

**YES**


Connecticut State Department of Education • Revised November 2015 44

## Menu Planning Quiz for Fruits

Does each planned serving count as  $\frac{1}{2}$  cup of the **FRUITS** component?



**Product 3** Worksheet 1




$\frac{1}{2}$  cup of canned fruit in light syrup

**YES**


Connecticut State Department of Education • Revised November 2015 45

## Menu Planning Quiz for Fruits

Does each planned serving count as  $\frac{1}{2}$  cup of the **FRUITS** component?



**Product 4** Worksheet 1



$\frac{1}{2}$  cup of canned fruit in heavy syrup


**No**

**Canned fruit must be in juice or light syrup**


Connecticut State Department of Education • Revised November 2015 46

## Menu Planning Quiz for Fruits

Does each planned serving count as  $\frac{1}{2}$  cup of the **FRUITS** component?



Product 5 Worksheet 1



$\frac{1}{2}$  cup of dried fruit

**No**

Dried fruit counts as **TWICE** the volume served ( $\frac{1}{2}$  cup equals 1 cup)

Connecticut State Department of Education • Revised November 2015 47



## Menu Planning Quiz for Fruits

Does each planned serving count as  
 $\frac{1}{2}$  cup of the **FRUITS** component?



Product 6

Worksheet 1



$\frac{1}{2}$  cup of frozen  
fruit without  
added sugar

YES

## Menu Planning Quiz for Fruits

Does each planned serving count as  
 $\frac{1}{2}$  cup of the **FRUITS** component?



Product 7

Worksheet 1




$\frac{1}{2}$  cup of frozen  
fruit with added  
sugar


YES

## Menu Planning Quiz for Fruits

Does each planned serving count as  $\frac{1}{2}$  cup of the **FRUITS** component?



**Product 8** Worksheet 1



$\frac{1}{2}$  cup of fruit juice


**YES**

However, juice cannot count for more than **HALF** of the weekly fruits component


Connecticut State Department of Education • Revised November 2015 50

**Menu Planning Quiz for Fruits**

Does each planned serving count as  $\frac{1}{2}$  cup of the **FRUITS** component?



**Product 9** Worksheet 1




$\frac{1}{2}$  cup of red/orange, dark green or "other" fresh, frozen or canned vegetables

**YES**


Connecticut State Department of Education • Revised November 2015 51

**Menu Planning Quiz for Fruits**

Does each planned serving count as  $\frac{1}{2}$  cup of the **FRUITS** component?



**Product 10** Worksheet 1




$\frac{1}{2}$  cup of legumes, e.g., kidney beans, black beans

**YES**


Connecticut State Department of Education • Revised November 2015 52

## Menu Planning Quiz for Fruits

Does each planned serving count as  $\frac{1}{2}$  cup of the **FRUITS** component?



**Product 11** Worksheet 1



$\frac{1}{2}$  cup of potatoes,  
e.g., hash browns


**YES**

However, only if weekly menu includes **AT LEAST 2 CUPS** of **NONSTARCHY** vegetables


Connecticut State Department of Education • Revised November 2015 53

**Menu Planning Quiz for Fruits**

Does each planned serving count as  $\frac{1}{2}$  cup of the **FRUITS** component?



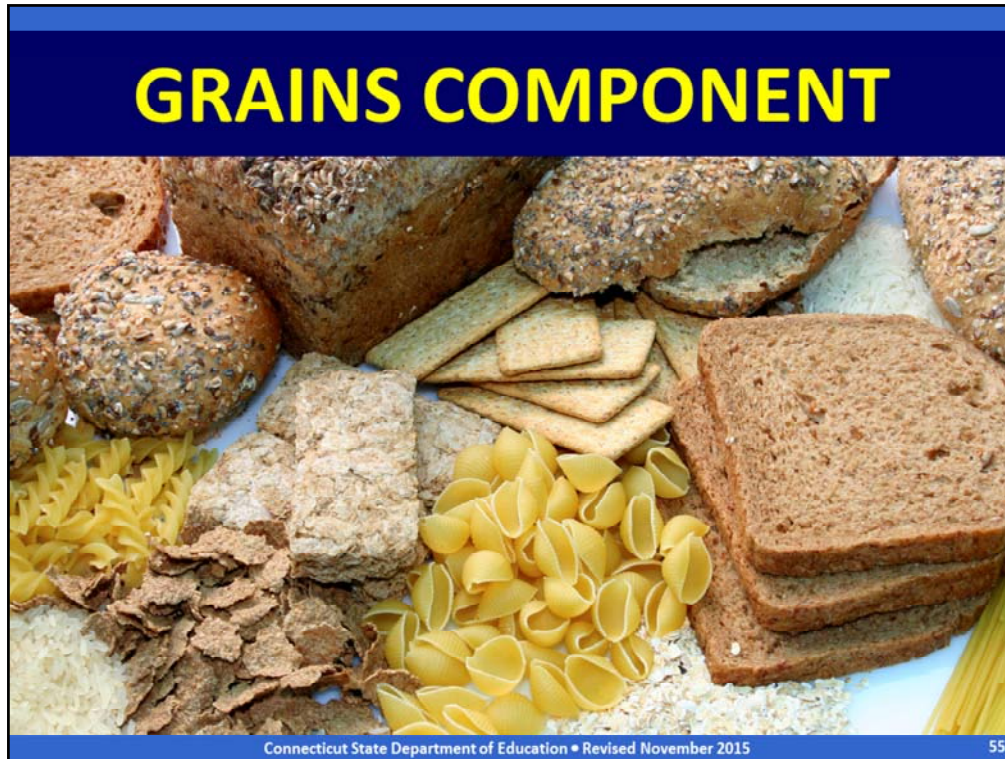
**Product 12** Worksheet 1

  $\frac{1}{2}$  cup of vegetable juice

**YES**

However, the combined total of all juice (fruit and vegetable) cannot be more than **HALF** of the weekly fruits component

Connecticut State Department of Education • Revised November 2015 54



**Ask participants:** Before we move on to the grains component, what questions do you have about the vegetables component?

The grains component is the most challenging meal component to understand because it is more complicated than the other components. Today, we will focus on the basic requirements for crediting grains but we will not be doing any grains crediting calculations.

Two important handouts for you to consult include the CSDE's handouts, "Criteria for Whole Grain-rich Foods" and the USDA Whole Grain-rich Ounce Equivalents chart (next two slides). You have these handouts included in your handout packets.

For more information, you can consult the grains section of the CSDE's *Menu Planning Guide for School Meals*. This resource is listed on your handout, "Resources for School Meals."



## Criteria for Whole Grain-rich Foods

**U.S. Department of Agriculture (USDA) School Nutrition Programs**  
**CRITERIA FOR WHOLE GRAIN-RICH FOODS**

To credit toward the grain component of the USDA meal patterns for the National School Lunch Program (NSLP) and School Breakfast Program (SBP), all grains must be whole grain-rich (WGR), and provide the required serving size in the USDA's course equivalent chart, *What Grain-rich Cereals Represent for School Nutrition Programs*.

The Connecticut Nutrition Standards (CNS) apply the same WGR criteria to all grain products sold separately from institutional meals in public schools that choose the healthy food option of Healthy Food Connections (HFC) under Section 10-215f of the Connecticut General Statutes. In HFC districts, grain products sold separately from school meals must be WGR and meet all nutrient standards, i.e., sodium, fat, saturated fat, trans fat, sodium and sugar. Grain products that meet these criteria are listed on the Connecticut State Department of Education's (CSDE) *List of Acceptable Foods and Beverages*.

Products must comply with the three criteria below to be WGR:

1. The product must contain at least 50 percent whole grains, as indicated by at least one of the following criteria:
  - contain at least 8 grams of whole grains per ounce equivalent for groups A-C of the USDA's course equivalent chart and provide the amount volume or weight for groups D and E of the USDA's course equivalent chart,
  - include the Food and Drug Administration's (FDA) whole grain health claim, or
  - list a whole grain first on the product's ingredients statement.For more information on evaluating products for compliance with this criterion, see [Step 1 on page 2](#).
2. Any nonwhole grain ingredients in the product must be excluded. For more information on evaluating products for compliance with this criterion, see [Step 2 on page 4](#).
3. Any nonwhole grain must be less than two percent (2) ounce equivalent of the product formula. To comply with this limit, the combined total of all nonwhole grain cannot exceed 3.96 grams for groups A-C (solid grains) or 6.93 grams for groups D (crust grains) and E (ready-to-eat breakfast cereals). If nonwhole grain exceed these amounts, the entire product is non-compliant, even if it meets the first two criteria above. For more information on evaluating products for compliance with this criterion, see [Step 3 on page 5](#).

Foods that qualify as WGR are either 100 percent whole grain (every grain ingredient is whole grain) or contain a blend of whole and enriched grains, of which at least 50 percent is whole grain. To determine if grain-based foods are WGR, menu planners must review the product's percentage label and product formulation statement (PFS), using the three steps below:

1. Determine if whole grains are at least 50 percent of the product's total weight.
2. Determine if all other grain ingredients in the product are excluded.
3. Determine if the product contains nonwhole grain, and if so, whether their combined weight complies with the specified limit.

Detailed guidance on each step follows. For examples of how to evaluate a product's ingredients statement for compliance with the three WGR criteria, see "Determining if Products Meet WGR Criteria" on pages 9-13.

Connecticut State Department of Education • Revised August 2015 • Page 1 of 16

[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nsfp/crediting/wgrcriteria.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nsfp/crediting/wgrcriteria.pdf)

Connecticut State Department of Education • Revised November 2015

56

This slide shows the CSDE's handout, "Criteria for Whole Grain-rich Foods," which summarizes the criteria for determining whether a food meets the USDA whole grain-rich requirement. It is available on the CSDE's Crediting Foods Web page, at the link indicated on this slide.

## Whole Grain-rich Ounce Equivalents

**Whole Grain-rich Ounce Equivalents (Oz Eq) for School Nutrition Programs<sup>1,2</sup>**

Group A	Oz Eq for Group A
Baked rice cooking Baked white, hard Cooked rice Cooked Pasta, hard Starchy vegetable, e.g., potatoes and sweet potatoes Tofu, dry, whole, weight equal to starch in dry	1 oz eq = 20 grams or 0.8 ounce 1/2 oz eq = 10 grams or 0.4 ounce 1/3 oz eq = 7 grams or 0.3 ounce 1/4 oz eq = 5 grams or 0.2 ounce
Group B	Oz Eq for Group B
Baked rice cooking Breads, e.g., whole wheat wheat, French, Italian Beans, lentils and hot dog Egg, yolk only Flaked oatmeal Pita bread, whole wheat or whole grain rich Potatoes Pasta, soft Tofu, whole wheat or whole grain rich Starchy vegetable, e.g., potato, sweet potato and winter squash, plain, all shapes <sup>3</sup> Tortilla, whole wheat or whole grain Tortilla chips, whole wheat or whole grain Tostitos, whole wheat or whole grain	1 oz eq = 20 grams or 0.8 ounce 1/2 oz eq = 10 grams or 0.4 ounce 1/3 oz eq = 7 grams or 0.3 ounce 1/4 oz eq = 5 grams or 0.2 ounce
Group C	Oz Eq for Group C
Cakes, plain, including vanilla wafers <sup>4</sup> Cookies Crackers Cakes including flat crackers, e.g., corned butter or cheese Dumplings Pancakes Pie crust (short pie) <sup>5</sup> , wafers <sup>6</sup> , hot biscuits <sup>7</sup> , and meat or meat alternative pies Waffles	1 oz eq = 26 grams or 1.2 ounces 1/2 oz eq = 13 grams or 0.6 ounce 1/3 oz eq = 9 grams or 0.4 ounce 1/4 oz eq = 7 grams or 0.3 ounce
Group D	Oz Eq for Group D
Doughnuts, plain and cream-filled, unfilled <sup>8</sup> Cereal bars, branflakes, granola bars, plain <sup>9</sup> Muffins, all-fruit only Sweet rolls, unfilled <sup>10</sup> Tostitos, plain, unfilled <sup>11</sup>	1 oz eq = 10 grams or 0.4 ounce 1/2 oz eq = 5 grams or 0.2 ounce 1/3 oz eq = 3 grams or 0.1 ounce 1/4 oz eq = 2 grams or 0.1 ounce
Group E	Oz Eq for Group E
Cereal bars, branflakes, granola bars, with nuts, dried fruit or chocolate pieces <sup>12</sup> Cookies, with filling or frosting, nuts, cream, chocolate pieces or fruit pieces <sup>13</sup> Doughnuts, plain and cream-filled, frosted or glazed <sup>14</sup> French toast Sweet rolls, frosted <sup>15</sup> Tostitos, plain, frosted <sup>16</sup>	1 oz eq = 10 grams or 0.4 ounce 1/2 oz eq = 5 grams or 0.2 ounce 1/3 oz eq = 3 grams or 0.1 ounce 1/4 oz eq = 2 grams or 0.1 ounce

<sup>1</sup> For uncooked whole grains only, the specified quantity of foods in Groups A-D must contain at least 10 grams of whole grain or 3 grams of whole grain and 3 grams of starch (equal to starch flour).  
<sup>2</sup> Some of these grains are high in sugar, salt and fat. This document is informational unless denoted otherwise on these items.  
<sup>3</sup> Allowed only for dinner or lunch in the National School Lunch Program (NSLP) per state food service requirements per state.  
<sup>4</sup> Allowed only for dinner or lunch in the NSLP per state food service requirements per state and conditions in the National School Lunch Program (NSLP).  
 Connecticut State Department of Education • Revised August 2015 • Page 1 of 2

[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/grainsizeq.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/grainsizeq.pdf)

Connecticut State Department of Education • Revised November 2015 57

This slide shows the ounce equivalents chart. You have it as a handout in your packets, and it is available on the CSDE's Crediting Foods Web page, at the link indicated on this slide.

<b>Grains Component</b>				
<b>Grains at Breakfast (Oz Eq)</b>				
All grains must be whole grain-rich				
Grades	FIVE-DAY WEEK		SEVEN-DAY WEEK	
	Daily	Weekly*	Daily	Weekly*
K-5	1	7-10	1	10-14
6-8	1	8-10	1	11-14
9-12	1	9-10	1	12.5-14

\* Must meet weekly minimum but not maximum

Connecticut State Department of Education • Revised November 2015 58

This chart shows the daily and weekly grain requirements for five-day and seven-day weeks. Effective with school year 2014-15, all grains must be WGR.

- The **daily** requirement is 1 ounce equivalent for all grades.
- The **weekly** requirement for a **five-day** week is a minimum of 7 ounce equivalents for grades K-5, 8 ounce equivalents for grades 6-8 and 9 ounce equivalents for grades 9-12. The **weekly** requirement for a **seven-day** week is a minimum of 10 ounce equivalents for grades K-5, 11 ounce equivalents for grades 6-8 and 12.5 ounce equivalents for grades 9-12.
- On some days menu planners must include more than 1 ounce equivalent so the weekly menus meet the minimum weekly requirement. For example, for a five-day week, offering 1 ounce equivalent every day provides 5 ounce equivalents weekly, which is below the **minimum weekly requirement** of 7 ounce equivalents.

Schools cannot offer less than the minimum weekly grains requirement but the maximums are not required. You will still see them on the meal pattern because the regulations for the meal pattern have not changed. Schools should continue to use the weekly maximums as a planning tool to assist in offering balanced meals that meet the calorie, sodium and saturated fat requirements. If menus are planned to regularly include larger amounts of grains, they might not comply with the weekly calorie limits and dietary specifications.

**INSTRUCTOR NOTES:** If there are no participants from RCCIs, do not review the information for seven-day weeks.

## Two Requirements for Grain Products

1. Must be **WHOLE GRAIN-RICH (WGR)**
  - ▶ 100% whole grain
  - ▶ At least 50% whole grain
2. Must meet **MINIMUM** serving size



Connecticut State Department of Education • Revised November 2015

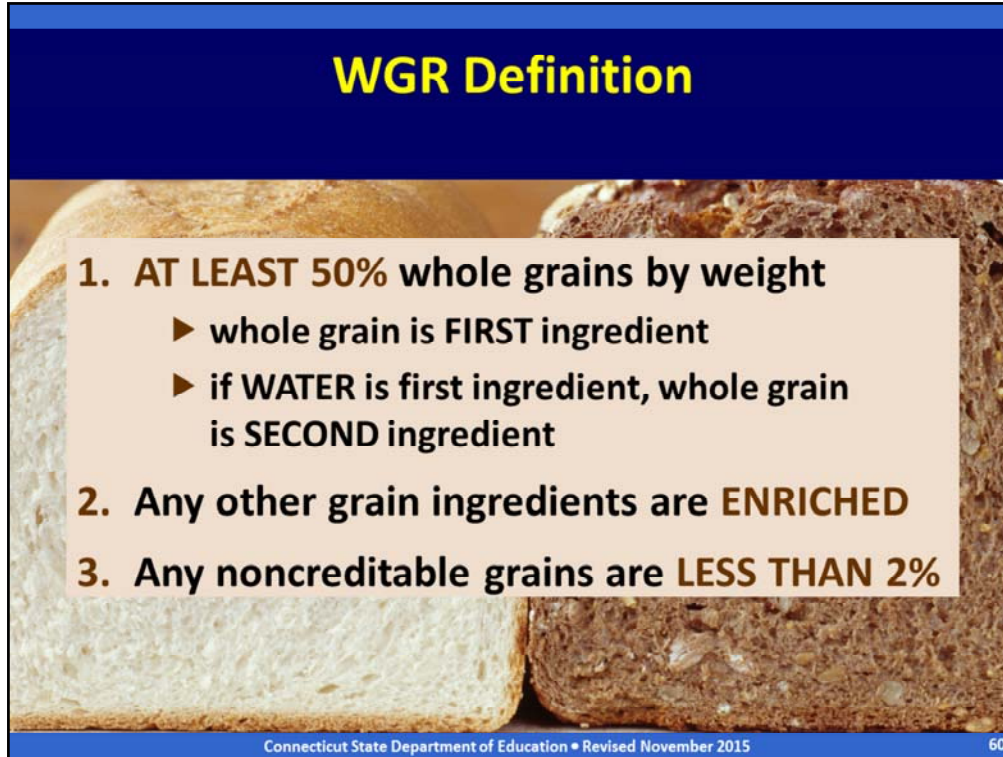
59

There are two requirements that all grains must meet to be served in the SBP.

All grains offered at breakfast must be WGR. WGR foods include products that are **100 percent whole grain** (every grain in the product is a whole grain) and products that are **at least 50 percent** whole grain.

Products that are at least 50 percent whole grain must also meet some additional requirements to be considered WGR, which we will review in a minute.

In addition, all grains must meet the minimum serving sizes specified in the SBP meal pattern. We will look at each of these requirements in more detail.



## WGR Definition

1. **AT LEAST 50% whole grains by weight**
  - ▶ whole grain is **FIRST** ingredient
  - ▶ if **WATER** is first ingredient, whole grain is **SECOND** ingredient
2. Any other grain ingredients are **ENRICHED**
3. Any noncreditable grains are **LESS THAN 2%**

Connecticut State Department of Education • Revised November 2015 60


It is important to understand the USDA definition of **WGR** so you can identify grain products that comply with this requirement. To meet the definition of WGR, a grain product must meet **three criteria**:

1. Contains at least 50 percent whole grains by weight. This means that a whole grain is the first ingredient or if water is the first ingredient, the second ingredient must be a whole grain.
2. Any remaining grain ingredients are enriched.
3. Any noncreditable grain ingredients are less than 2 percent of the product formula.

The product **must meet all three criteria** to be considered whole grain-rich. Let's take a look at each of these three criteria in more detail.

**WGR Definition Criterion 1**  
**At least 50% WHOLE GRAINS**

- **GRAIN-BASED PRODUCTS**, e.g., breads, cereals, waffles, muffins
  - ▶ Whole grain is **FIRST** ingredient listed
- **COMBINATION FOODS**, e.g., breakfast burrito and breakfast pizza
  - ▶ Whole grain is **FIRST GRAIN** ingredient listed



Connecticut State Department of Education • Revised November 2015 61


The first criterion is that the product contains at least 50 percent whole grains by weight. There are several methods to determine whether a product is at least 50 percent whole grains, but we will focus on the easiest and most practical method. This method is what we recommend schools use.

If a product lists a whole grain first on the product's ingredients statement, with an exception for water, it contains at least 50 percent whole grains. The USDA allows an exemption for the definition of whole-grain products. If the first ingredient of a grain product is water, a whole grain may be listed as the second ingredient and still meet the whole grain-rich criteria. This is based on the Dietary Guidelines definition of whole grain-rich products.

- If the food item is a **grain-based product** (such as breads, cereals, waffles and muffins), it must have a whole grain listed as the **first ingredient** by weight on the ingredient label.
- If the food item is a **mixed dish product** (such as pizza, lasagna or breaded chicken nuggets) a whole grain must be the primary **grain** ingredient by **weight**. In other words, a whole grain is the first **GRAIN** ingredient that appears in the list after any other nongrain ingredients.

## Is it a Whole Grain?

- Look for the word **“WHOLE”** e.g., whole corn, whole rye, whole-wheat flour
- Grains without **“whole”** are usually not whole grains, e.g., corn, rye flour, wheat flour
  - ▶ Require manufacturer documentation (PFS)
  - ▶ **EXCEPTIONS:** Some grains do not state **“whole”** but are whole grains



Connecticut State Department of Education • Revised November 2015

62

**Ask participants:** What are whole grains? Whole grains are grains that consist of the entire kernel, including the starchy endosperm, the fiber-rich bran and the germ. Whole grains are nutrient rich, containing vitamins, minerals, fiber and antioxidants. All grains start out as whole grains, but many are processed to remove the bran and germ (e.g., white bread, white rice), which also removes many of the nutrients.


How do you determine whether a grain is a whole grain? Labeling and advertising is often confusing and misleading, making people think that many foods are whole grain when they are not. Careful label reading is needed.

If a grain is listed in the ingredient statement without the word **“whole,”** the product might not be whole grain, e.g., corn, rye flour and wheat flour. The menu planner must obtain additional information from the manufacturer to determine if grains with these terms are whole grains.

If you see **“whole”** corn, **“whole”** rye flour and **“whole”** wheat flour, you know it is a whole grain. If you don't see the word **“whole,”** you will need additional documentation from the manufacturer to determine if these grains are whole, i.e., a product formulation statement (PFS).

**Examples of Exceptions\***

- **BERRIES or GROATS** (e.g., wheat berries or oat groats)
- **OATS or OATMEAL** (old-fashioned, quick-cooking, instant)
- **Amaranth**
- **Brown rice**
- **Brown rice flour**
- **Buckwheat**
- **Graham flour**
- **Millet**
- **Quinoa**
- **Triticale**
- **Teff**
- **Sorghum**



**\* These grains do not state "whole" in their description  
but they are whole grains**

Connecticut State Department of Education • Revised November 2015

63

However, there are exceptions. Some grain products do not state "whole" in their description but they are whole grains. These include the grain ingredients listed on this slide, such as oat groats, brown rice, millet and quinoa.

**INSTRUCTOR NOTES:** Mention just a few examples. Do not review all of the grains on the slide.



## USDA Product Formulation Statement (PFS) for Grains

**Formulation Statement for Documenting Grains in School Meals**  
Required Beginning SY 2013-2014  
(Crediting Standards Based on Grains of Creditable Grains)

School Food Authorities (SFAs) should include a copy of the label from the purchased product package in addition to the following information in the label signed by an official company representative. Grain products may be credentialed based on previous records through SY 2012-2013. The new crediting standards for grains (as outlined in Policy Memorandum SP 10-2012) must be used beginning SY 2013-2014. SFAs have the option to choose the crediting method that best fits the specific needs of the same program.

Product Name: Wheat Spelt Pancakes Code No: 14905

Manufacturer: ABC Brand Company Serving Size: 2 pancakes (50 g (1.76oz))  
(see dough weight may be used to calculate crediting grain amount)

I. Does the product meet the Whole Grain Rich Criteria? Yes A No B  
(Refer to SP 10-2012 Grain Requirements for the National School Lunch Program and School Breakfast Program.)

II. Does the product contain non-creditable grains? Yes No How many grams: \_\_\_\_\_  
(Products with more than 0.24 oz equivalent or 3.99 grams for Group I A-C or 6.99 grams for Group II of non-creditable grains may not credit towards the grain requirements for school meals.)

III. Use Policy Memorandum SP 10-2012 Grain Requirements for the National School Lunch Program and School Breakfast Program, Exhibit A to determine if the product fits into Group A-C (whole grains), Group II (cracked grains) or Group I (REFE breakfast cereals). Different methodologies are applied to calculate servings of grain components based on crediting grains. Group A-C use the standard of 16 grams creditable grains per oz. eq. Group II use the standard of 16 grams creditable grains per oz. eq. and Group I is reported by volume or weight.

Indicate in which Exhibit A Group (A-B) the Product Belongs: C

Description of Creditable Grain Ingredient <sup>1</sup>	Grams of Creditable Grain Ingredient per Portion <sup>2</sup>	Gram Standard of Creditable Grain per oz equivalent (16g = 1oz) <sup>3</sup>	Creditable Amount
	A	B	A ÷ B
Whole wheat flour (12%)	25	16	1.5625
Enriched flour (22%)	11	16	0.6875
<b>Total Creditable Amount<sup>4</sup></b>			<b>2.25</b>

<sup>1</sup>Creditable grains are whole grain cereals (flour and cracked seed form).  
<sup>2</sup>Serving size (% of creditable grain in formula). Please be aware that serving sizes other than grams must be converted to grams.  
<sup>3</sup>Standard grams of creditable grains from the corresponding Group in Exhibit A.  
<sup>4</sup>Total Creditable Amount must be rounded down to the nearest quarter (0.25) or mg. Do not round up.

Total weight (per portion) of product as purchased: 50 g (1.76oz)  
Total contribution of product (per portion): 2.25 oz equivalent

I certify that the above information is true and correct and that a 2.25 ounce portion of this product (ready for service) provides 2.25 oz equivalent grains. I further certify that non-creditable grains are not above 0.24 oz eq. per portion. Products with more than 0.24 oz equivalent or 3.99 grams for Group A-C or 6.99 grams for Group II of non-creditable grains may not credit towards the grain requirements for school meals.

Signature: \_\_\_\_\_ Title: \_\_\_\_\_  
Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_ Phone Number: \_\_\_\_\_

<http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=333796>

Connecticut State Department of Education • Revised November 2015 64

**Ask participants:** How many of you are familiar with product formulation statements? What is the difference between it and a Child Nutrition (CN) label?

This slide shows the USDA's sample PFS for grains. Product formulation statements are developed by manufacturers to provide specific information about their products. They generally include a detailed explanation of what the product contains and the amount of each ingredient in the product by weight. However, unlike CN labels:

- there is no standard information required for product formulation statements (each company can decide what to include);
- they are not approved or monitored by the USDA; and
- they do **not** provide any warranty against audit claims for reimbursable meals.

Product formulation statements are available for many types of food products. CN label are only for meat/meat alternate products, but can include information on grains, fruits and vegetables if they are part of the meat/meat alternate product.

There is a packet of all the USDA sample product formulation statements on your table. The USDA has developed product formulation statements with completed samples for the grains, meat/meat alternates, vegetables and fruits. If you receive a PFS from a manufacturer, it must include the **same information** on the USDA sample PFS forms. These are available on the USDA's Web site, which you can link to from the CSDE's Crediting Foods Web page at the address indicated on the bottom of the slide.

**Whole Grain or Not Whole Grain?** Worksheet 2  
**That is the question....**

1. Amaranth	Yes
2. Brown rice	Yes
3. Buckwheat groats	Yes
4. Bulgur (cracked wheat)	Yes
5. Cornmeal	No
6. Couscous	No
7. Degerminated cornmeal	No
8. Graham flour	Yes
9. Grits	No
10. Instant oatmeal	Yes
11. Long-grain white rice	No

Connecticut State Department of Education • Revised November 2015 65

It is important for menu planners to be able to read ingredients and identify whole grains. Let's see how well we do at identifying whether these terms are whole grains or not. We will take this quiz together as a group.


Take out worksheet 3 – Whole Grain or Not Whole Grain. For each grain listed, we will indicate either “yes” it is a whole grain, or “no” it is not a whole grain.

**INSTRUCTOR NOTES:**

- Do this activity with all participants together as one large group. Read each term and ask participants to indicate “yes,” it's a whole grain or “no,” it is not whole grain.
- Refer to answer key for worksheet 2. In the interest of keeping to the time schedule, don't review the entire explanation for each term unless someone asks for more information.
- **Modification:** If time is short, select a few of the questions.

**Whole Grain or Not Whole Grain?**  
**That is the question....**

Worksheet 2



12. Millet flakes	Yes
13. Pearled (pearl) barley	No
11. Quinoa	Yes
12. Rolled oats	Yes
13. Rye berries	Yes
14. Semolina	No
15. Wheat flour	No
16. White whole-wheat flour	Yes
17. Whole-grain barley	Yes
18. Whole-wheat flour	Yes

Connecticut State Department of Education • Revised November 2015 66

Examples of Whole-Grain Products and Ingredients *		
<b>BARLEY</b> <ul style="list-style-type: none"><li>■ dehulled barley</li><li>■ dehulled-barley flour</li><li>■ whole barley</li><li>■ whole-barley flakes</li><li>■ whole-barley flour</li><li>■ whole-grain barley</li><li>■ whole-grain barley flour</li></ul>	<b>CORN</b> <ul style="list-style-type: none"><li>■ masa (whole corn treated with lime)</li><li>■ whole corn</li><li>■ whole-corn flour</li><li>■ whole cornmeal</li><li>■ whole-grain corn flour</li><li>■ whole-grain grits</li><li>■ whole-ground corn</li></ul>	<b>RYE</b> <ul style="list-style-type: none"><li>■ whole rye</li><li>■ rye berries</li><li>■ whole-rye flour</li><li>■ whole-rye flakes</li></ul>
<b>BROWN RICE</b> <ul style="list-style-type: none"><li>■ brown rice</li><li>■ brown rice flour</li></ul>	<b>OATS</b> <ul style="list-style-type: none"><li>■ oat groats</li><li>■ oatmeal, including old-fashioned, quick-cooking and instant</li><li>■ rolled oats</li><li>■ whole oats</li><li>■ whole-oat flour</li></ul>	

\* This list is not all-inclusive

Connecticut State Department of Education • Revised November 2015 67

This chart lists examples of grain products and ingredients that are whole grains. This list may not contain all possible representations of whole grain ingredient names on food labels.

- If one of these terms is listed **first** on the ingredients statement, the product meets the requirement for at least 50 percent whole grain.
- If a whole grain is not the first ingredient but the **combined weight** of all whole grain ingredients is **more** than the weight of the first ingredient, the product meets the requirement for at least 50 percent whole grains.

To be whole grain-rich, remember that the product must also meet the other two requirements (any other grains are enriched and any noncreditable grains are less than 2 percent).

This information is contained in the CSDE's handout, "Criteria for Whole Grain-rich Foods," which summarizes the criteria for determining whether a food meets the USDA WGR requirement. You have it in your handout packet and it is also available on the CSDE's Crediting Foods Web page, at the link indicated on the slide.

**INSTRUCTOR NOTES:** Hold up the handout so participants can see it.

<b>Examples of Whole-Grain Products and Ingredients *</b>		
<b>WHEAT (RED)</b> <ul style="list-style-type: none"><li>■ bulgur (cracked wheat)</li><li>■ bromated whole-wheat flour</li><li>■ cracked wheat</li><li>■ crushed wheat</li><li>■ entire-wheat flour</li><li>■ graham flour</li><li>■ sprouted wheat</li><li>■ sprouted wheat berries</li><li>■ stone ground whole-wheat flour</li><li>■ toasted crushed whole wheat</li><li>■ wheat berries</li><li>■ whole bulgur</li><li>■ whole durum flour</li><li>■ whole durum wheat flour</li></ul>	<b>WHEAT (RED), continued</b> <ul style="list-style-type: none"><li>■ whole-grain bulgur</li><li>■ whole-grain wheat</li><li>■ whole wheat</li><li>■ whole-wheat flour</li><li>■ whole-wheat pastry flour</li><li>■ whole-wheat flakes</li></ul> <b>WHEAT (WHITE)</b> <ul style="list-style-type: none"><li>■ whole white wheat</li><li>■ whole white wheat flour</li></ul> <b>WILD RICE</b> <ul style="list-style-type: none"><li>■ wild rice</li><li>■ wild rice flour</li></ul>	<b>LESS COMMON GRAINS</b> <ul style="list-style-type: none"><li>■ amaranth</li><li>■ buckwheat, buckwheat groats</li><li>■ einkorn</li><li>■ emmer (farro)</li><li>■ Kamut®</li><li>■ millet</li><li>■ quinoa</li><li>■ sorghum (milo)</li><li>■ spelt</li><li>■ teff</li><li>■ triticale</li></ul>
* This list is not all-inclusive		

Connecticut State Department of Education • Revised November 2015 68

# Identifying Whole Grains


U.S. Department of Agriculture (USDA) School Nutrition Programs

**IDENTIFYING WHOLE GRAINS**

Grains meet for whole grain-rich (WGR) to meet the meal pattern requirements for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). WGR products contain at least 50 percent whole grains, any other grain ingredients are enriched and the combined weight of any nonenriched grains (such as enriched flour, starch and bran) is less than two percent of the product formula. For more information, see the Connecticut State Department of Education's (CSDE) handbook, *Criteria for Whole Grain-rich Foods*.

**WHOLE GRAINS**

Whole grains consist of the entire cereal grain seed or kernel, after removing the inedible outer husk or hull. The kernel includes the starchy endosperm, the fiber-rich bran and the nutrient-rich germ. Usually the grain kernel is milled, crushed, flaked or ground during the milling process. A grain product is whole grain if it contains the same relative amounts of bran, germ and endosperm as the original grain. Whole grains contain a wide variety of nutrients and compounds that help reduce the risk of chronic diseases.



**CRITERIA THAT DO NOT INDICATE WHOLE GRAIN CONTENT**

There are several criteria that cannot be used to determine if a grain product contains at least 50 percent whole grains. These include color, fiber content, the Whole Grain Stamp and marketing terms.

**Color**

A grain product's color does not indicate whether it contains whole grains. While whole-grain products are usually browner than products made with refined white flour, sometimes the brown color comes from coloring (e.g., "natural coloring") or inclusions, not from whole-grain ingredients. Read the ingredients statement to determine if the product contains any whole grains.


**Fiber Content**

Fiber content does not indicate whether a product contains whole grains. Whole grains and fiber both provide health benefits but they are not the same thing. The nutrition facts panel lists total fiber, which includes naturally occurring and added sources. Grain-based foods that are good sources of fiber, such as bran cereal, may contain bran or other added fiber without much or any whole grains. Manufacturers sometimes add fiber such as cellulose, inulin and dextrin next to processed foods that would otherwise contain little or no fiber.

**Whole Grain Stamp**

The **Whole Grain Council** provides two stamps that manufacturers can use on product packaging for foods that contain whole grains.

- **Basic Whole Grain Stamp:** Products that display this stamp contain at least 8 grams of whole grains, but may not meet the USDA criteria for enriched grains and nonenriched grains. They may contain unenriched refined flour and nonenriched grains.
- **100% Whole Grain Stamp:** Products that display this stamp contain at least 16 grams of whole grains, but may not meet the limit for nonenriched grains.



Connecticut State Department of Education • Revised August 2015 • Page 1 of 4

[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/identifyingwg.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/identifyingwg.pdf)

Connecticut State Department of Education • Revised November 2015


69

For more information on how to identify whole grains, refer to this handout. It is available on the CSDE's Crediting Foods Web page, at the link indicated on this slide.

## Products with Flour Blends

PFS must indicate that

- whole grain content is **AT LEAST 8 GRAMS** per ounce equivalent (groups A-G) **OR**
- weight of whole grain is **MORE THAN FIRST INGREDIENT** listed after flour blend



Water, **FLOUR BLEND** [whole-wheat flour, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, enzyme, folic acid)], brown sugar....

Connecticut State Department of Education • Revised November 2015 70


When products contain a flour blend grouped together with parentheses, e.g., “*flour blend (whole wheat flour, enriched flour)*,” the menu planner must obtain a PFS from the manufacturer that documents the **weight** of each creditable grain ingredient.

The PFS must indicate that either the whole grain content is at least 8 grams per ounce equivalent (groups A-G) or that the weight of the whole grain is more than the first ingredient listed after the flour blend.

This slide shows an example of a flour blend listed in the ingredients statement.

## Products with Flour Blends

SAMPLE PRODUCT		
Ingredient	Percentage of Total Product Weight	
Flour Blend	40%	Whole wheat flour = 25% Enriched Flour = 15%
Brown sugar	30%	



Water, **FLOUR BLEND** [whole-wheat flour, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, enzyme, folic acid)], brown sugar....

Connecticut State Department of Education • Revised November 2015 71

From the ingredients statement, the menu planner can tell that the **total weight** of the flour blend (whole-wheat flour and enriched flour) is more than the weight of the brown sugar. However, the menu planner cannot tell the weight of **each individual ingredient** in the flour blend.

For example, if the flour blend is 40 percent of the product's total weight (25 percent whole-wheat flour and 15 percent enriched flour) and sugar is 30 percent, the whole-wheat flour is not the greatest ingredient by weight. To determine if this product meets the criteria for at least 50 percent whole grains, the manufacturer's PFS must document that the weight of the whole-wheat flour is more than the weight of the brown sugar.



**WGR Definition Criterion 2**  
**Any Other Grains are ENRICHED**

Enriched grains contain **FIVE NUTRIENTS** added within limits specified by FDA

- **THIAMIN** (vitamin B1, thiamin mononitrate, thiamin hydrochloride)
- **RIBOFLAVIN** (vitamin B2)
- **NIACIN** (vitamin B3, niacinamide)
- **FOLIC ACID** (folate)
- **IRON** (reduced iron, ferrous sulfate)

Connecticut State Department of Education • Revised November 2015 72

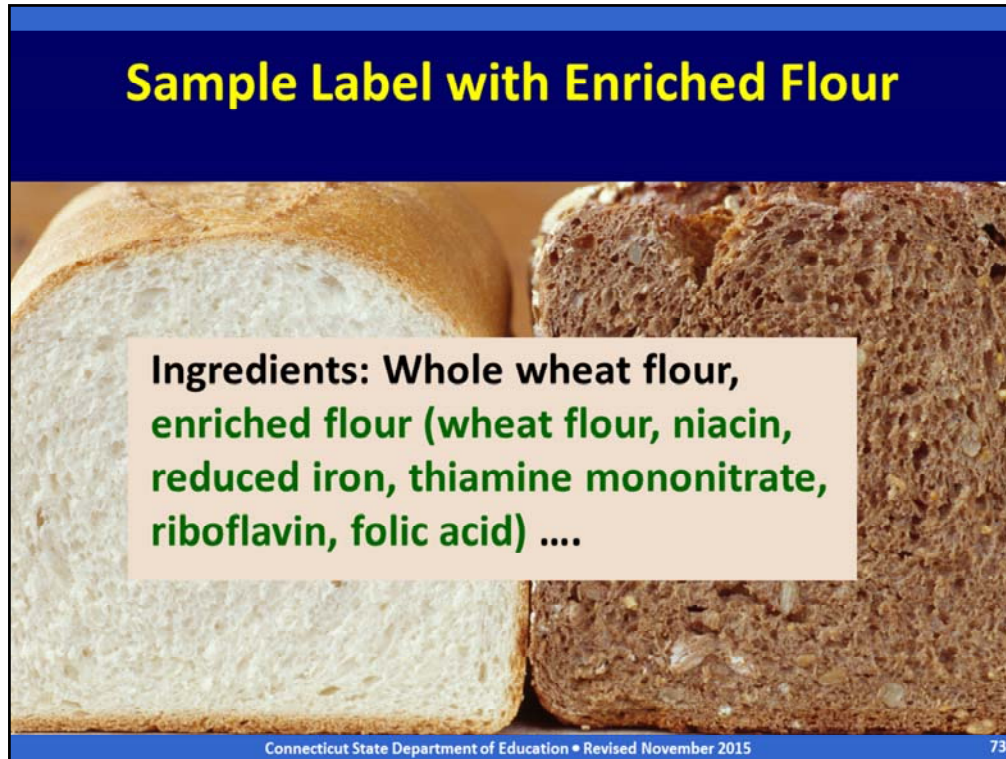
The second criterion is that any other grains in the product are enriched. Enriched grains are **refined grains** (such as wheat, rice and corn) and grain products (such as cereal, pasta and bread) that have **vitamins and minerals** added to replace the nutrients lost during processing.

Enriched products are **not nutritionally equivalent** to whole-grain products because enrichment does not replace all the nutrients, fiber and other health-enhancing substances originally present in the whole grain.

Enriched grains have **five nutrients** added within limits specified by the Food and Drug Administration (FDA):

- thiamin (vitamin B<sub>1</sub>, thiamin mononitrate, thiamin hydrochloride);
- riboflavin (vitamin B<sub>2</sub>);
- niacin (vitamin B<sub>3</sub>, niacinamide);
- folic acid (folate); and
- iron (reduced iron, ferrous sulfate).

**INSTRUCTOR NOTES:** Do not read all of the alternate names for each nutrient. Use the terms thiamin, riboflavin, niacin, folic acid and iron, and explain that the other terms in parenthesis are other names for these nutrients that may be found on food labels.



This slide shows an example of an ingredients statement that contains enriched flour. You can tell it is enriched because it states “enriched” and list the five enrichment nutrients in parentheses.

To determine whether a product is enriched: check the label for the term “enriched,” e.g., “enriched flour” or check the ingredients statement for the five enrichment nutrients, e.g., “flour, niacin, ferrous sulfate, thiamine mononitrate, riboflavin, folic acid.” If the ingredients statement includes all five nutrients (iron, thiamin, riboflavin, niacin and folic acid), the product is enriched.

Not all refined products are enriched. For example, when corn is processed into cornmeal, the germ of the grain is removed. Unless the product indicates “enriched cornmeal” or the ingredients statement lists all five enrichment nutrients, the product is not enriched.



**WGR Definition Criterion 3**  
**Limit for NONCREDITABLE GRAINS**

- **Combined total of all noncreditable grains must be LESS THAN 2% of product formula**
  - ▶ **3.99 grams** for groups A-G (baked goods) of USDA ounce equivalents chart
  - ▶ **6.99 grams** for group H (cereal grains) and group I (ready-to-eat breakfast cereals) of USDA ounce equivalents chart
- **If exceeds this limit, food is not WGR**

Connecticut State Department of Education • Revised November 2015 75

The third criterion is the limit for noncreditable grains. Only whole and enriched grains are creditable. Noncreditable ingredients cannot credit (count) toward the grains component or the WGR requirement.

If grain products include these ingredients they must be present at levels less than two percent of the product formula for the product to meet the WGR definition. The combined total of all noncreditable grains cannot exceed:

- **3.99 grams** for groups A-G (baked goods) of the USDA ounce equivalents chart; or
- **6.99 grams** for groups H (cereal grains) and group I (ready-to-eat breakfast cereals) of the USDA ounce equivalents chart.

We will talk more about the ounce equivalents chart later on.

If noncreditable ingredients exceed the specified limits, the entire product is noncreditable, i.e., the grain product does **not** count as a WGR food and cannot be used as part of the grains component for school meals. It could only be served as an “extra” item, but then must count toward the weekly dietary specifications (calories, saturated fat and sodium) and must also contain zero grams of trans fat.

Examples of Noncreditable Grain Ingredients *		
<ul style="list-style-type: none"> <li>■ barley grits</li> <li>■ bran</li> <li>■ corn bran</li> <li>■ corn fiber</li> <li>■ corn flour (not enriched)</li> <li>■ corn grits</li> <li>■ corn starch</li> <li>■ cultured wheat starch</li> <li>■ durum grits</li> <li>■ fava bean flour</li> <li>■ fermented wheat</li> <li>■ germ</li> <li>■ hydrolyzed starch</li> </ul>	<ul style="list-style-type: none"> <li>■ malted barley flour (not enriched)</li> <li>■ modified food starch (including potato, legume and other vegetable flours)</li> <li>■ modified corn starch</li> <li>■ modified rice starch</li> <li>■ modified tapioca starch</li> <li>■ modified wheat starch</li> <li>■ oat fiber</li> <li>■ potato flour</li> <li>■ potato starch</li> <li>■ rice flour (not enriched)</li> </ul>	<ul style="list-style-type: none"> <li>■ rice starch</li> <li>■ soluble corn fiber</li> <li>■ soy fiber</li> <li>■ soy grits</li> <li>■ soy flour</li> <li>■ tapioca starch</li> <li>■ wheat bran</li> <li>■ wheat germ</li> <li>■ wheat flour (not enriched)</li> <li>■ wheat starch</li> </ul>
* This list is not all-inclusive		
Criteria for Whole Grain-rich Foods: <a href="http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/WGRCriteria.pdf">www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/WGRCriteria.pdf</a>		
Connecticut State Department of Education • Revised November 2015		
		76

This chart lists examples of noncreditable grain ingredients. This list may not contain all possible representations of noncreditable grain ingredients on food labels.

This information is contained in the CSDE’s handout, “Criteria for Whole Grain-rich Foods,” which summarizes the criteria for determining whether a food meets the USDA WGR requirement. You have it in your handout packet and it is also available on the CSDE’s Crediting Foods Web page, at the link indicated on the slide.


**INSTRUCTOR NOTES:** Some ingredients are not creditable as grains but are **not** included in the calculation of a product’s total noncreditable grain ingredients. For example: cellulose fiber, chicory extract, chicory root, citrus fiber, corn dextrin, fibersol, inulin, malt, malt powder, maltodextrin, pea fiber, powdered cellulose and wheat gluten. If these ingredients are listed anywhere in the product’s ingredient statement, they can be disregarded. This information is in the CSDE’s handout, Criteria for Whole Grain-rich Foods.

The definition below is only for your for background information. You do not need to provide this information unless someone asks a question about it.

**Wheat gluten** is the protein component of the wheat grain, that helps baked goods hold their shape. It is neither a creditable or noncreditable grain. When the glutes in wheat are stretched out through the kneading or mixing process, they form little pockets which can then be inflated by the gases released by the leavening agent. When these air pockets inflate, the dough expands or rise. When baked, gluten hardens, which allows the bread to hold its shape and gives it its firm texture.

## Nongrain Ingredients in Combination Foods

- If noncreditable grain ingredients are **NOT** part of combination food's **GRAIN COMPONENT**, they do **NOT** count toward the noncreditable grains limit
- If a product contains an ingredient that contains two or more ingredients itself, these ingredients will be **LISTED IN PARENTHESES** after the name of the ingredient



Connecticut State Department of Education • Revised November 2015 77


The only exception to the noncreditable grains limit is fortified breakfast cereals that contain a whole grain as the first ingredient. The USDA does not require these cereals to limit the amount of noncreditable grains such as bran or germ.

To be considered WGR, ready-to-eat breakfast cereals must list a whole grain as the first ingredient and the cereal must be fortified. Cereals are not required to be fortified if they are 100 percent whole grain.

If a cereal bar is made with a fortified breakfast cereal that contains a whole grain as the first ingredient, any noncreditable grains listed in the ingredients for the **cereal** do **not** count toward the limit for noncreditable grains. Noncreditable grains are not limited for cereals that list a whole grain as the first ingredient and are fortified.

### Combination Food Example: Apple Breakfast Bun

Ingredients: **100% WHOLE-GRAIN WHITE WHEAT FLOUR**, **APPLE FILLING** (corn syrup, **MODIFIED FOOD STARCH**, evaporated apples, cinnamon, lemon juice, locust bean gum, erythorbic acid and potassium sorbate [used as preservatives]), water, margarine (palm oil, soybean oil, whey [milk], mono and diglycerides, soybean lecithin [soy], natural butter flavor, colored with beta carotene, vitamin A palmitate added), sugar, contains 2% or less of: dough conditioner (**RYE FLOUR**, **MALTED BARLEY FLOUR**, ascorbic acid, enzymes, guar and/or arabic gums, **WHEAT FLOUR**), nonfat dry milk (nonfat dry milk, whey [milk]), natural orange emulsion (natural flavor, propylene glycol, gum), salt, eggs, egg replacer (**WHOLE SOY FLOUR**, wheat gluten, corn syrup solids, algin), yeast (leavening), mold inhibitor (cultured organic spelt flour, lactic acid).



- This product contains **APPLE FILLING** (nongrain ingredient) and **BUN** (grain component)
- The modified food starch in the apple filling does **NOT** count toward noncreditable grains limit
- The **FOUR NONCREDITABLE GRAINS** in the bun (rye flour, malted barley flour, wheat flour, whole soy flour) count toward noncreditable grains limit

Connecticut State Department of Education • Revised November 2015 78

The only exception to the noncreditable grains limit is fortified breakfast cereals that contain a whole grain as the first ingredient. The USDA does not require these cereals to limit the amount of noncreditable grains such as bran or germ.

To be considered WGR, ready-to-eat breakfast cereals must list a whole grain as the first ingredient and the cereal must be fortified. Cereals are not required to be fortified if they are 100 percent whole grain.

If a cereal bar is made with a fortified breakfast cereal that contains a whole grain as the first ingredient, any noncreditable grains listed in the ingredients for the **cereal do not** count toward the limit for noncreditable grains. Noncreditable grains are not limited for cereals that list a whole grain as the first ingredient and are fortified.

**“Contains 2% or less”**

■ If product lists only **ONE** noncreditable grain after “contains 2% or less” **PFS NOT NEEDED**



**WHOLE-WHEAT BAGEL**  
Ingredients: **WHOLE WHEAT FLOUR**, sugar, wheat gluten.  
Contains 2% or less of each of the following: honey, salt, **YELLOW CORN FLOUR**, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes

Connecticut State Department of Education • Revised November 2015 79

This slide shows an example of an ingredients statement that states “contains 2% or less of each of the following.” When you see this statement on a label followed by only ONE noncreditable grain ingredient, the noncreditable grain ingredient is low enough that it does not exceed the required limit (3.99 grams for groups A-G or 6.99 grams for groups H-I).

This ingredients statement shows an example. This whole-wheat bagel contains whole wheat flour as the first and only grain ingredient (indicated in green). This product contains only one source of noncreditable grains (yellow corn flour, indicated in red uppercase), listed after the statement “contains 2% or less of.” Therefore, this product meets the WGR requirement and a PFS is not required.




**“Contains 2% or less”**

- If product lists **TWO OR MORE** noncreditable grains after “contains 2% or less,” **PFS REQUIRED**
  - ▶ Must document combined weight of all noncreditable grains

**WHOLE-GRAIN BAGEL**

Ingredients: **WHOLE WHEAT FLOUR**, enriched bromated wheat flour (niacin [a-B vitamin], thiamine mono nitrate [vitamin B-1], ferrous sulfate [iron], potassium bromate, riboflavin [vitamin B-2], and folic acid), water, brown sugar granulated sugar. **Contains 2% or less of the following ingredients:** salt, vital wheat gluten, mono & diglycerides, honey, **CORN MEAL**, calcium propionate, **MALTED BARLEY FLOUR**, molasses powder (molasses, **WHEAT STARCH**), ammonium chloride, ascorbic acid (vitamin C), l-cysteine hydrochloride, azodicarbonamide (ADA), calcium sulfate, enzymes



Connecticut State Department of Education • Revised November 2015 80

However, if you see **two or more** noncreditable grain ingredients after the statement that says “contains 2% or less of each of the following,” it is not possible to know if the **combined weight** of all noncreditable grains is less than 2 percent. Therefore, you must obtain a PFS from the manufacturer to document the combined weight of all noncreditable grains.



This ingredients statement shows an example. This whole-wheat bagel contains whole wheat flour as the first ingredient and the only other grain ingredient is enriched bleached flour (indicated in green). However, this product contains **three sources** of noncreditable grains (corn meal, malted barley flour and wheat starch), indicated in red uppercase.

To determine whether this product meets the WGR requirement, schools must obtain a PFS that documents that the **combined weight** of all three noncreditable grains is less than 3.99 grams.

## Two Exemptions for Noncreditable Grains

- 1. FORTIFIED BREAKFAST CEREALS** that contain a **WHOLE GRAIN** as the first ingredient
- 2. CEREAL BARS** made from a fortified breakfast cereal that contains a whole grain as the first ingredient

Only **CEREAL PORTION** of ingredients is exempt



Connecticut State Department of Education • Revised November 2015 81


The only exception to the noncreditable grains limit is fortified breakfast cereals that contain a whole grain as the first ingredient. The USDA does not require these cereals to limit the amount of noncreditable grains such as bran or germ.

To be considered WGR, ready-to-eat breakfast cereals must list a whole grain as the first ingredient and the cereal must be fortified. Cereals are not required to be fortified if they are 100 percent whole grain.

If a cereal bar is made with a fortified breakfast cereal that contains a whole grain as the first ingredient, any noncreditable grains listed in the ingredients for the **cereal do not** count toward the limit for noncreditable grains. Noncreditable grains are not limited for cereals that list a whole grain as the first ingredient and are fortified.

## Identifying Fortified Cereals

ENRICHED	FORTIFIED
<ol style="list-style-type: none"><li>1. Iron</li><li>2. Thiamin</li><li>3. Riboflavin</li><li>4. Niacin</li><li>5. Folic acid</li></ol>	<ol style="list-style-type: none"><li>1. Iron</li><li>2. Thiamin</li><li>3. Riboflavin</li><li>4. Niacin</li><li>5. Folic acid</li><li>6. Additional vitamins and minerals *</li></ol>



\* Manufacturers choose which ones and how much

Connecticut State Department of Education • Revised November 2015

82

How do you know if a breakfast cereal is fortified? Fortified breakfast cereals contain the five enrichment nutrients lost during the refining process (iron, thiamin, riboflavin, niacin and folic acid), as well as additional vitamins and minerals that do not exist naturally in grains.

This slide shows the difference between enrichment and fortification. To determine whether a ready-to-eat breakfast cereal is fortified, check the ingredients statement. Fortified cereals must contain:


- the **five enrichment nutrients** (iron, thiamin, riboflavin, niacin and folic acid); and
- **additional nutrients** such as calcium and vitamins A and C.

When fortification nutrients are added to cereals, they will either be listed directly in the ingredients statement or in the ingredients statement under “Vitamins and Minerals.”

Manufacturers can choose which additional nutrients to use for fortification. Different cereal brands may list different fortification nutrients. The USDA does not specify a minimum number of nutrients or a minimum percentage for the level of fortification for breakfast cereals.

## Ready-to-Eat Breakfast Cereals

- Cereals containing **ONLY ENRICHED GRAINS, BRAN OR GERM** are not WGR and do not credit
- Cereals that contain **MORE THAN 2 PERCENT** of these ingredients only credit if
  - ▶ whole grain is first ingredient **AND**
  - ▶ cereal is fortified



Connecticut State Department of Education • Revised November 2015 83

Effective with this current school year (2014-15), cereal products that contain only enriched grains, bran or germ no longer credit toward the grains component because they are not WGR. Examples include:

- enriched cream of wheat;
- enriched farina;
- 100 percent bran cereals (not fortified raisin bran cereals); and
- wheat germ.

Bran is a noncreditable grain ingredient. Ready-to-eat breakfast cereals containing 100 percent bran are not creditable, even if they are fortified.

However, cereals such as raisin bran or bran flakes that contain bran at levels of more than two percent of the product formula are creditable if the cereal contains a **whole grain as the first ingredient** and the cereal is **fortified**.

## Crediting Breakfast Cereals

**U.S. Department of Agriculture (USDA) School Nutrition Programs**

**CREDITING BREAKFAST CEREALS**

Ready-to-eat (RTE) and cooked breakfast cereals served in the National School Lunch Program (NSLP) and School Breakfast Program (SBP) must be whole grain-rich (WGR) and meet the minimum serving size requirements. For more information, see the Connecticut State Department of Education's (CSDE) handbook, *Options for Whole Grain-rich Foods*, and the USDA's source equivalent chart, *Whole Grain-rich Cereals Equivalent for School Nutrition Programs*.

**SERVING SIZES FOR BREAKFAST CEREALS**

Serving sizes for cereals are based on the USDA's source equivalent chart. This chart divides products into three groups (A-C) based on their average grain content. Cooked breakfast cereals such as oatmeal are in group H. Cold RTE breakfast cereals are in group I. Both groups require 28 grams or 1 ounce of product to credit as 1 source equivalent of grains.

- Cooked Breakfast Cereals:** Cereal grains in group H (such as oats, buckwheat and speltz) are served cooked and water is added in preparation. They credit based on the cooked volume equivalent of 1/2 cup. All cooked breakfast cereals must meet the WGR criteria and list a whole grain as the primary ingredient. Cooked 100 percent whole grain breakfast cereals are not required to be fortified. For more information, see the CSDE's handbook, *Options for Whole Grains*.
- RTE Breakfast Cereals:** One source equivalent of RTE breakfast cereals equals 1 cup of flakes or rounds, 1 1/2 cups of puffed and 1/2 cup of granola. Many granolas can credit RTE breakfast cereals based on either volume (cup) or weight (grams). If the appropriate volume of cereal weighs less than 28 grams, it credits as 1 source equivalent, e.g., 1 cup of flaked cereal that weighs 28 grams credits as 1 source equivalent.

**WGR REQUIREMENT FOR BREAKFAST CEREALS**

To be WGR, breakfast cereals must list a whole grain as the first ingredient and the cereal must be fortified. Fortified breakfast cereals contain five nutrients (iron, thiamin, riboflavin, niacin and folic acid) lost during the refining process, as well as additional vitamins and minerals that do not exist naturally in grains. To determine if a RTE breakfast cereal is fortified, check the ingredients statement. Fortified cereals must contain:

- the five enrichment nutrients (iron, thiamin, riboflavin, niacin and folic acid); and
- additional nutrients such as vitamins A, C, E, K, B<sub>6</sub>, pyridoxine hydrochloride, vitamin B<sub>12</sub> (cobalamin), pantothenic acid, phosphorus, magnesium and zinc. When fortification nutrients are added to cereals, they will either be listed directly in the ingredients statement or in the ingredients statement under "Vitamins and Minerals."

All fortified cereals must contain the five enrichment nutrients. However, manufacturers can choose which additional nutrients to use for fortification. Different cereal brands may list different fortification nutrients. The USDA does not specify a minimum number of nutrients or a minimum percentage for the level of fortification for breakfast cereals.

Cooked or RTE breakfast cereals that are 100 percent whole grains are not required to be fortified.

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[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/credit\\_cereals.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/credit_cereals.pdf)


Connecticut State Department of Education • Revised November 2015

84

This handout provides more information on identifying breakfast cereals that meet the WGR requirement. It is available on the CSDE's Crediting Foods Web page, at the link indicated on this slide.

## Worksheet 3: Is it WGR?

Indicate if each food item meets the WGR requirements for school meals **OR** if you need to obtain a PFS from the manufacturer to provide more information



Connecticut State Department of Education • Revised November 2015

85

Now let's evaluate some products to see whether they meet the WGR requirements for school meals.


Take out worksheet 3 – Is it whole grain-rich? In your small group, look at each food item and determine if it meets the WGR requirements or if you need to obtain a PFS from the manufacturer to provide more information.

**INSTRUCTOR NOTES:**

- Divide participants into seven groups (number off). Assign one food to each group.
- Give groups a few minutes to review the ingredients list for their food, and determine if the product is WGR.
- When the groups are done, have each group report their answers. The tallest person is the reporter.
- **Modification:** If time is short, have people stay in table groups or do the activity together as one large group. You can also make fewer groups and do some foods together, for example, make five groups and do the last two together as one large group.

**Product 1 – WGR?**

**Whole Wheat Bagel**  
Ingredients: Whole wheat flour, sugar, wheat gluten. Contains 2% or less of each of the following: honey, salt, yellow corn flour, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes




- Criterion 1 WHOLE GRAIN
- Criterion 2 ENRICHED
- Criterion 3 NONCREDITABLE

Connecticut State Department of Education • Revised November 2015 86

Does the whole-wheat bagel meet the WGR definition?

**Product 1 – WGR?** **YES**

**Whole Wheat Bagel**  
Ingredients: **WHOLE WHEAT FLOUR**, sugar, wheat gluten. **Contains 2% or less of each of the following:** honey, salt, **YELLOW CORN FLOUR**, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes



- Criterion 1 WHOLE GRAIN**
- Criterion 2 ENRICHED**
- Criterion 3 NONCREDITABLE**

Connecticut State Department of Education • Revised November 2015 87

Yes. This product is WGR. Whole wheat flour is the first and only grain ingredient. This product contains one source of noncreditable grains (yellow corn flour), listed after the statement “contains 2% or less of.” This product meets the WGR requirement and a PFS is not required.

**INSTRUCTOR NOTES:** The definition below is only for your background information. You do not need to provide this information unless someone asks a question about it.


**Wheat gluten** is the protein component of the wheat grain, that helps baked goods hold their shape. It is neither a creditable or noncreditable grain. When the glutes in wheat are stretched out through the kneading or mixing process, they form little pockets which can then be inflated by the gases released by the leavening agent. When these air pockets inflate, the dough expands or rise. When baked, gluten hardens, which allows the bread to hold its shape and gives it its firm texture.



## Product 2 – WGR?

**BRAND A White Whole-Wheat Bread Sticks**

**Ingredients:** Water, whole wheat flour, unbleached unbromated enriched wheat flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, enzymes, folic acid), honey, yeast, salt, dough conditioners (mono & diglycerides, datem, l-cysteine, ascorbic acid, enzymes), modified food starch, fava bean flour, flavor (natural flavor, modified vegetable gum, hydrolyzed starch, maltodextrin), malted barley flour, dextrose, rye flour.



- Criterion 1 WHOLE GRAIN
- Criterion 2 ENRICHED
- Criterion 3 NONCREDITABLE

Connecticut State Department of Education • Revised November 2015

88

Does Brand A of the white whole-wheat bread sticks meet the WGR definition?

**Product 2 – WGR?**

**Need PFS \***

**BRAND A White Whole-Wheat Bread Sticks**  
Ingredients: Water, **WHOLE WHEAT FLOUR, UNBLEACHED UNBROMATED ENRICHED WHEAT FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE, RIBOFLAVIN, ENZYMES, FOLIC ACID)**, honey, yeast, salt, dough conditioners (mono & diglycerides, datem, l-cysteine, ascorbic acid, enzymes), **MODIFIED FOOD STARCH, FAVA BEAN FLOUR**, flavor (natural flavor, modified vegetable gum, hydrolyzed starch, maltodextrin), **MALTED BARLEY FLOUR, dextrose, RYE FLOUR.**



**Criterion 1 WHOLE GRAIN**  
 **Criterion 2 ENRICHED**  
 **Criterion 3 NONCREDITABLE**

\* PFS must document that combined weight of modified food starch, fava bean flour, malted barley flour and rye flour is less than 3.99 grams

Connecticut State Department of Education • Revised November 2015 89


This product may or may not meet the WGR definition.

This product lists a whole grain (whole-grain wheat flour) as the first ingredient after water. However, it contains four sources of noncreditable grains: modified food starch, fava bean flour, malted barley flour, rye flour.

If the combined weight of all noncreditable grains is less than 3.99 grams, the product meets the WGR definition. This must be documented by a PFS from the manufacturer that is on company letterhead and is signed by an official company representative.

## Product 3 – WGR?

**BRAND B White Whole-Wheat Bread Sticks**  
**Ingredients:** whole wheat flour, water, enriched unbleached wheat flour (wheat flour, malted barley flour, niacin, iron as ferrous sulfate, thiamine mononitrite, enzyme, riboflavin, folic acid), yeast, sugar, wheat gluten. **Contains less than 2%** of the following: soybean oil, salt, oat fiber, honey, sodium stearoyl lactylate, datem, ascorbic acid, enzyme. May contain milk, soy, egg and sesame.



- Criterion 1 WHOLE GRAIN
- Criterion 2 ENRICHED
- Criterion 3 NONCREDITABLE


Connecticut State Department of Education • Revised November 2015

90

Does Brand B of the white whole-wheat bread sticks meet the WGR definition?

**Product 3 – WGR?** YES

**BRAND B White Whole-Wheat Bread Sticks**  
**Ingredients:** **WHOLE WHEAT FLOUR**, water, **ENRICHED UNBLEACHED WHEAT FLOUR (WHEAT FLOUR, MALTED BARLEY FLOUR, NIACIN, IRON AS FERROUS SULFATE, THIAMINE MONONITRITE, ENZYME, RIBOFLAVIN, FOLIC ACID)**, yeast, sugar, wheat gluten. **Contains less than 2%** of the following: soybean oil, salt, **OAT FIBER**, honey, sodium stearoyl lactylate, datem, ascorbic acid, enzyme. May contain milk, soy, egg and sesame.



- Criterion 1 WHOLE GRAIN**
- Criterion 2 ENRICHED**
- Criterion 3 NONCREDITABLE**

Connecticut State Department of Education • Revised November 2015 91

Yes. This product is WGR. Whole wheat flour is the first ingredient. The remaining grain is enriched flour.

This product contains one noncreditable grain (oat fiber) but it is listed **after** “2 percent or less” of the product formula, so there is no need to request additional information from the manufacturer. Therefore, this product meets the WGR requirement and a PFS is not required.


This shows the importance of checking each individual product. You cannot assume that similar products are the same. Even though products 4 and 5 are both white whole-wheat bread sticks, they have different ingredients and one requires a PFS while the other does not.

**INSTRUCTOR NOTES:** The definition below is only for your background information. You do not need to provide this information unless someone asks a question about it.

**Wheat gluten** is the protein component of the wheat grain, that helps baked goods hold their shape. It is neither a creditable or noncreditable grain. When the glutes in wheat are stretched out through the kneading or mixing process, they form little pockets which can then be inflated by the gases released by the leavening agent. When these air pockets inflate, the dough expands or rise. When baked, gluten hardens, which allows the bread to hold its shape and gives it its firm texture.

## Product 4 – WGR?

**Whole-Grain Cereal Bar**  
**Ingredients:** whole grain rolled oats, brown sugar, crisp brown rice, whole grain rolled wheat, soybean oil, whole wheat flour, almonds, water, freeze dried bananas, whole corn flour, sodium bicarbonate, malted barley extract, soy lecithin, natural flavor, caramel color, alpha tocopherol acetate, BHT.



- Criterion 1 **WHOLE GRAIN**
- Criterion 2 **ENRICHED**
- Criterion 3 **NONCREDITABLE**


Connecticut State Department of Education • Revised November 2015

92

Does the whole-grain cereal bar meet the WGR definition?

**Product 4 – WGR?** **YES**

**Whole-Grain Cereal Bar**  
**Ingredients:** **WHOLE GRAIN ROLLED OATS**, brown sugar, **CRISP BROWN RICE**, **WHOLE GRAIN ROLLED WHEAT**, soybean oil, **WHOLE WHEAT FLOUR**, almonds, water, freeze dried bananas, **WHOLE CORN FLOUR**, sodium bicarbonate, malted barley extract, soy lecithin, natural flavor, caramel color, alpha tocopherol acetate, BHT.



- Criterion 1 WHOLE GRAIN**
- Criterion 2 ENRICHED**
- Criterion 3 NONCREDITABLE**


Connecticut State Department of Education • Revised November 2015 93

Yes. This product is WGR.

This cereal bar contains a whole grain as the first ingredient (whole-grain oats), and all other grains (crisp brown rice, whole-grain rolled wheat, whole-wheat flour and whole corn flour) listed are also whole. There are no noncreditable grains.

## Product 5 – WGR?

**Reduced Carb Wheat Tortilla**  
Ingredients: Water, modified food starch, whole-wheat flour, wheat gluten, powdered cellulose, hydrogenated soybean oil, caramel color, wheat protein isolate (wheat gluten, lactic acid, sulfite), sodium bicarbonate, **contains 1% or less of salt**, cellulose gum, cornstarch, distilled monoglycerides.



- Criterion 1 WHOLE GRAIN
- Criterion 2 ENRICHED
- Criterion 3 NONCREDITABLE


Connecticut State Department of Education • Revised November 2015

94

Does the reduced carb wheat tortilla meet the WGR definition?

**Product 5 – WGR?** **NO**

**Reduced Carb Wheat Tortilla**  
Ingredients: Water, **MODIFIED FOOD STARCH**, **WHOLE-WHEAT FLOUR**, wheat gluten, powdered cellulose, hydrogenated soybean oil, caramel color, wheat protein isolate (wheat gluten, lactic acid, sulfite), sodium bicarbonate, **contains 1% or less of salt**, cellulose gum, **CORNSTARCH**, distilled monoglycerides.



Criterion 1 **WHOLE GRAIN**  
 Criterion 2 **ENRICHED**  
 Criterion 3 **NONCREDITABLE**

Connecticut State Department of Education • Revised November 2015 95

No. This product is not WGR.

This product contains modified food starch as the first ingredient after water, and also contains cornstarch. Modified food starch and cornstarch are noncreditable grains, and must be less than 2 percent of the product formula for the product to count as the grains component.




## Product 6 – WGR?

**Whole-GrainReady-to-Eat Cereal**

**Ingredients:** whole grain wheat, sugar, brown rice flour, whole grain oats, honey, canola oil, maltodextrin, salt, corn syrup, cinnamon, barley malt syrup, barley malt extract, color added, soy lecithin, artificial flavor, baking soda, trisodium phosphate, vitamin E (mixed tocopherols) and BHT added to preserve freshness.

**Vitamins and Minerals:** Calcium Carbonate, Vitamin E acetate, a B vitamin (niacinamide), Vitamin C (sodium ascorbate), Iron (a mineral nutrient), Vitamin B6 (pyridoxine hydrochloride), Vitamin B2 (riboflavin), Vitamin B1 (thiamin mononitrate), Vitamin A (palmitate), Vitamin B12, Vitamin D3.



- Criterion 1 WHOLE GRAIN
- Criterion 2 ENRICHED
- Criterion 3 NONCREDITABLE

Connecticut State Department of Education • Revised November 2015 96


Does the whole-grain cereal meet the WGR definition?

**Product 6 – WGR?** **YES**

**Whole-Grain Ready-to-Eat Cereal**

**Ingredients:** **WHOLE GRAIN WHEAT**, sugar, **BROWN RICE FLOUR**, **WHOLE GRAIN OATS**, honey, canola oil, maltodextrin, salt, corn syrup, cinnamon, barley malt syrup, barley malt extract, color added, soy lecithin, artificial flavor, baking soda, trisodium phosphate, vitamin E (mixed tocopherols) and BHT added to preserve freshness.

**Vitamins and Minerals:** Calcium Carbonate, Vitamin E acetate, a B vitamin (niacinamide), Vitamin C (sodium ascorbate), Iron (a mineral nutrient), Vitamin B6 (pyridoxine hydrochloride), Vitamin B2 (riboflavin), Vitamin B1 (thiamin mononitrate), Vitamin A (palmitate), Vitamin B12, Vitamin D3.



- Criterion 1 WHOLE GRAIN**
- Criterion 2 ENRICHED**
- Criterion 3 NONCREDITABLE**

Connecticut State Department of Education • Revised November 2015 97

Yes. This product is WGR.

To meet the WGR criteria, ready-to-eat (RTE) breakfast cereals must list a whole grain first in the ingredient list and the cereal must be fortified. This cereal meets both requirements.

## Product 7 – WGR?

**Whole-Grain Blueberry Muffin**

**Ingredients:** whole wheat flour, sugar, eggs, water, blueberries, enriched flour (flour, malted barley flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), invert sugar, soybean oil, contains 2% or less of: palm oil, canola oil, propylene glycol mono- and diesters of fats and fatty acids, oat fiber, leavening (baking soda, sodium aluminum phosphate, monocalcium phosphate), mono- and diglycerides, modified food starch, potassium sorbate (preservative), sodium alginate, salt, soy lecithin, natural and artificial flavor, sodium stearoyl lactylate, wheat starch, blackberry juice concentrate, blueberry juice concentrate, malic acid, enzymes.

**Contains:** wheat, egg, soy.



- Criterion 1 WHOLE GRAIN
- Criterion 2 ENRICHED
- Criterion 3 NONCREDITABLE

Connecticut State Department of Education • Revised November 2015

98

Does the whole-grain blueberry muffin meet the WGR definition?

**Product 7 – WGR?**

**Need PFS \***

**Whole-Grain Blueberry Muffin**  
Ingredients: **WHOLE WHEAT FLOUR**, sugar, eggs, water, blueberries, **ENRICHED FLOUR (FLOUR, MALTED BARLEY FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE, RIBOFLAVIN, FOLIC ACID)**, invert sugar, soybean oil, **contains 2% or less of:** palm oil, canola oil, propylene glycol mono- and diesters of fats and fatty acids, **OAT FIBER**, leavening (baking soda, sodium aluminum phosphate, monocalcium phosphate), mono- and diglycerides, **MODIFIED FOOD STARCH**, potassium sorbate (preservative), sodium alginate, salt, soy lecithin, natural and artificial flavor, sodium stearoyl lactylate, **WHEAT STARCH**, blackberry juice concentrate, blueberry juice concentrate, malic acid, enzymes. Contains: wheat, egg, soy.



**Criterion 1 WHOLE GRAIN**  
 **Criterion 2 ENRICHED**  
 **Criterion 3 NONCREDITABLE**

\* PFS must document that combined weight of oat fiber, modified food starch and wheat flour is less than 3.99 grams

Connecticut State Department of Education • Revised November 2015 99


This product may or may not meet the WGR definition.

This product lists a whole grain (whole-wheat flour) as the first ingredient and contains enriched flour. However, it contains three sources of noncreditable grains: oat fiber, modified food starch and wheat starch.

If the combined weight of the three noncreditable grains is less than 3.99 grams, the product meets the WGR definition. This must be documented by a PFS from the manufacturer that is on company letterhead and is signed by an official company representative.

**Product 8 – WGR?**

**Whole-Grain Waffles**  
Ingredients: whole wheat flour, unbleached, enriched wheat flour (wheat flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid), water, lecithin, eggs, sugar, baking powder, whey, soy flour, salt, natural flavor.



- Criterion 1 WHOLE GRAIN
- Criterion 2 ENRICHED
- Criterion 3 NONCREDITABLE

Connecticut State Department of Education • Revised November 2015 100

Do the whole-grain waffles meet the WGR definition?

**Product 8 – WGR?**

**Whole-Grain Waffles**

**Ingredients:** WHOLE WHEAT FLOUR, UNBLEACHED, ENRICHED WHEAT FLOUR (WHEAT FLOUR, NIACIN, IRON, THIAMIN MONONITRATE, RIBOFLAVIN, FOLIC ACID), water, lecithin, eggs, sugar, baking powder, whey, **SOY FLOUR**, salt, natural flavor.

**Criterion 1 WHOLE GRAIN**  
 **Criterion 2 ENRICHED**  
 **Criterion 3 NONCREDITABLE**

\* PFS must document that soy flour weighs less than 3.99 grams

Need PFS \*

Connecticut State Department of Education • Revised November 2015 101

This product may or may not meet the WGR definition.

Whole wheat flour is the first ingredient (criterion 1) and the product contains enriched flour (criterion 2).

This product contains one noncreditable grain (soy flour). To determine if this product meets criterion 3, the menu planner must obtain a PFS from the manufacturer.

If the combined weight of the soy flour is less than 3.99 grams, this product complies with the noncreditable grains limit (criterion 3) and meets the WGR definition.

Products containing noncreditable grains in amounts more than 2 percent of the product formula (3.99 grams for groups A-G) cannot contribute toward the reimbursable meal.




Because the crediting the requirements for grains are complicated, it is important for schools to ensure that all grains products used on school menus comply.

The procurement process is the best time to address the WGR requirements and ensure that grain products comply with the limit for noncreditable grains. Schools can explicitly include the WGR requirements, including the limit for noncreditable grains, in their bid solicitation documents and accompanying bid specifications.

It is also advisable to include a copy of the USDA PFS for grains so that bidders are aware of the information required to document meal pattern compliance.

## Serving Sizes for Grains

- Menu planner determines **SERVING SIZES** and **NUMBER** of servings
- Minimum of **¼ OUNCE EQUIVALENT** to count toward daily total
  - ▶ Amounts less than ¼ ounce equivalent **NOT** included in daily and weekly grains
- Can offer **COMBINATION** of various grains to meet daily total



Connecticut State Department of Education • Revised November 2015 103

After you have determined that a product meets the WGR criteria, you must ensure that the serving size meets the meal pattern requirements for the grains component.

The menu planner determines the **servicing sizes** and the number of **servings** of grains needed to meet the meal pattern requirement 1 ounce equivalent daily for grades K-5 and 6-8, and 2 ounce equivalents daily for grades 9-12).

A minimum of ¼ ounce equivalent must be served to count toward the total grains, with the rest of the minimum required portion coming from other grains in the meal. Grains offered in amounts less than ¼ ounce equivalent are **not** included in the calculation of daily and weekly grain offerings.

You can serve smaller portions of grains to meet the total grains requirement. For example, for grades 9-12, you can choose to offer 1 ounce equivalent of pasta (½ cup) and a 1-ounce equivalent whole-grain roll. The menu planner determines the number of grains offered, keeping in mind that the smallest creditable amount is ¼ ounce equivalent.

When we talk about offer versus serve later on, you will see that you may want to offer the minimum daily required serving size for each grade group as one food item.



## Two Methods to Determine Serving Sizes for Baked Goods (Groups A-G)

### METHOD 1

Use **WEIGHT OR VOLUME** in  
USDA ounce equivalents chart

#### ■ To use this method

- ▶ all grains must be **CREDITABLE**  
(whole grain or enriched)
- ▶ combined total of any  
noncreditable grains must be  
**no more than 3.99 grams**



The image shows a portion of the USDA Ounce Equivalents Chart for School Nutrition Programs. It is a table with multiple columns and rows, organized into sections for different food groups. The visible sections include 'Grains', 'Vegetables', and 'Fruits'. Each section lists various food items and their corresponding ounce equivalents. For example, under 'Grains', it lists 'Whole grain bread, 1 slice' as 1 ounce equivalent and 'White bread, 1 slice' as 1/2 ounce equivalent. The chart is used to determine the appropriate serving size for various food items based on their weight or volume.

The menu planner has two choices for determining the appropriate serving size for grain products in groups A-G of the USDA ounce equivalents chart. One method uses the weights or volumes in the USDA ounce equivalents chart and the other uses the total weight of creditable grains.

- **Method 1 Weights or Volumes:** Use either the weights or volumes listed in the USDA ounce equivalents chart to determine the appropriate serving size. This method can be used only if all grains in the product are creditable (i.e., whole or enriched) and the combined total of any noncreditable grains is no more than 3.99 grams.

## Two Methods to Determine Serving Sizes for Baked Goods (Groups A-G)

**METHOD 2**  
Determine **WEIGHT** of  
**CREDITABLE** grains

- Requires **MANUFACTURER DOCUMENTATION (PFS)** for commercial products
- Requires **STANDARDIZED RECIPE** for school-made products



Connecticut State Department of Education • Revised November 2015 105

**Method 2 Creditable Grains:** Determine the ounce equivalents of a product by calculating the creditable grains per serving.

For commercial products, this method requires documentation from the manufacturer to certify the grams of creditable grains per portion, i.e., a product formulation statement.


**Ask participants:** Does anyone bake lunch items from scratch, such as muffins or breads? For school-made products, this method requires a standardized recipe.

The combined total of any noncreditable grains must be less than 3.99 grams. Menu planners must use method 2 if:

- the manufacturer claims that a product can provide the minimum creditable grains per portion using a serving size less than the weights given in the USDA ounce equivalents chart;
- a product is made from scratch on site and the menu planner calculates the serving size based on grams of creditable grains instead of using ounce equivalents; or
- a product does not fit into one of the groups of the USDA ounce equivalents chart.

**For both methods, round DOWN all calculations to nearest  $\frac{1}{4}$  ounce equivalent**

**Whole-wheat Roll, 1.49 ounces**



**Group B: 1 ounce equivalent = 28 grams (1 ounce)  
Credits as 1.25 ounce equivalents of grains**

Connecticut State Department of Education • Revised November 2015 106

For both methods, menu planners must round down all amounts to the nearest  $\frac{1}{4}$  ounce equivalent when counting grains toward the daily and weekly requirements.

Here is an example. The menu planner wants to use a 1.49-ounce whole-wheat roll for the grains component.

**Ask participants:** How many ounce equivalents of grains can the menu planner meet with this roll?

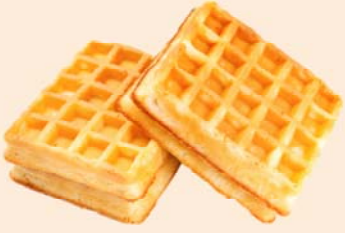
Rolls are in group B, with all other bread items. For group B, 1 ounce of product provides 1 ounce equivalent of grains.

The menu planner can credit the roll as 1.25 ounce equivalents of grains (1.49 ounces rounded down to the nearest quarter).

**INSTRUCTOR NOTES:** Click to show the answer.

**For both methods, round DOWN all calculations to nearest ¼ ounce equivalent**

**WGR Waffles, 2.6 ounces**



**Group C:**  
**1 ounce equivalent = 34 grams (1.2 ounces)**  
**2.6 ounces ÷ 1.2 ounces = 2.2 ounce equivalents**  
**Credits as 2 ounce equivalents of grains**

Connecticut State Department of Education • Revised November 2015 107

The menu includes 2.6 ounces of WGR waffles.

**Ask participants:** How many ounce equivalents of grains?


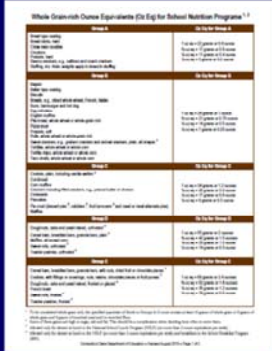
Look at your ounce equivalent chart. Waffles are in Group C, which requires 1.2 ounces to equal 1 ounce equivalent. The two waffles weigh 2.6 ounces. Divide 2.6 ounces by 1.2 ounces per ounce equivalent to equal 2.2 ounce equivalents, which rounds down to 2 ounce equivalents (2.2 ounces rounded down to the nearest quarter).

Key message: 1 ounce of a product is not always 1 ounce equivalent.

**INSTRUCTOR NOTES:** Click to show the answer.

## Method 1 – Ounce Equivalents Chart

- Use serving sizes **(WEIGHTS)** in USDA ounce equivalents chart
- Nine groups based on amount that provides **1 OUNCE EQUIVALENT** of grains



Connecticut State Department of Education • Revised November 2015 108

For method 1, schools must use the USDA ounce equivalents chart, *Whole Grain-rich Ounce Equivalents Requirements for School Nutrition Programs*. Take a look at your ounce equivalents chart.

The USDA ounce equivalents chart provides minimum serving sizes (ounce equivalents) for a wide variety of grain products. It divides products into **nine groups (A-I)** based on their **average grain content**.

The weight needed for each group to provide 1 ounce equivalent of grains varies because different types of foods contain different concentrations of whole and enriched grains. Grains with fillings, frosting, toppings, nuts, chocolate chips, dried fruit and other similar ingredients require a larger serving to meet the minimum grain content.

- For groups A-G, 1 ounce equivalent of grains must provide **16 grams** of creditable grains. This can be either at least 16 grams of whole grains or at least 8 grams of whole-grains and 8 grams of enriched grains.
- For groups H-I, 1 ounce equivalent of grains must provide **28 grams** of creditable grains or meet the specified weights and volumes.

### Weight Required for 1 Ounce Equivalent

 <b>Cereal 1 ounce</b> (1 cup for flakes and rounds, 1 ¼ cups for puffed cereal and ¾ cup for granola)	 <b>Toast 1 ounce</b>	 <b>Graham Crackers 1 ounce</b>	 <b>Corn muffin 1.2 ounces</b>
 <b>Waffles 1.2 ounces</b>	 <b>Blueberry Muffin 2 ounces</b>	 <b>French Toast 2.4 ounces</b>	 <b>Frosted Sweet Roll 2.4 ounces</b>

Connecticut State Department of Education • Revised November 2015 109


This slide shows some examples of the amounts of different grain products that are required to meet 1 ounce equivalent.

For example, looking at the ounce equivalents chart handout, you will see that toast is in Group B where 1 ounce of bread equals 1 ounce equivalent, while a blueberry muffin is in Group D where 2 ounces of weight is needed to equal 1 ounce equivalent.

**Ask participants:** Why do you think a corn muffin needs only 1.2 ounces to provide 1 ounce equivalent but other muffins such as blueberry muffins need 2 ounces to provide 1 ounce equivalent? The servings sizes in the ounce equivalents chart are based on the amount of the product that provides a specific amount of creditable grains (**16 grams** for groups A-G and **28 grams** for groups H-I). Additional ingredients such as fruits dilute the grains so you need a larger serving size to provide the minimum amount of grains.

**How much equals 1 ounce equivalent?**

**Whole-wheat Bagel**



**GROUP B**  
**1 ounce equivalent equals 28 grams (1 ounce)**

Connecticut State Department of Education • Revised November 2015 110

Let's look at some more examples. Refer to your handout, ounce equivalents chart.

**Ask participants:** What is serving size of whole-wheat bagel equals 1 ounce equivalent of grains?

Bagels are in group B: 28 grams (1 ounce) provide 1 ounce equivalent of grains.

**INSTRUCTOR NOTES:** Click to show the answer.

**How much equals 1 ounce equivalent?**

**Granola Bars, Plain**



**GROUP D**  
**1 ounce equivalent = 55 grams (2 ounces)**

Connecticut State Department of Education • Revised November 2015 111

Let's look at some more examples. Refer to your HANDOUT, ounce equivalents chart.

**Ask participants:** What serving size of plain granola bars equals 1 ounce equivalent of grains?


Plain granola bars are in group D: 55 grams (2 ounces) provides 1 ounce equivalent of grains.

**INSTRUCTOR NOTES:** Click to show the answer.



**How much equals 1 ounce equivalent?**

**Oatmeal**



**GROUP H**  
**1 ounce equivalent =**  
**½ cup cooked or**  
**28 grams (1 ounce) dry**

Connecticut State Department of Education • Revised November 2015 112


**Ask participants:** What serving size of oatmeal equals 1 ounce equivalent of grains?

Oatmeal is in group H: ½ cup cooked or 28 grams (1 ounce) dry provide 1 ounce equivalent of grains.

**INSTRUCTOR NOTES:** Click to show the answer.

## Method 2 – Creditable Grains

- Calculate **GRAMS OF CREDITABLE GRAINS** per serving
- Requires documentation from
  1. an original **CN LABEL** from the product carton if the grains are part of a meat/meat alternate product
  - OR**
  2. a **PFS** signed by an official of the manufacturer



Connecticut State Department of Education • Revised November 2015 113

For method 2, creditable grains, the school food authority must determine the ounce equivalents of a product by calculating the creditable grains per serving. This method requires documentation from the manufacturer to certify the **grams of creditable grains** per portion. Creditable grains are whole or enriched.

This documentation must be either:

- an original CN label from the product carton if the grains are part of a meat/meat alternate product; or
- a PFS signed by an official of the manufacturer.

There are several situations when you must use method 2. Menu planners must use method 2 if:

- the manufacturer claims that a product can provide the minimum creditable grains per portion using a serving size less than the weights given in the USDA ounce equivalents chart;
- a product is made from scratch on site and the menu planner calculates the serving size based on grams of creditable grains instead of using ounce equivalents; or
- a product does not fit into one of the groups of the USDA ounce equivalents chart.

## Calculation Methods for Crediting Grains

U.S. Department of Agriculture (USDA) School Nutrition Programs

### CALCULATION METHODS FOR CREDITING GRAINS

Grains must be whole grain-rich (WGR) to meet the meal patterns for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). WGR products contain at least 50 percent whole grains, any other grain ingredients are included and the combined weight of all noncreditable grains cannot exceed 3.50 grams for groups A-C (school grade) or 6.99 grams for groups H (total grains) and I (breakfast) (total grains) of the USDA's meal patterns chart, *WGR Grains Chart Supplement for School Nutrition Programs*. For more information, see the Connecticut State Department of Education's (CSDE) handbook, *Criteria for WGR Grains* Page 1.

#### CHOOSING A CALCULATION METHOD

Menu planners have two options for calculating the contribution of grain products toward the USDA meal patterns. Method 1 uses the weights or volume in the USDA's meal patterns chart and method 2 uses the total weight of creditable grain (calcs) and included in the product (see page 2) and 4. Menu planners can choose to use either calculation method but must document which method is used for each product. This information will be reviewed by the CSDE during the administrative review of the school food authority's (SFA) school nutrition programs.

Menu planners must use method 2 if any of the following apply:

- The manufacturer claims that a product can provide the minimum creditable grain per portion (16 grams for groups A-C or 28 grams for groups H and I) using a serving size that is less than the weight grams in the USDA's meal patterns chart.
- A product does not fit into one of the nine groups of the USDA's meal patterns chart.
- A product is made from scratch on site and the menu planner chooses to calculate the serving size based on grams of creditable grain instead of using ounce equivalents.

The USDA does not require schools to use one method for all grain menu items. Menu planners can choose different methods for evaluating different products. The SFA must maintain documentation that shows how the menu planner determined the crediting information for all grains on the menu. For method 2, menu planners must obtain the information from the manufacturer's PPS for all commercial grain products served as part of reimbursable school meals.

When menu planners choose a calculation method for a specific product, the same calculation method must be used each time that same product is on the menu for that grade group. For example, if the menu planner uses method 2 to determine the crediting of a whole grain bagel at the high school, that same bagel on any high school menu must always be credited using method 2. However, the menu planner can choose to use a different calculation method for the same bagel at middle and elementary schools.

The CSDE strongly recommends choosing one calculation method to be consistent in crediting grain products. This will greatly simplify the SFA's menu planning and documenting compliance with the meal patterns requirements for grains.

Credited (US Department of Education - Revised August 2014 - Page 1 of 5)

[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/graincalc.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/graincalc.pdf)

Connecticut State Department of Education • Revised November 2015


114

We won't be doing any crediting calculations with these methods today, but the CSDE's handout, "Calculation Methods for Crediting Grains," describes the two methods schools must use to determine whether grains are creditable and how much to serve to meet the minimum serving size requirements. It is available on the CSDE's Crediting Foods Web page, at the link indicated on this slide.



## M/MA Grain Substitutes

- **Optional**
- **Can only be offered after **MINIMUM DAILY** grains (1 ounce equivalent)**
- **Minimum of  $\frac{1}{4}$  OZ EQ to count toward daily total**
- **Schools can choose to offer**
  - ▶ **IN PLACE** of grains
  - ▶ **as an EXTRA** item



Connecticut State Department of Education • Revised November 2015 116

The breakfast meal pattern does not require meat/meat alternates. However, menu planners can choose to offer meat/meat alternates as a grain substitution after offering the minimum daily grains (1 ounce equivalent). One ounce equivalent of meat/meat alternate substitutes for 1 ounce equivalent of grains. A minimum of  $\frac{1}{4}$  ounce equivalent must be served to count toward the total requirements. Meat/meat alternate substitutions offered in amounts less than  $\frac{1}{4}$  ounce equivalent are **not** included in the calculation of daily and weekly grain offerings.

There are two options for crediting meat/meat alternates served at breakfast:


1. Offer a serving of meat/meat alternate **in place** of a serving of grains as long as 1 ounce equivalent of grains is also served. For this option, the meat/meat alternate counts with grains toward the weekly grains range. Meat/meat alternates offered in place of grains count as grain food items for OVS.
2. Offer a serving of meat/meat alternate as an **extra** food that does not count toward the weekly grains range. Meat/meat alternates offered as extras do not count as a food item for OVS.

For both options, meat/meat alternates must count toward the weekly dietary specifications.

Why are there both options? USDA offers the option to count or not count meat/meat alternates because there is no meat/meat alternates component requirement and therefore no requirement schools to credit meat/meat alternates if served. The USDA does not encourage or discourage one approach over the other.

### M/MA Serving Sizes

- Products **WITHOUT** binders and extenders credit based on **SERVING WEIGHT**
- Products **WITH** binders and extenders credit based only on **ACTUAL AMOUNT OF MEAT**
  - ▶ Require PFS from manufacturer



Connecticut State Department of Education • Revised November 2015 117

Meat products **without** binders and extenders credit on an **ounce-per-ounce** basis (actual serving weight). This means that 1 ounce of the meat product provides 1 ounce equivalent of meat/meat alternates.


Meat products **with** binders and extenders credit based only on the **actual amount** of meat without the weight of the binders and extenders.

- For example, if a turkey sausage weighs 1 ounce and contains modified food starch as an ingredient, it cannot credit as 1 ounce equivalent of meat/meat alternates. This product would credit based on the actual percentage of ground meat (such as beef, chicken, turkey or pork) in the product formula. To determine this information, schools must obtain a product formulation statement from the manufacturer.

To credit based on actual serving weight, luncheon meats, cold cuts, hot dogs, knockwurst and Vienna sausage must be all meat without binders or extenders or added ingredients such as water or meat broth.

## 1 Ounce Equivalent of M/MA

■ 1 ounce of cooked lean meat, poultry or fish	■ 2 tablespoons of nut butters
■ 1 ounce of natural or process cheese *	■ 1 ounce of nuts or seeds
■ 2 ounces of cottage or ricotta cheese, cheese food/spread and cheese substitute *	■ 2.2 ounces (¼ cup) of commercial tofu (containing at least 5 grams of protein)
■ ¼ cup of cooked beans and peas (legumes)	■ ½ cup of yogurt or soy yogurt *
■ ½ large egg	■ 1 ounce of alternate protein products (APP)



\* Low-fat recommended

Connecticut State Department of Education • Revised November 2015

118

The serving sizes for meat/meat alternates are provided in **ounce equivalents**, which is the amount of meat or meat alternate that is equivalent to one ounce of cooked lean meat, poultry or fish.


For example, 1 ounce equivalent of meat/meat alternates equals:

- 1 ounce of lean meat, poultry or fish;
- 1 ounce of cheese (low-fat recommended);
- ¼ cup of cooked beans and peas (legumes);
- ½ large egg;
- 2 tablespoons of nut or seed butters (such as almond butter, cashew nut butter, peanut butter, reduced-fat peanut butter, sesame seed butter, soy nut butter and sunflower seed butter);
- 1 ounce of nuts/seeds (such as include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios and soynuts);
- 2.2 ounces of tofu;
- ½ cup of yogurt or soy yogurt; and
- 1 ounce of alternate protein products (APP).

Choose low-fat dairy products to help school meals comply with the saturated fat limits of the dietary specifications.

### M/MA at Breakfast

**EXAMPLE OF OPTION 1**  
Offer M/MA IN PLACE of grains



Planned Menu	Meal Pattern Components	Food Items
Whole-wheat toast (1-ounce slice)	Grains, 1 ounce equivalent	1
Low-fat cheese stick (1 ounce)	Grains, 1 ounce equivalent (M/MA substitution)	1
Banana (½ cup)	Fruits, ½ cup	1
Orange juice (½ cup)	Fruits, ½ cup	1
Milk choice (1 cup)	Milk, 1 cup	1
<b>TOTAL</b>		<b>5</b>

Connecticut State Department of Education • Revised November 2015 119


Depending on how the meat/meat alternate substitution is planned, it may or may not count as a food item. This slide shows an example of the first option: **Offer a serving of meat/meat alternates in place of a serving of grains and count it toward the weekly grains range.** Meat/meat alternates offered in place of grains count as a grains food item.

In this example, the menu planner plans the string cheese as grain substitution so it counts as a food item for OVS.



## M/MA at Breakfast

**EXAMPLE OF OPTION 2**  
Offer M/MA as  
**EXTRA FOOD**



Planned Menu	Meal Pattern Components	Food Items
<b>Hard-boiled egg (½ egg)</b>	<b>None (extra food)</b>	<b>0</b>
Whole-wheat blueberry muffin (2 ounces)	Grains, 1 ounce equivalent	1
Canned peaches (½ cup)	Fruits, ½ cup	1
Strawberries (½ cup)	Fruits, ½ cup	1
Milk choice (1 cup)	Milk, 1 cup	1
<b>TOTAL</b>		<b>4</b>

Connecticut State Department of Education • Revised November 2015 120

This slide shows an example of the second option: **Offer a serving of meat/meat alternates as an extra food that does not count toward the weekly grains range.**

In this example, the menu planner plans the egg as an “extra” foods so it does **not** count as a food item.

As a reminder, for both options, the meat/meat alternates must count toward the weekly dietary specifications. The inclusion of meat/meat alternates cannot cause the breakfast menu to exceed the average weekly calorie, saturated fat and sodium limits.



**Ask participants:** Before we move on to noncreditable foods, what questions do you have about the grains component?

**INSTRUCTOR NOTES:** Ask group 1 to report on noncreditable foods. Use slides to briefly confirm correct information that the group identified about noncreditable foods and share any information that was not included in the group's list. Do not spend any time on information that has already been discussed.

Take out your handout, Noncreditable Foods.

There are many foods that do not credit in school nutrition programs. You can see some of them on this slide, for example: bacon, cream cheese, potato chips, popcorn, pudding, white rice and condiments, such as ketchup, mustard, mayonnaise and salad dressing.

## Noncreditable Foods

- **CANNOT CREDIT** toward meal pattern
- **LIMIT** frequency and amount
  - ▶ Often contain little nutritional value
- **Must count toward weekly DIETARY SPECIFICATIONS** (nutriton standards)



Connecticut State Department of Education • Revised November 2015 122

Noncreditable foods are foods and beverages that **cannot credit** toward the USDA meal patterns for school nutrition programs. Schools and institutions may serve noncreditable foods in addition to the meal components to add variety, help improve acceptability in the meal and satisfy appetites. Some examples include maple syrup on pancakes, salad dressing on salad and condiments such as ketchup or mustard on a hotdog, sandwiches and other entrees.

Menu planners should limit noncreditable foods in school menus. These foods often contain little nutritional value and are high in fat, sugars and sodium. Menu planners should read labels, be aware of the ingredients in foods and limit the frequency and amount of less nutritious choices.

Noncreditable foods that are offered as part of reimbursable meals must be counted toward the weekly dietary specifications. If noncreditable foods are served, they must contain zero trans fat and their inclusion cannot cause the menu to exceed the average weekly limits for calories, saturated fat and sodium.

Let's look at some of the noncreditable foods in each meal component.

**Noncreditable Fruits \***

- **Snack-type foods made from fruits**
  - ▶ dried banana chips
  - ▶ fruit snacks, e.g., fruit drops, roll-ups, wrinkles, twists and yogurt-covered fruit snacks
  - ▶ 100% fruit strips
- **Jam or jelly**
- **Home-canned products (for food safety reasons)**
- **Juice drinks that are not 100 percent juice, e.g., grape juice drink, orange juice drink, cranberry juice cocktail, lemonade**



\* This list is not all-inclusive

Connecticut State Department of Education • Revised November 2015

123

These are some of the fruit products that are not creditable in school meals. This list is not all inclusive.

- Snack-type foods made from fruits do not qualify as fruits and cannot be credited toward meeting the fruits requirement in any of the USDA meal patterns, including dried banana chips; fruit snacks (e.g., roll-ups, wrinkles, twists and yogurt-covered fruit snacks); and 100% fruit strips. This applies to all fruit snacks, even if they meet the USDA Smart Snacks nutrition standards for competitive foods (a la carte sales). These foods cannot be used to count as the fruits component for school meals.
- Jam or jelly;
- Home-canned products (for food safety reasons); and
- Juice drinks that are not 100 percent juice, e.g., Grape juice drink, orange juice drink, pineapple-grapefruit drink, cranberry juice cocktail, lemonade.

**Noncreditable Vegetables\***

- **Snack-type foods made from vegetables, such as potato chips or popcorn**
- **Pickle relish**
- **Tomato catsup and chili sauce**
- **Home-canned products (for food safety reasons)**
- **Dehydrated vegetables used for seasoning**



**\* This list is not all-inclusive**

Connecticut State Department of Education • Revised November 2015 124


The following products do not qualify as vegetables and cannot credit toward meeting the vegetables component:

- snack-type foods made from vegetables, such as potato chips or popcorn;
- pickle relish;
- jam or jelly;
- tomato catsup and chili sauce;
- Home-canned products (for food safety reasons); and
- dehydrated vegetables used for seasoning.

This list is not all inclusive.

## Noncreditable M/MA \*

- **Shelf-stable, DRY OR SEMI-DRY meat snacks**
  - ▶ Smoked snack sticks made with beef and chicken
  - ▶ Summer sausage
  - ▶ Pepperoni sticks
  - ▶ Meat, poultry or seafood jerky
  - ▶ Meat or poultry nuggets (similar to jerky)
  
- **Bacon**
  
- **Cream Cheese**



\* This list is not all-inclusive

Connecticut State Department of Education • Revised November 2015 125

These foods cannot credit toward the meat/meat alternates component. This list is not all inclusive.

- **Shelf-stable, dry or semi-dry meat snacks** including smoked snack sticks made with beef and chicken; summer sausage; pepperoni sticks; meat, poultry or seafood jerky such as beef jerky, turkey jerky and salmon jerky; and meat or poultry nuggets (shelf-stable, nonbreaded, dried meat or poultry snack made similar to jerky) such as turkey nuggets. These snack products do not meet the usual and customary function of the meat/meat alternates component as either an entree or side dish of a meal. In addition, dried meat, poultry or seafood snacks do not qualify for the USDA CN Labeling Program because they cannot contribute to the meat/meat alternate component. Therefore, menu planners cannot accept fact sheets or company certified product formulation statements for these products.
- **Bacon and cream cheese** do not count as a meat/meat alternate or any other component in the USDA meal patterns. They are low in protein and high in fat

**INSTRUCTOR NOTES:** Some meat-stick type products may credit in school nutrition programs with authorized CN labels or a company certified product formulation statement (see CSDE Operational Memorandum 27-11:*Shelf-stable, Dried Snacks Made from Meat, Poultry or Seafood*).

- cooked, cured meat and/or poultry sausages without byproducts, cereals, binders or extenders such as bologna, frankfurters, knockwurst and Vienna sausage as listed in the meat/meat alternates section of the Food Buying Guide;
- extended meat or poultry “pattie-like” products shaped into sticks that are usually breaded and either frozen or refrigerated; and
- dried pepperoni when used as a topping on a CN labeled pizza.

## Noncreditable Grains \*

- **Products that are not WGR**
- **Products that are only enriched**
- **Products that contain more than 3.99 grams of noncreditable grains for groups A-G or 6.99 grams for groups H and I**



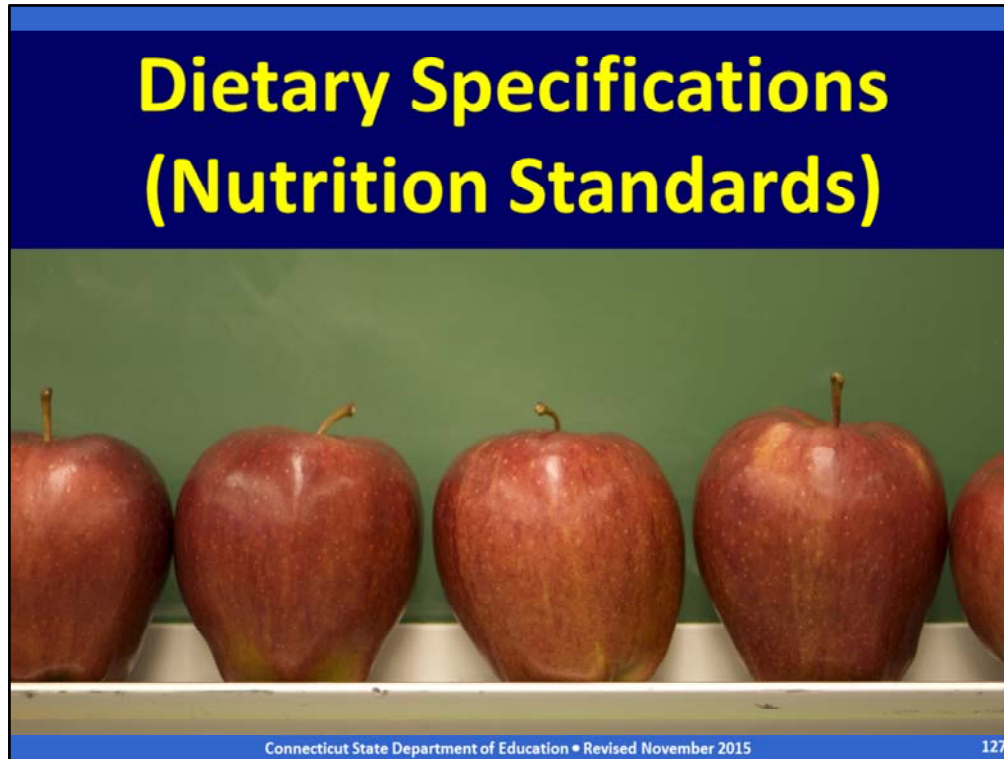
\* This list is not all-inclusive

Connecticut State Department of Education • Revised November 2015 126

As we just saw with the grains component, any grain products that do not meet the WGR definition are not creditable.

Remember that to be WGR, grain product must contain at least 50 percent whole grains by weight, any remaining grain ingredients are enriched and any noncreditable grain ingredients are less than 2 percent of the product formula (no more than 3.99 grams for groups A-G or 6.99 grams for groups H and I).

This is the reverse of the WGR definition.



That concludes the discussion of the meal components. We will now focus on the dietary specifications (nutrition standards) within the meal pattern.

**Ask participants:** Before we move on, do you have any questions about noncreditable foods?

**INSTRUCTOR NOTES:** Ask group 4 to report on the dietary specifications. Use slides to briefly confirm correct information that the group identified the dietary specifications and share any information that was not included in the group's list. Do not spend any time on information that has already been discussed.



<b>Dietary Specifications (Nutrition Standards) for Breakfast</b>			
<b>School Years 2014-15 through 2016-17</b>			
<b>Daily Amount Based on Weekly Average</b>			
<b>NUTRIENTS</b>	<b>GRADES K-5</b>	<b>GRADES 6-8</b>	<b>GRADES 9-12</b>
<b>Calories</b>	<b>350-500</b>	<b>400-550</b>	<b>450-600</b>
<b>Saturated Fat</b>	<b>&lt; 10 %</b>	<b>&lt; 10 %</b>	<b>&lt; 10 %</b>
<b>Sodium *</b>	<b>≤ 540 mg</b>	<b>≤ 600 mg</b>	<b>≤ 640 mg</b>
<b>Trans Fat</b>	<b>Nutrition label or manufacturer specifications must indicate <b>zero grams</b> of trans fat per serving</b>		

\* First sodium target through June 30, 2017

Connecticut State Department of Education • Revised November 2015 128

This chart shows the dietary specifications (nutrition standards) for breakfast. These are based on the weekly average of a five-day or seven-day week.

Take a look at your breakfast meal pattern handout.

**Ask participants:** Do you see these on your meal pattern handout?

You will find it just below the meal components. Notice that this chart is part of the meal pattern. The dietary specifications are right under the meal components and serving sizes, and are part of the meal pattern requirements.

In addition to complying with the meal pattern components, schools must also meet four dietary specifications. This is intended to improve the consistency of school meals with the Dietary Guidelines and the Dietary Reference Intakes.

These specifications are calories, sodium, saturated fat and trans fat. Let's look at each nutrition standard in more detail.

## Four Dietary Specifications (Nutrition Standards)

- **WEEKLY** average requirements for calories, saturated fat and sodium
- **DAILY** requirement for trans fat (all foods)

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The nutrition standards must be met on average over the school week. This means that the levels of calories, saturated fat and sodium in **any one meal** could exceed the standard as long as the **average over the week** meets the standard.

For example, menu planners may be able to offer a meal or food that is relatively high in saturated fat or sodium at some point during the week, if meals with lower to moderate saturated fat or sodium content are offered the rest of the week.

However, for trans fat, all food products and ingredients used daily must contain zero grams of trans fat per serving.

**Calorie Ranges**

- **MINIMUM** and **MAXIMUM** calorie levels averaged over the week
- **NUTRIENT-DENSE** menus (more fruits, vegetables and whole grains)
  - ▶ Avoiding foods high in fats and added sugars

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The first dietary specification is calorie ranges, including minimums and maximums for each grade group. Schools must meet the calorie ranges on average over the school week. The weekly calorie ranges apply to the school meal offered on average over the week, not per student.

The specified calorie ranges are based on evidence about children's intakes at meals and snacks, and were designed based on age-appropriate nutrition and physical activity habits of the average student. The USDA's intent is not to reduce the amount of food but to avoid excessive calories by serving more nutrient-dense foods.

The meal patterns provide more fruits, vegetables and whole grains to provide nutrient-dense school meals. The required maximum calorie levels are expected to drive menu planners to select nutrient-dense foods and ingredients to prepare meals, and avoid products that are high in fats and added sugars.

**Saturated Fat**

- Limit saturated fat to **LESS THAN 10 PERCENT** of total calories

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The next dietary specification is saturated fat. Average weekly meals must contain less than 10 percent of calories.


Schools are not required to meet a total fat standard. The Dietary Guidelines emphasize that the **type** of fat consumed is more important than **total** fat in terms of preventing diet-related disease such as heart diseases, cancer and stroke.

**Ask participants:** Why are we concerned about children's saturated fat intake? Saturated fat, and particularly trans fat, have the most negative health consequences, which is why the USDA dietary specifications focus on reducing these two types of fat.

Saturated fats are harmful to our health. Research shows that eating high amounts of saturated fat is associated with higher levels of blood total cholesterol and low-density lipoprotein (LDL) cholesterol, the “bad” cholesterol. Higher total and LDL cholesterol levels are risk factors for cardiovascular disease.

## Sodium

Sodium Reduction Timeline for Lunch			
	Target 1 (mg)	Target 2 (mg)	Final Target (mg)
Grade Group	Meet by July 1, 2014 (SY 2014-15)	Meet by July 1, 2017 (SY 2017-18)	Meet by July 1, 2022 (SY 2022-23)
K-5	≤ 1,230	≤ 935	≤ 640
6-8	≤ 1,360	≤ 1,035	≤ 710
9-12	≤ 1,420	≤ 1,080	≤ 740



[http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/sodium\\_timeline.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/sodium_timeline.pdf)

The next standard is for sodium. This chart summarizes the required sodium reductions at lunch. The sodium limit includes both naturally occurring sources (like milk and bread) and added sources, e.g., salt in processed foods.


You can see the gradual phase-in of the three targets for each grade group. The first sodium target took effect on July 1, 2014. The second sodium target takes effect July 1, 2017, and the third and last sodium target takes effect July 1, 2022.

**Ask participants:** Why are we concerned about children's sodium intake? In some people, sodium increases blood pressure because it holds excess fluid in the body, creating an added burden on the heart. Since blood pressure rises with age, helping children eat less sodium now will help curb that increase and reduce children's risk of developing other conditions associated with too much sodium, such as stroke, heart failure, osteoporosis, stomach cancer and kidney disease.\* This is why the USDA dietary specifications focus on reducing sodium in school meals.

\* Source: About Sodium (Salt). American Heart Association.  
[https://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyEating/About-Sodium-Salt\\_UCM\\_463416\\_Article.jsp](https://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyEating/About-Sodium-Salt_UCM_463416_Article.jsp)

## Sodium Intake

- 75% from processed and prepared foods
- 12% naturally occurring in foods
- 13% added during cooking and at the table



Get the Facts: Sources of Sodium in Your Diet (CDC, 2012). [www.cdc.gov/salt/pdfs/sources\\_of\\_sodium.pdf](http://www.cdc.gov/salt/pdfs/sources_of_sodium.pdf)  
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Let's briefly review some information and resources to help schools plan menus to meet the sodium target.

Most sodium (about 75 percent) in our diet comes from eating processed and prepared foods, such as canned vegetables, soups, luncheon meats, and frozen entrees. Food manufacturers use salt or other sodium-containing compounds to preserve food as well as to modify the taste and texture.

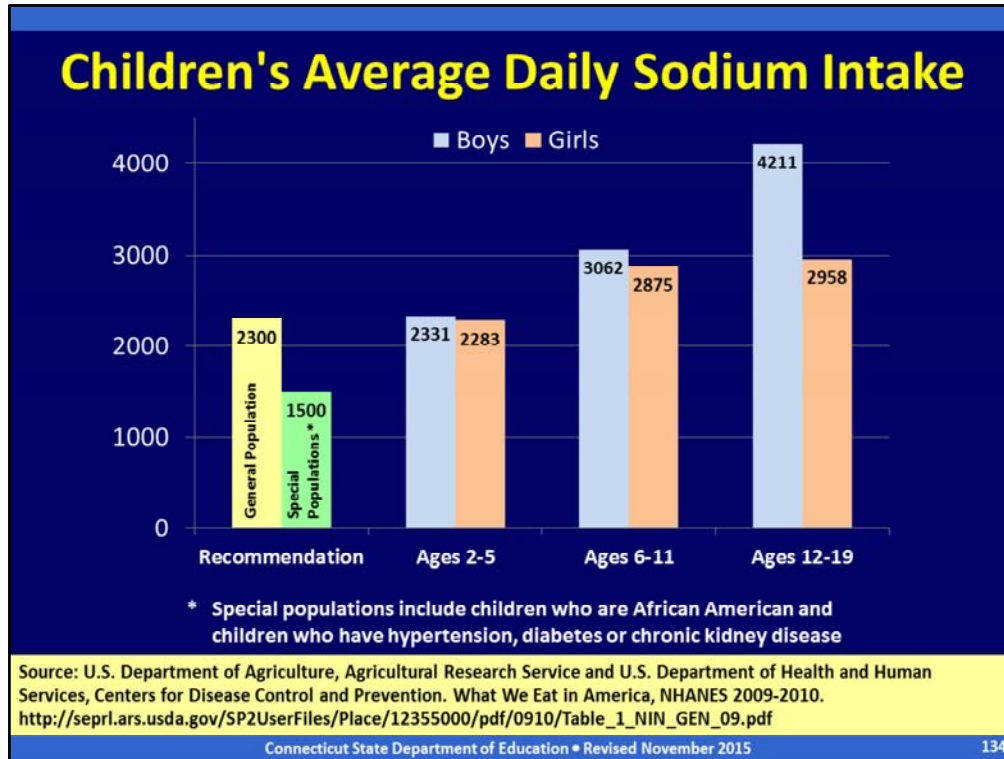
Sodium that naturally occurs in foods such as meat, poultry, dairy products and vegetables accounts for only about 12 percent of our sodium intake.

About 13 percent is added during cooking or at the table.

**Ask participants:** So what does this tell us?

We can have the greatest impact on the amount of salt in school menus by being careful about what we **purchase**, e.g., reading product labels and specifying foods that are lower in sodium.

When cooking, we can limit ingredients that are higher in sodium, for example, condiments such as soy sauce and ketchup. Adding them while cooking or at the table can raise the sodium content of meals.



Most Americans, including children, consume more sodium than they need. This chart show the average daily sodium intake of boys and girls, ages 2 to 19.

Based on the 2010 Dietary Guidelines for Americans, the recommended daily sodium limit is no more than 2,300 milligrams and no more than 1,500 milligrams for special populations such as children who are African American and children who have hypertension, diabetes or chronic kidney disease.

You can see that for both boys and girls, all ages significantly exceed this limit, and the older children get, the more sodium they consume. For example:

- Boys and girls ages 6-11 consume about one-third more than the recommended limit.
- Adolescent boys consume 4,211 milligrams daily – almost double the recommended limit.
- Adolescent girls consume 2,958 milligrams daily – almost one-third more than the recommended limit.

## Sodium Content of Typical Breakfast Menus

**SODIUM LIMITS**  
(through June 30, 2017)

**K-5 540**

**6-8 600**

**9-12 640**

Food	Portion Size	Sodium (milligrams) *
Honey Oat Cereal	1 ounce (1 cup)	160
Graham crackers	3 pack	100
Orange juice	½ cup	1
Fresh banana	1 medium	1
Fat-free milk	8 fluid ounces	130
<b>TOTAL</b>		<b>392</b>

\* Sodium values represent typical sodium content of these foods but are not valid for all varieties or brands  
\* When evaluating school menus, use sodium content of actual foods purchased and prepared

Source: Product labels and USDA National Nutrient database (<http://ndb.nal.usda.gov/>)

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Let's look at the sodium content of some typical breakfast menus.

These nutrition values are based on product labels from manufacturers and the USDA National Nutrient database.

It is important to note that the sodium values for these menus are representative of typical sodium content of these foods but are not valid for all varieties or brands of these foods. When evaluating school menus for compliance with the sodium standard, menu planners should use the sodium content of the actual foods purchased and prepared for the breakfast menu.

This menu contains Honey Nut Cheerios, graham crackers, orange juice, banana and low-fat milk. The total sodium content is 392 milligrams. This amount is well below the first required sodium limit for each grade group, which is in effect through June 30, 2017:

- 540 milligrams for grades K-5;
- 600 milligrams for grades 6-8; and
- 640 milligrams for grades 9-12.



## Sodium Content of Typical Breakfast Menus

**SODIUM LIMITS**  
(through June 30, 2017)

**K-5 540**  
**6-8 600**  
**9-12 640**

Food	Portion Size	Sodium (milligrams) *
Whole-wheat toast	2 slices	300
Peanut butter	2 tablespoons	150
Fresh orange, wedges	One 138-count	1
Apple juice	½ cup (4 fluid ounces)	5
Fat-free milk	8 fluid ounces	130
<b>TOTAL</b>		<b>586</b>

\* Sodium values represent typical sodium content of these foods but are not valid for all varieties or brands  
\* When evaluating school menus, use sodium content of actual foods purchased and prepared

Source: Product labels and USDA National Nutrient database (<http://ndb.nal.usda.gov/>)

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This menu contains peanut butter on whole-wheat toast with fresh orange wedges, apple juice and low-fat milk. The total sodium content is 586 milligrams. This amount meets the sodium limit for grades 6-8 and 9-12 but exceeds the sodium limit for grade K-5.

However, remember that the sodium limits are based on the **weekly average** of all menus. This menu could still be served if the other menus served during the same week are low enough in sodium that the average of all menus is below the weekly limits.

**Ask participants:** Can you think of a way to reduce the sodium in this menu? Decreasing the peanut butter to one tablespoon reduces the sodium by 75 milligrams down to 511 milligrams total. This brings the menu into the appropriate range for grades K-5, as well as the other grade groups. In this case, the peanut butter would not provide the full serving of meat/meat alternate so it would have to be served as an “extra” item (not counted for OVS).

## Trans Fat

- Restriction for **ARTIFICIAL** trans fat only
  - ▶ Excludes naturally occurring trans fat, e.g., beef, lamb, dairy products
- Nutrition label or manufacturer's specifications must indicate **ZERO GRAMS** of trans fat per serving (less than 0.5 gram)



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The last dietary specification is trans fat. This standard is different than the others because it applies to **all** food products and ingredients used to prepare school meals, not the weekly average of school meals. Menu planners should develop food procurement specifications and recipes to meet this standard.

The requirement applies only to **artificial** trans fat, not the naturally occurring trans fat found in products such as beef, lamb and dairy products. Schools must ensure that the nutrition label or manufacturer specifications for food products and ingredients used to prepare meals indicates zero grams of trans fat per serving. The USDA trans fat standard uses the Food and Drug Administration's (FDA) definition of "zero trans fat" for food labeling, which allows manufacturers to claim "0" on the food label if the product contains less than 0.5 gram of trans fat per serving.

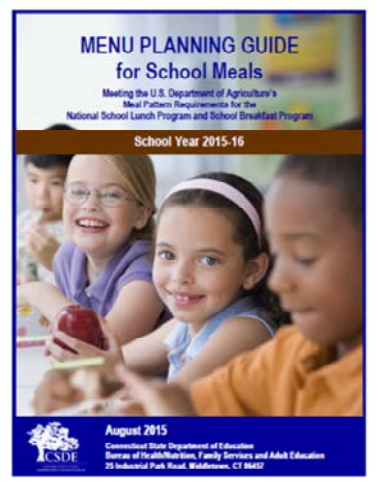
When foods contain **both** added and naturally occurring fats, schools must obtain additional information from the manufacturer to determine if the artificial trans fat meets the requirements for zero (less than 0.5 grams) trans fat. For example, a burrito could have partially hydrogenated oil in the tortilla shell (artificial source), as well as trans fat from the beef (natural source).

**Ask participants:** Why do the USDA dietary specifications focus on reducing trans fat?

Trans fats are a type of saturated (solid) fat made from vegetable oils through the process of hydrogenation – a process used by food manufacturers to make products containing unsaturated fats solid at room temperature (i.e., more saturated) and therefore more resistant to becoming spoiled or rancid. Partial hydrogenation means that some of the unsaturated fat in the oil is converted to saturated fat. This results in the creation of **trans fats**, which cause significant health risks.

The Dietary Guidelines recommend keeping trans fats as low as possible because there is a very strong association between increased trans fats and increased risk of cardiovascular (heart) disease. Trans fats raise the "bad" LDL cholesterol, which increases this risk.

**Guidance on Dietary Specifications**  
*Menu Planning Guide for School Meals (Section 5)*




[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/mpg/mpg5.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/mpg/mpg5.pdf)

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Section 5 of the CSDE's Menu Planning Guide for School Meals contains guidance on limiting calories, saturated fat, trans fats and sodium in school meals. It is available at the link indicated on this slide.

## Guidance on Dietary Specifications

### Menu Planning Resources for School Meals



[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/MPResources.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/MPResources.pdf)

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139

In addition, there are other useful resources for schools. Several of these are included in your Resources handout.

#### INSTRUCTOR NOTES:

Hold up the Resources for School Meals handout. Remind participants that the bolded resources are key resources for schools to use.

## Offer versus Serve (OVS) at Breakfast



[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/sbp/OVS\\_SBP.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/sbp/OVS_SBP.pdf)

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140

**Ask participants:** Before we begin, do you have any questions on the dietary specifications?

Now we will take a look at the requirements for offer versus serve (OVS) at breakfast. The CSDE's handout, *Offer versus Serve in the School Breakfast Program*, summarizes the requirements for OVS at breakfast. It is available on the CSDE's Meal Pattern Web page.

## OVS at Breakfast

- **OPTIONAL** for all grades
- Meals must include at least **4 ITEMS** from the 3 required food components (milk, fruits, grains)
- Students must select at least **3 FOOD ITEMS** including **½ CUP OF FRUIT** (or vegetable substitution)
- Same meal price if student declines any items



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OVS is a concept that applies to menu planning and the determination of reimbursable school meals. The goals of OVS are to minimize plate waste and food costs by allowing students to select the foods they prefer to eat, and encourage schools to offer more food choices.

At breakfast, OVS allows students to decline a certain number of food items in the meal. The following criteria apply to OVS:

- OVS is optional in the SBP for all grades.
- Meals must include **at least four items** from the three required food components (milk, fruits and grains). A food item is a specific food offered within the food components.
- Students must select **at least three food items** including at least ½ cup of fruit (or vegetable substitutions, if offered). Students can take ½ cup of fruits or ½ cup of vegetables offered in place of fruits or any combination of ½ cup of fruits and vegetables, e.g., ¼ cup of tomato salsa and ¼ cup of oranges or ½ cup of salsa made with tomatoes and pineapple.
- The meal must be priced as a unit (minimum of four food items). The meal price is the same if a student declines a food item.

## Student Selections

Students must select at least the **DAILY MINIMUM** required by the meal pattern to count as a food item for OVS (except for fruits component)



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To count as a food item under OVS, students must take **at least the daily minimum** required by the meal pattern, except for the fruits component (including vegetable substitutions). Students must take at least  $\frac{1}{2}$  cup of fruits, which is less than the full daily component of 1 cup.

Students cannot take less than 1 ounce equivalent of grains (or meat/meat alternates as grain substitutions).

Students can't take less than 1 cup (8 fluid ounces) of milk.

## Components versus Items

FOOD COMPONENT	FOOD ITEM
One of the <b>THREE</b> food groups that make up the reimbursable breakfast	A <b>SERVING</b> of food offered within the three food components
<b>1. GRAINS</b> (with optional M/MA as grains substitution)	
<b>2. FRUITS</b> (with optional vegetable substitutions)	
<b>3. MILK</b>	



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It is important to understand the difference between food **components** and food **items**. These terms are often used interchangeably but they do not mean the same thing.

They are also different for breakfast than lunch because breakfast uses food items for offer versus serve but lunch uses food components for offer versus serve.

A **food component** is one of the three food groups that comprise reimbursable breakfasts, including:


- grains (with optional meat/meat alternate as grains substitution);
- fruits (with optional vegetable substitutions);
- and milk).

Schools must always offer all three food components in at least the minimum required amounts.



## Components versus Items at Breakfast

Whole-grain 2-ounce bagel (2 oz eq)



**1 Food Component (GRAINS)**

**How many food items?**  
**2 food items (2 grains)**

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144

Let's look at some examples. How many food items are provided by a whole-grain 2-ounce bagel?

A 2-ounce bagel is **one food component** (grains) that contains **two food items** (two grains) for OVS.

## Components versus Items at Breakfast

**Variety of assorted fruit choices  
(½ cup each)**



**1 Food Component (FRUITS)**

**How many food items?**  
**4 food items (4 fruits)**

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145

How many food items are provided by a variety of assorted fruit choices that includes four separate ½-cup servings of fruit?

Offering a variety of assorted fruit choices that includes four separate ½-cup servings of blueberries, grapes, apple and orange slices is **one food component** (fruits) that contains four **food items** (four fruits) for OVS at breakfast.

## Components versus Items at Breakfast

**School-made smoothie  
with milk (1 cup) and  
fruit (½ cup)**



**2 Food Components  
(MILK AND FRUIT)**

**How many food items?**  
**2 food items (1 milk and 1 fruit)**


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How many food items are provided by a school-made smoothie containing 1 cup of milk and ½ cup of fruit?

A school-made milk (1 cup) and fruit (½ cup) smoothie is **two food components** (milk and fruit) that contains **two food items** (one milk and one fruit) for OVS.

## Components versus Items at Breakfast

$\frac{1}{2}$  cup of yogurt (1 oz eq)  
and fruit ( $\frac{1}{2}$  cup) with  
 $\frac{1}{4}$  cup of granola (1 oz eq)



**2 Food Components  
(GRAINS AND FRUIT)**

**How many food items?**

**3 food items (2 grains\* and 1 fruit)**

\* Includes 1 M/MA (yogurt) as grain substitution

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147

How many food items are provided by a school-made yogurt parfait containing  $\frac{1}{2}$  cup of yogurt,  $\frac{1}{2}$  cup of fruit and  $\frac{1}{4}$  cup of granola?

A yogurt ( $\frac{1}{2}$  cup) and fruit ( $\frac{1}{2}$  cup) parfait with granola ( $\frac{1}{4}$  cup) is **two food components** (grains and fruit) that contains **three food items** (two grains and one fruit) for OVS. The two grains are from the granola and the yogurt (meat/meat alternate as grain substitution).



Before we talk about OVS, we need to understand how menu planning decisions affect the allowable selections for a reimbursable breakfast.

<b>Without OVS</b> (Minimum of <b>3</b> Food Items)	<b>With OVS</b> (Minimum of <b>4</b> Food Items)
<ol style="list-style-type: none"><li><b>1. Milk</b></li><li><b>2. Fruits</b> (or vegetable substitutions)</li><li><b>3. Grains</b></li></ol> 	<ol style="list-style-type: none"><li><b>1. Milk</b></li><li><b>2. Fruits</b> (or vegetable substitutions)</li><li><b>3. Grains</b></li><li><b>4. Additional item from fruits</b> (including vegetable substitutions) <b>or grains</b> (including M/MA substitutions)</li></ol>
<b>Student CANNOT decline any food items</b>	<b>Student must take AT LEAST 3 FOOD items including AT LEAST ½ CUP OF FRUIT</b>

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This slide shows the difference between meals without OVS and meals with OVS. Without OVS, schools must offer at least three food items from the three meal pattern components and students must select all three. There is no option to decline any food items.

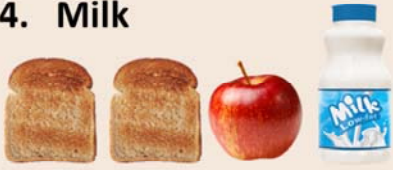

To implement the OVS option in the SBP, schools must offer a **minimum of four food items** from the three food components including:

- milk;
- fruits (or vegetable substitutions);
- grains (1 ounce equivalent); and
- an additional food item, e.g., 1 ounce equivalent of grains, 1 ounce equivalent of meat/meat alternate as a grain substitution or ½ cup of fruit. The fourth food item cannot be another serving of milk.

For a reimbursable meal, students must select at least three food items including at least ½ cup of fruit. The selections of the other food items besides fruit must be the minimum required daily serving size.

## Menu Planning for OVS at Breakfast

**Acceptable Menus**  
**(Plan a MINIMUM OF 4 Food Items) \***

<ol style="list-style-type: none"><li>1. Grains</li><li>2. Grains (or M/MA substitutions)</li><li>3. Fruits</li><li>4. Milk</li></ol> 	<ol style="list-style-type: none"><li>1. Grains</li><li>2. Fruits (or vegetable substitutions)</li><li>3. Fruits (or vegetable substitutions)</li><li>4. Milk</li></ol> 
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**\*The four food items cannot include two servings of milk**

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This slide shows the acceptable options menu planning for OVS.

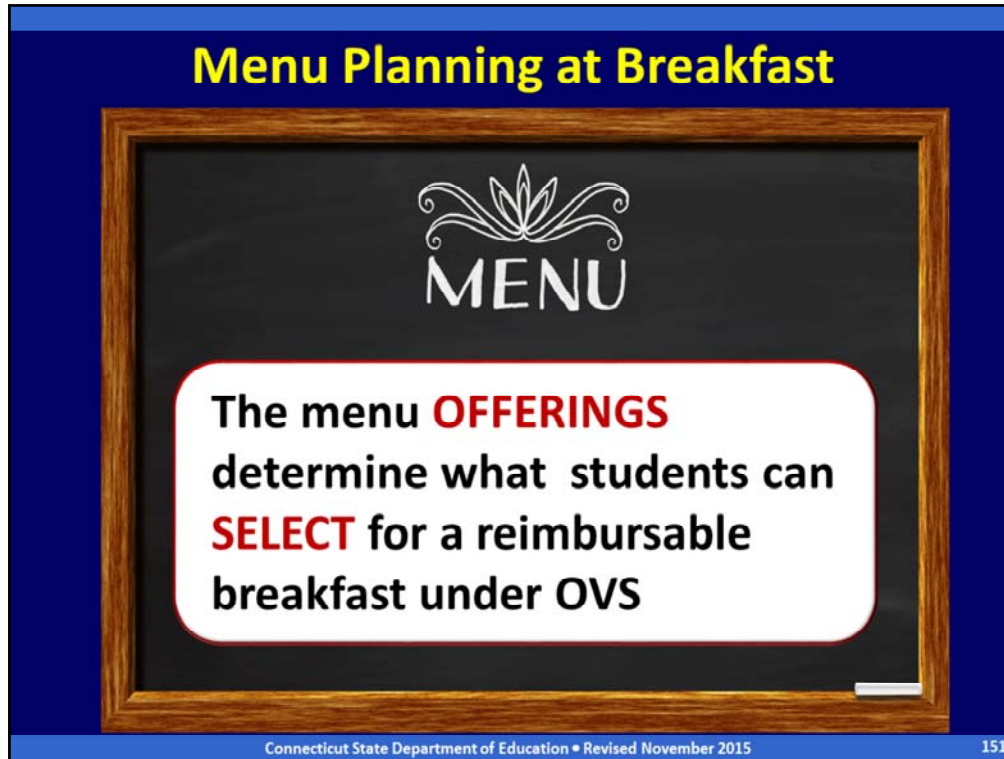
Meals must always include at least four food items from three food components: milk; fruits (or vegetable substitutions); and grains (with optional meat/meat alternate as grains substitution). Schools can choose to substitute a meat/meat alternate in place of grains after the minimum daily grains requirement (1 ounce equivalent) is met.

Acceptable menus include:

- two grains (or one grain and one meat/meat alternate substitution), fruits (or vegetable substitutions); and milk; or
- one grain, two fruits (or vegetable substitutions) and milk.

The four food items can include two servings of grains or two servings of fruits but not two servings of milk. Under OVS, double servings are allowed for both the fruits and the grains component, e.g., two servings of the same food item such as two servings of cereal or two servings of applesauce. Credited meat/meat alternates may also be in double servings when substituted for grains (after the minimum daily grains requirement (1 ounce equivalent) is met).

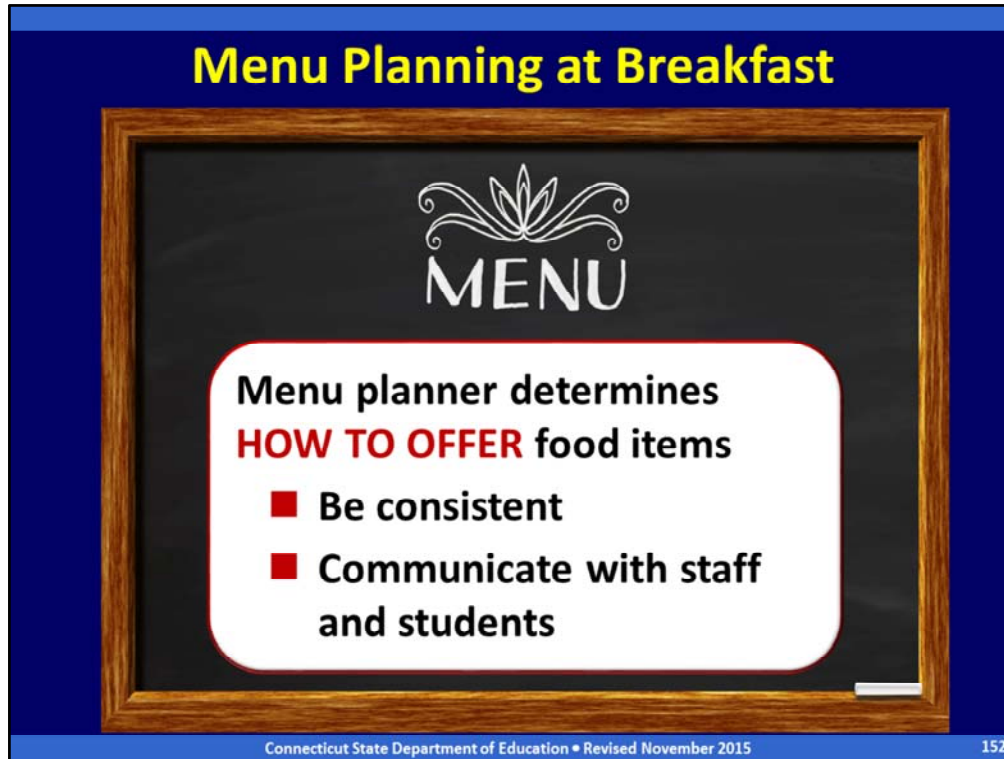
Schools can also choose to offer more than four food items.



The menu offerings are what determine the allowable selections for a reimbursable meal.

**The way the food items are offered may affect the selections the student takes in order to have a reimbursable meal under OVS.** These are important considerations for the menu planner.





The menu planner determines **how** to offer the food items. This determines how food items credit toward a student's required selections for OVS.

Consistency is important to help minimize confusion among students and staff. Menu planners should be consistent in how they plan and credit food items for breakfast menus. For example, if meat/meat alternates are served, choose whether to credit them as a grain substitute or extra food, and then do this consistently.

It is also important that the menu planner **clearly communicates** this information to the school food service staff and students.

**Foods with More than 1 Oz Eq Grains**



**2 oz eq muffin =  
2 food items (grains)**

**3 oz eq muffin =  
3 food items (grains)**


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Products that contain more than 1 ounce equivalent of grains or meat/meat alternates can count as more than one food item for OVS at breakfast if the additional amount of grains or meat/meat alternates equals the **full 1 ounce equivalent**.

Amounts less than 1 full ounce equivalent do not count as a food item for OVS. When counting grains and meat/meat alternates as a food item for OVS, menu planners must **round down** to the nearest whole number of ounce equivalents. For example, a muffin that contains 1 ½ ounce equivalents of grains counts as only one food item (one grain) for OVS.

This slide shows how the menu planner could credit a muffin containing 2 ounce equivalents of grains as two food items (two grains), and a muffin containing 3 ounce equivalents of grains as three food items (three grains).

**Foods with More than 1 Oz Eq Grains**

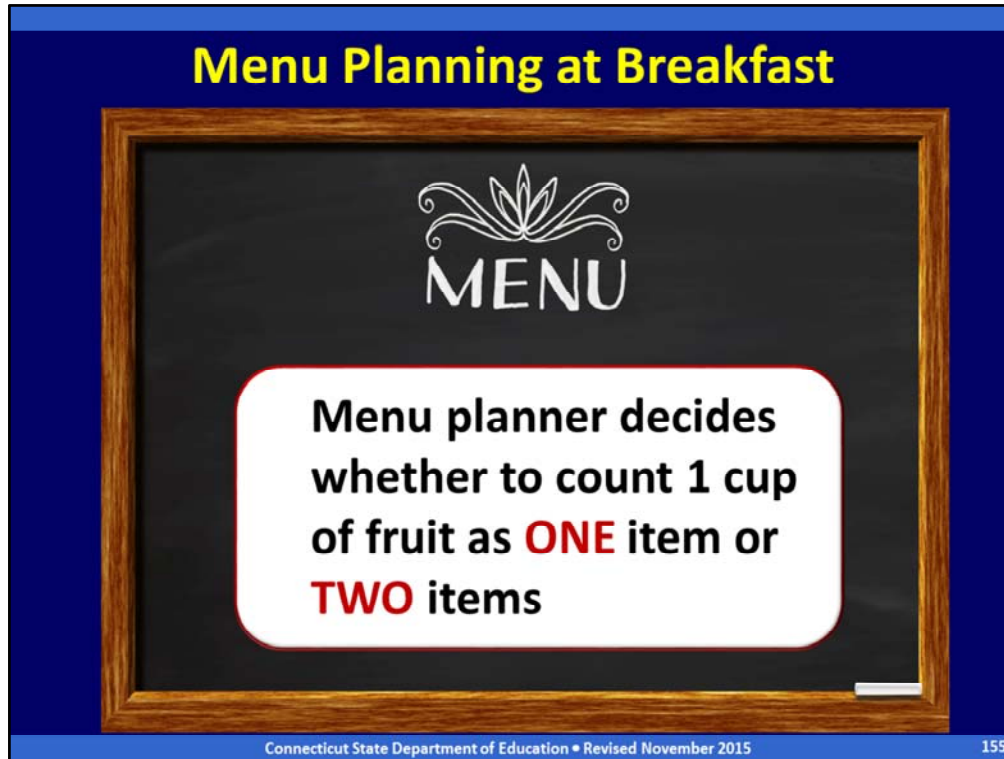


**2 oz eq omelet = 2 food items  
(M/MA as grain substitution)**

Connecticut State Department of Education • Revised November 2015 154

Another example is an omelet containing 2 ounce equivalents of meat/meat alternate as a grains substitution, which the menu planner can credit as two food items (two grain substitutions). One egg provides 2 ounce equivalents of meat/meat alternate.

The menu planner could also choose to offer the omelet as an “extra” food item.



The menu planner decides whether to count 1 cup of fruit as one item or two items.

Foods that are offered in large enough quantities can credit as two food items. For example, an apple that is large enough to credit for 1 cup of fruit, based on the Food Buying Guide, can credit as two food items.

This practice is at the discretion of the menu planner and must be clearly communicated to staff and students to minimize confusion and ensure students are selecting reimbursable meals. The USDA allows these decisions for maximum flexibility.

One example of when you might want to count 1 cup of fruit as one item is an apple. The *Food Buying Guide* indicates that one 125-138 count apple credits as 1 cup of fruit. However, one banana (150 count) credits as  $\frac{1}{2}$  cup of fruit and most oranges (138-count) credits as  $\frac{1}{2}$  cup of fruit (a 125-count orange or 113-count orange equals  $\frac{5}{8}$  cup of fruit). If you are serving assorted fresh fruit choices, it could be confusing to staff and students to say that one apple equals two fruits, while one banana and one orange equal 1 fruit. It would be simpler to count all fresh fruit choices as one fruit.

The slide features a dark blue background with a central white and blue menu area. At the top, the title 'Counting One Fruit as TWO Items' is written in yellow. Below it, a blue header reads 'PLANNED BREAKFAST MENU'. The menu items are: two waffles labeled '2 oz eq (2 Grains)', a bowl of blueberries labeled '1 cup (2 Fruits)', and a carton of milk labeled '1 cup (1 Milk)'. Below this, another blue header reads 'STUDENT SELECTS', showing a bowl of blueberries labeled '2 Fruits' and a carton of milk labeled '1 Milk'. A green bar at the bottom of the menu area says 'REIMBURSABLE MEAL'. At the very bottom of the slide, a blue footer contains the text 'Connecticut State Department of Education • Revised November 2015' and the number '156'.

This slide shows an example of counting one serving (1 cup) of fruit as two items. This meal includes four items that meet the minimum required serving sizes and meal components for the SBP:

- two grains from 2.4 ounces of whole-grain waffles (2 ounce equivalents);
- two fruits from 1 cup of blueberries; and
- one milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.

In this menu, the menu planner has chosen to count the 1 cup of blueberries as **two food items** instead of one. This is acceptable because the total serving size is one cup, i.e., two ½-cup servings. At breakfast, foods that are planned and offered in large enough quantities can credit as two food items.

A student could select the blueberries and milk (three food items including two fruits and one milk) for a reimbursable meal.

The slide is titled "Counting One Fruit as ONE Item" in yellow text on a dark blue background. It features two panels. The top panel, "PLANNED BREAKFAST MENU", shows three items: two waffles labeled "2 oz eq (2 Grains)", a bowl of blueberries labeled "1 cup (1 Fruit)", and a carton of milk labeled "1 cup (1 Milk)". The bottom panel, "STUDENT SELECTS", shows only the bowl of blueberries labeled "1 Fruit" and the carton of milk labeled "1 Milk". A red banner at the bottom of the student selects panel reads "NOT REIMBURSABLE MEAL". At the very bottom of the slide, it says "Connecticut State Department of Education • Revised November 2015" and the number "157".

This slide shows an example of counting one serving (1 cup) of fruit as one item. This meal includes four items that meet the minimum required serving sizes and meal components for the SBP:

- two grains from 2.4 ounces of whole-grain waffles (2 ounce equivalents);
- one fruit from 1 cup of blueberries; and
- One milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.

In this menu, the menu planner has chosen to count the 1 cup of blueberries as **one food item**. If the student selects the same two items as before, the meal is not reimbursable because the student has only two food items.

This example shows why it is advantageous to count the 1 cup of fruit as two food items, either 1 cup of the same fruit or two ½ cups of different fruits.

**Best Practice for Fruits with OVS**

- Offer all fruits (and vegetable substitutions) in **½-CUP SERVINGS**



Connecticut State Department of Education • Revised November 2015 158

The simplest method of helping students choose the required ½-cup serving of fruits (or vegetable substitutions) for OVS is to offer all fruits (and vegetable substitutions) at breakfast in ½-cup portions.

### Meeting Juice Limits with OVS

- No more than **HALF** of daily 1 cup fruit offerings can come from juice
- If menu offers 1 cup requirement as **VARIETY** of ½-cup fruit and juice choices and allows **TWO SELECTIONS**, students can take only **ONE JUICE**



Connecticut State Department of Education • Revised November 2015 159

As we saw earlier when we reviewed the fruits component, no more than **half** of the daily fruit offerings can come from juice. If a school serves **the required 1 cup of fruits** daily, then no more than ½ cup of juice can be offered to students daily.

Therefore, if the menu offers a variety of ½-cup fruit and juice choices and allows students to select two choices to meet the daily 1 cup requirements, students can select only **one juice** (½-cup serving) to comply with the weekly juice limit (½ cup of juice is half of 1 cup of fruit).

Students cannot be allowed to select two ½-cup servings of juice (1 cup total) unless the menu planner offers 2 cups of fruits daily ( 1 cup of juice is half of 2 cups of fruit).



**Sample Language for Assorted Fruit and Juice Choices with OVS**

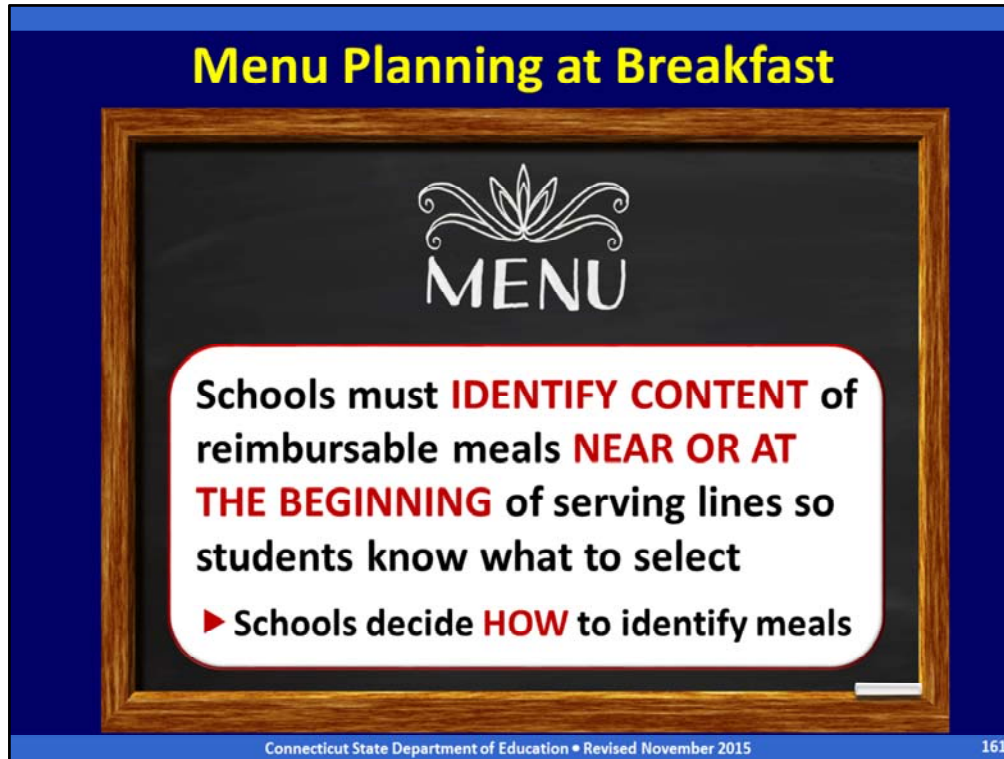
<b>FRUITS *</b> Choose 2 fruits OR Choose 1 fruit and 1 juice	<b>FRUITS *</b> Choose up to 2 fruits (no more than 1 juice)
<ul style="list-style-type: none"><li>■ Fresh fruit</li><li>■ Canned fruit</li><li>■ Fruit or vegetable juice</li><li>■ Fresh vegetables</li></ul>	<ul style="list-style-type: none"><li>■ Fresh fruit</li><li>■ Canned fruit</li><li>■ Fruit or vegetable juice</li><li>■ Fresh vegetables</li></ul>
* ½-cup servings	* ½-cup servings

Connecticut State Department of Education • Revised November 2015 160

This slide shows sample language that can be used when the menu planner offers all fruits (and vegetable substitutions) in ½-cup servings and allows students to take a total of 1 cup (the minimum daily fruits requirement for breakfast). The menu planner must communicate to students that no more than one juice (½ cup ) can be selected.

Students can choose either two fruits or one fruit and one juice. They cannot select two servings of juice, as this would exceed the limit of no more than half of weekly fruit offerings.

If a school served **more than 1 cup of fruits** daily, the maximum amount of juice that can be served also increases. For example, if the menu planner offers 2 cups of fruits daily, then 1 cup (8 fluid ounces) of juice could be served daily because this would meet the weekly limit of no more than half.



With OVS, you can see how important it is to communicate information to students about the menu choices and what they are allowed to select for a reimbursable meal.

The USDA requires schools to identify the foods that are part of the reimbursable meal near or at the beginning of all serving lines. If schools offer **choices** of food items within the components, the menu must indicate what choices or combination of choices are available each day and what students may select. These requirements apply to all schools, including those that implement family-style meal service. In this case, you may consider options like table tents or posters.

Schools have discretion as to how to identify the foods that are part of the reimbursable meal depending on their menu, facilities, layout, age of children and other considerations. Some examples include posters, plastic frames, static clings or signs on sneeze guards or serving areas above the food items.

This requirement is to ensure that students understand the components of the reimbursable meal and do not make unintentional purchases of a la carte foods. This signage is also very important when schools implement OVS.

**Ask Participants:** What signage strategies do you use to help implement OVS at breakfast in your schools?

**Identify Reimbursable Breakfasts**

**Breakfast includes 5 food items:  
2 grains, 2 fruits and 1 milk**

**Choose 3 or more items including fruit**

- **GRAINS: Choose up to 2**  
Whole-grain cereal, whole-wheat bagel, whole-grain corn muffin, yogurt, hard-boiled egg, whole-grain waffles
- **FRUITS: Choose 2 fruits OR 1 fruit and 1 juice**  
Fresh fruit, canned fruit, assorted juices
- **MILK: Choose 1**  
Low-fat plain and fat-free plain or flavored

Connecticut State Department of Education • Revised November 2015 162

This slide shows an example of signage. Here is a simple breakfast menu that offers choices and includes five food items:

- choice of two grains with meat/meat alternate substitutions;
- choice of two fruits; and
- one milk choice

In this example:

- all grains (and meat/meat alternate substitutions) are offered in serving sizes of at least 1 ounce equivalent; and
- all fruits and juices are offered in ½-cup servings.

The menu tells students that they must select three or more items including fruit. It also specifies the limit for fruit juice, i.e., students can choose two fruits or one fruit and one juice.

**Best Practice for Signage**

Provide signage **THROUGHOUT** serving line to guide student selections

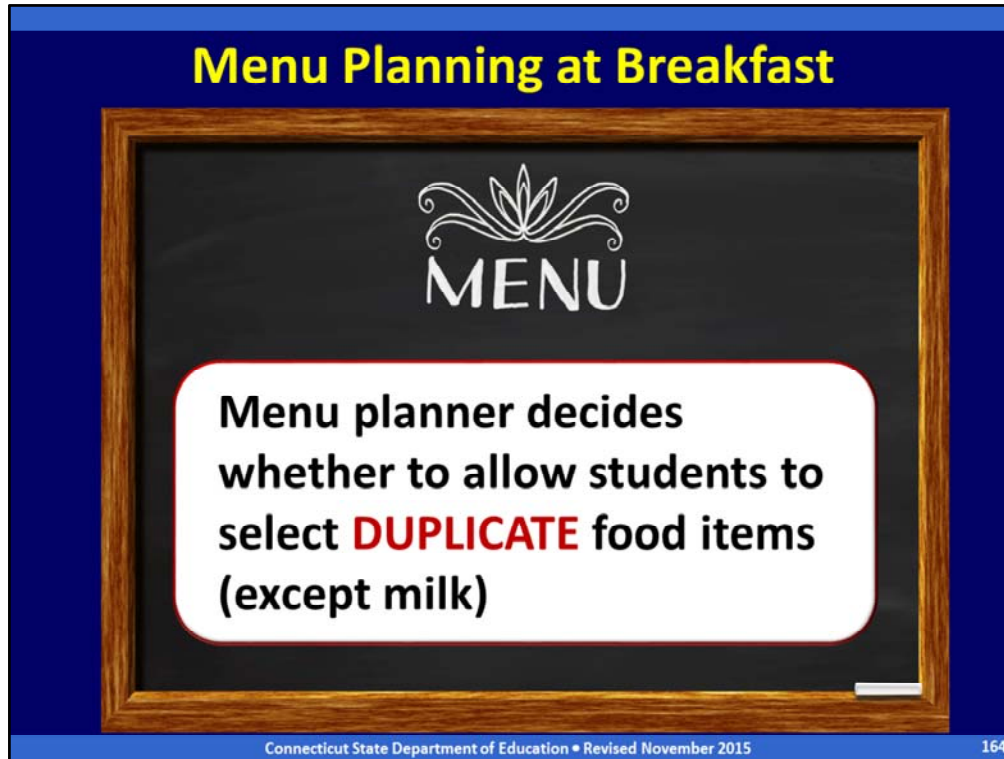
Select  
**1 MILK**  
Fat-free,  
Low-fat or Fat-free  
Chocolate

Select  
**1 or 2 FRUITS \***  
\*A complete meal  
includes at least  
1 fruit!

Select  
**1 or 2  
GRAINS**

Connecticut State Department of Education • Revised November 2015 163

Best practice is to provide signage **throughout** the serving line to guide students as they make their selections.



The menu planner decides whether to allow students to select duplicate food items such as two pieces of toast or two servings of fruit. The menu planner cannot allow students to select two serving of milk.

This information must be clearly communicated to staff and students, through the menu and other signage.

### Sample Breakfast Menu 1

**Choose AT LEAST 1 FRUIT and 2 OTHER food items.**  
*For best nutrition, choose all 5!*

MILK	FRUITS	GRAINS AND MEAT/MEAT ALTERNATES	
<b>CHOOSE 1</b>	<b>CHOOSE UP TO 2 *</b>	<b>CHOOSE UP TO 2</b>	
<ul style="list-style-type: none"><li>■ Low-fat (1%)</li><li>■ Fat-free</li><li>■ Fat-free chocolate</li><li>■ Fat-free strawberry</li></ul>	<ul style="list-style-type: none"><li>■ Fresh cut-up fruit</li><li>■ Canned fruit</li><li>■ Whole fruit</li><li>■ 100 percent fruit juice</li><li>■ Fresh veggies</li></ul> <p><b>* Choose 2 fruits OR 1 fruit and 1 juice</b></p>	<ul style="list-style-type: none"><li>■ Whole-grain cereals, assorted</li><li>■ Oatmeal</li><li>■ Whole-grain toast</li><li>■ Whole-grain muffins, assorted</li><li>■ Whole-grain mini bagel</li><li>■ Whole-grain mini pancakes</li></ul>	<ul style="list-style-type: none"><li>■ Yogurt, assorted flavors</li><li>■ Peanut butter</li><li>■ Low-fat cheese stick</li></ul>

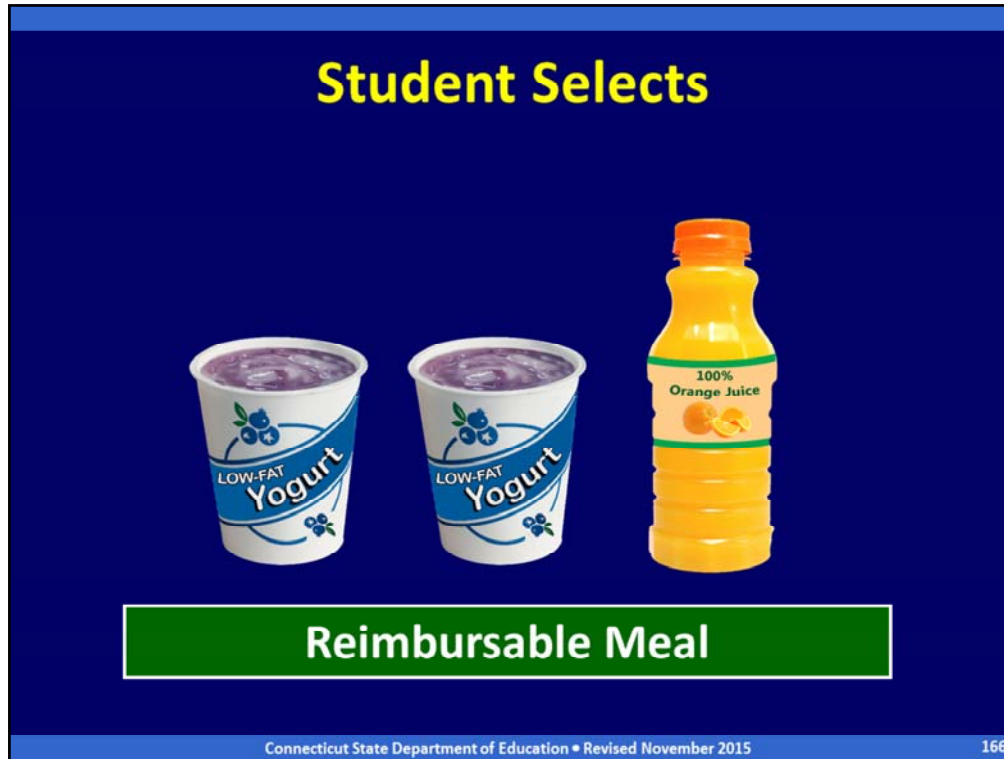
Connecticut State Department of Education • Revised November 2015 165

This sample breakfast menu shows how the menu planner could communicate the OVS requirements when breakfast includes meat/meat alternates as grain substitutions. This menu includes five food items and is planned to allow students to select from several choices within each meal pattern component, including meat/meat alternates as grain substitutions. Students can select:

- one food item from the milk component (1 cup each);
- two food items from the fruits component ( $\frac{1}{2}$  cup each for 1 cup total); and
- two food items from the grains and meat/meat alternates components combined (1 ounce equivalent each for a total of 2 ounce equivalents), including meat/meat alternates as grains substitutions. This could be one grain and one meat/meat alternate, two grains or two meat/meat alternates.

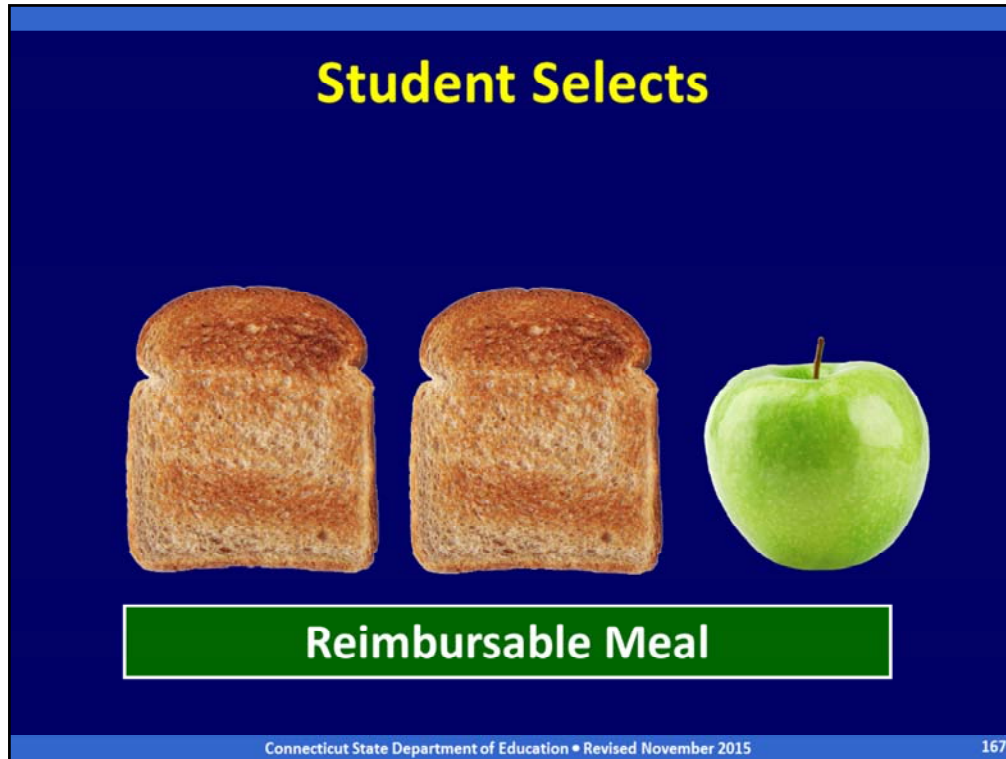
The menu clearly communicates that students are allowed to select all five food items but must select at least three food items including one serving ( $\frac{1}{2}$  cup) of fruit.

In this example, students **could select duplicate food items** from the grains component (including meat/meat alternate substitutions) such as two bagels or two cheese sticks because the menu is **planned to allow two choices** (two food items).



In this example, the student has chosen three food items, including  $\frac{1}{2}$  cup of fruit and two other food items.

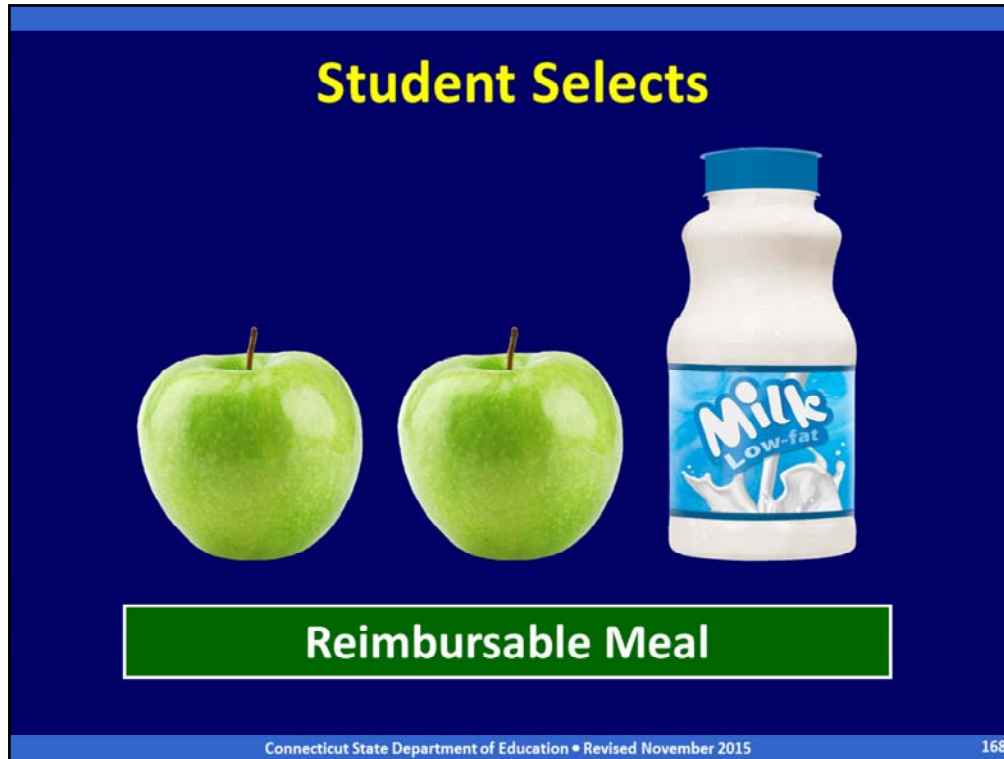
A student could select two yogurts (**duplicate food items, i.e., two meat/meat alternates as grain substitutes**) and juice (one fruit) for a reimbursable breakfast because the menu is **planned** to allow two choices (two food items) from the grains (with meat/meat alternates substitutions) component.



In this example, the student has chosen three food items.

A student could select two pieces of toast (**duplicate food items, i.e., two grains**) and apple (fruit) for a reimbursable breakfast because the menu is **planned** to allow two choices (two food items) from the grains (with meat/meat alternates substitutions) component.





In this example, the student has chosen three food items.

A student could select two apples (**duplicate food items, i.e., two fruits**) and milk because the menu is **planned** to allow any two choices (two food items) from the fruits component.



A student could NOT select two servings of juice because no more than **half** of the fruit offerings can come from juice. Since this menu offers 1 cup of fruit, allowing selections of two juices provides 1 cup of juice, which exceeds the limit of no more than half.

## Sample Breakfast Menu 2

Choose **AT LEAST 1 FRUIT** and **2 OTHER** food items.  
*For best nutrition, choose all 5!*

MILK	FRUITS	GRAINS	MEAT/MEAT ALTERNATES
<b>CHOOSE 1</b>	<b>CHOOSE up to 2 *</b>	<b>CHOOSE 1</b>	<b>CHOOSE 1</b>
<ul style="list-style-type: none"><li>■ Low-fat (1%)</li><li>■ Fat-free</li><li>■ Fat-free chocolate</li><li>■ Fat-free strawberry</li></ul>	<ul style="list-style-type: none"><li>■ Fresh cut-up fruit</li><li>■ Canned fruit</li><li>■ Whole fruit</li><li>■ 100 percent fruit juice</li><li>■ Fresh veggies</li></ul> <p><b>* Choose 2 fruits OR 1 fruit and 1 juice</b></p>	<ul style="list-style-type: none"><li>■ Whole-grain cereals, assorted</li><li>■ Oatmeal</li><li>■ Whole-grain toast</li><li>■ Whole-grain muffins, assorted</li><li>■ Whole-grain mini bagel</li><li>■ Whole-grain mini pancakes</li></ul>	<ul style="list-style-type: none"><li>■ Yogurt, assorted flavors</li><li>■ Peanut butter</li><li>■ Low-fat cheese stick</li></ul>

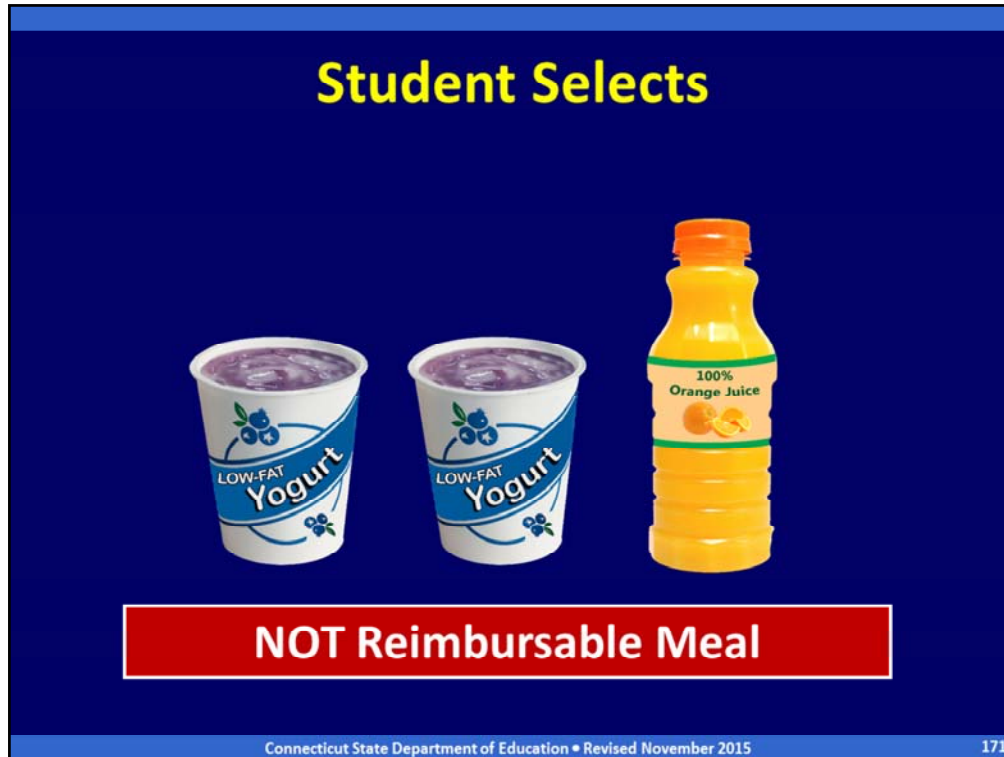
Connecticut State Department of Education • Revised November 2015 170

This sample breakfast menu shows how the menu planner could communicate the OVS requirements when breakfast includes meat/meat alternates as grain substitutions. This menu includes five food items and is planned to allow students to select from several choices within each meal pattern component, including meat/meat alternates as grain substitution. Students can select:

- one food item from the milk component (1 cup each);
- two food items from the fruits component ( $\frac{1}{2}$  cup each for 1 cup total);
- one food item from the grains component (1 ounce equivalent each); and
- one food item from the meat/meat alternates component as a grains substitution (1 ounce equivalent each).

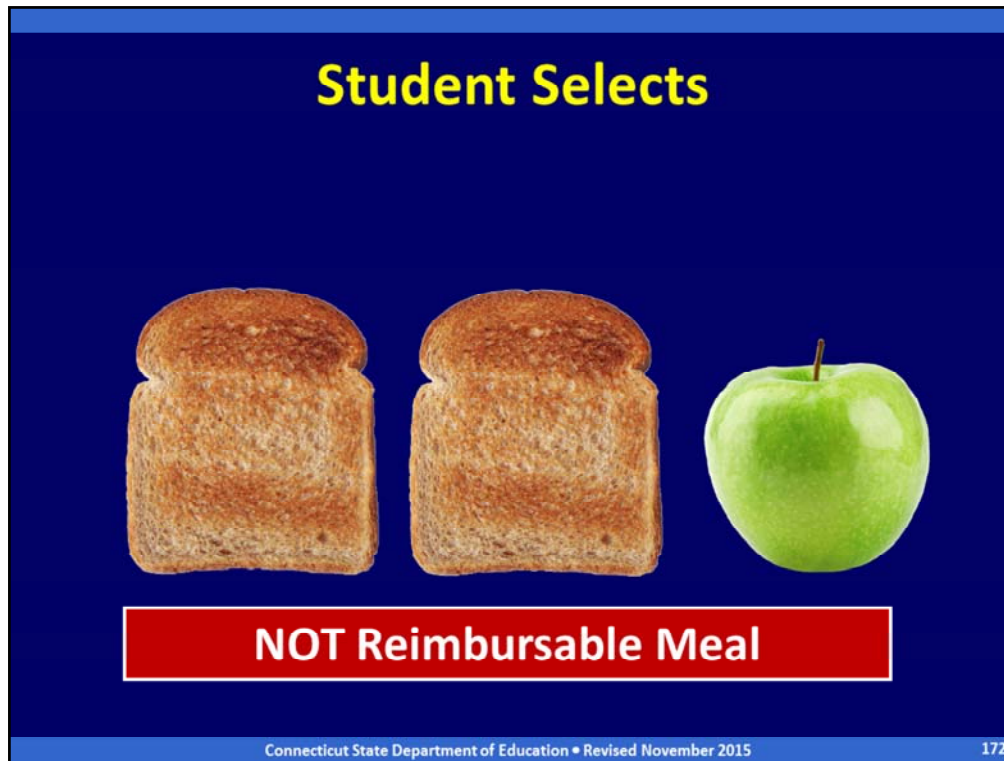
This menu clearly communicates that students are **allowed to select all five** food items but must select **at least three** food items including at least one serving ( $\frac{1}{2}$  cup) of fruit.

In this example, students **cannot** select duplicate food items from the grains (and meat/meat alternates as grain substitutions) component, such as two yogurts or two bagels because the menu is planned to allow only **one choice** (food item) from each component. However, they could select duplicate food items from the fruits component, such as two servings of canned fruit or two servings of whole fruit, because the menu planner allows **two choices** from the fruits category.



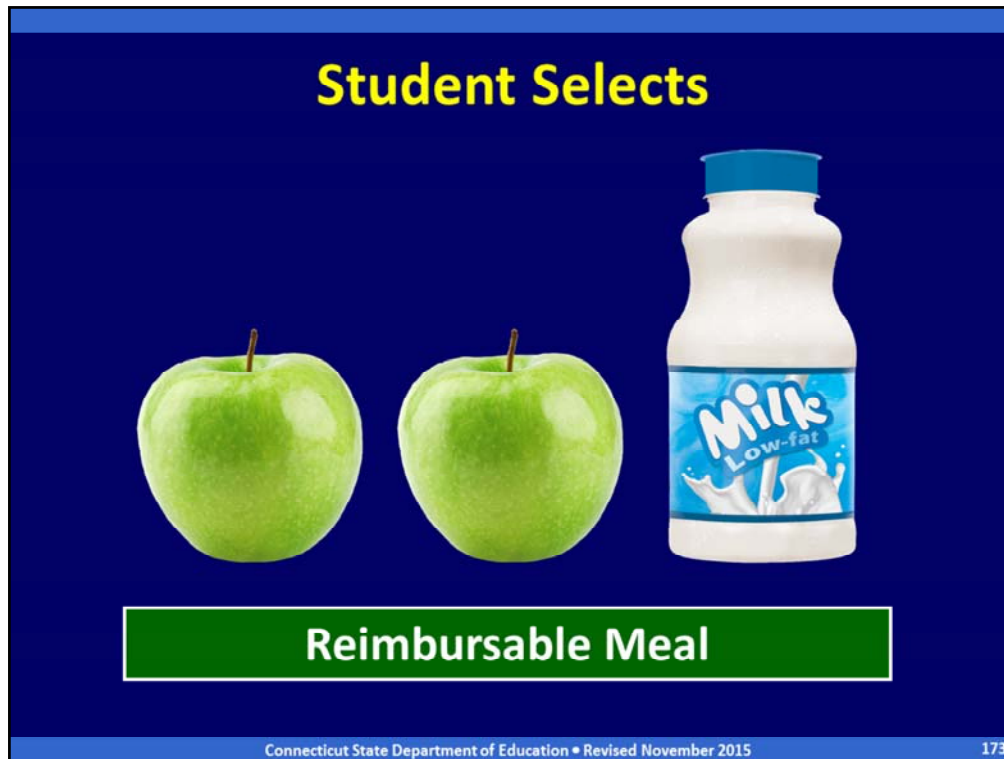
This slide shows an example of a student selection from Sample Breakfast Menu 2. In this example, the student has chosen only two food items.

A student could not select two yogurts (duplicate food items) and juice for a reimbursable breakfast because the menu is **planned** to allow only one choice (one food item) from the grains (with meat/meat alternates substitutions) component.



In this example, the student has chosen only two food items.

A student could NOT select two pieces of toast (duplicate food items) as two grain items and apple (fruit) for a reimbursable breakfast because the menu is **planned** to only allow **one choice** (one food item) from the grains (with meat/meat alternates substitutions) component.



In this example, the student has chosen three food items.

A student could select two apples (**duplicate food items, i.e., two fruits**) and milk because this menu is **planned** to allow any two choices (two food items) from the fruits component.



Now we're going to test your skill at identifying reimbursable meals under OVS. Let's play Meal or No Meal! Take out worksheet 4 – Meal or No Meal.

As a group, we will review some planned breakfast menus and various student selections to see if the student choices are reimbursable meals. You will see several breakfast menus that are all planned to meet the meal pattern requirements. There are no tricks here – each menu includes all required components in the minimum required serving sizes for lunch.

For each of the breakfast selections, you need to indicate “meal” or “no meal.”

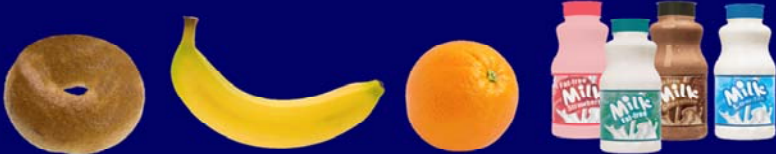
Note that for this activity, we are only looking at the **DAILY** requirements and are not concerned with the weekly requirements.

**INSTRUCTOR NOTES:**

- Do this activity with all participants together as one large group. Have participants take out worksheet 4 – Meal or No Meal.
- For each meal, participants will indicate either “meal” or “no meal.” Tell participants that they just have a few seconds to decide the answer, just as cashiers do when students come through the lunch line.
- After they have answered, click to bring in the answer on the slide. Refer to answer key for worksheet 4.

## Planned Breakfast

BREAKFAST MENU	
Food and Amount	Food Items
Whole-grain 2-ounce bagel (2 oz eq)	2 grains
Fresh orange (½ cup)	1 fruit
Banana (½ cup)	1 fruit
Milk choice (1 cup)	1 milk
<b>TOTAL FOOD ITEMS 5</b>	





Connecticut State Department of Education • Revised November 2015 175

This meal is planned to include **five** food items:

- two grains from the 2-ounce whole-grain bagel (2 ounce equivalents);
- two fruits from ½ cup of fresh orange (one fruit) and ½ cup of fresh banana (one fruit);  
and
- one milk from the choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.



**Student Selects**

**Reimbursable Meal?** **YES**

**Contains 3 food items**  
**(2 grains and 1 fruit)**


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The student selects the 2-ounce bagel and orange. Is this a reimbursable meal?

Yes. The selected meal contains three food items:

- two grains from the 2-ounce bagel (2 ounce equivalents); and
- one fruit ( $\frac{1}{2}$  cup of fruit).

**Student Selects**



**Reimbursable Meal?** **NO**


**Contains 3 food items (2 grains and 1 milk)  
but MISSING at least ½ cup of fruit**

Connecticut State Department of Education • Revised November 2015 177

The student selects the 2-ounce bagel and milk. Is this a reimbursable meal?

No. The selected meal contains three food items (two grains and one milk) but is missing at least ½ cup of fruit.

**Student Selects**



**Reimbursable Meal? YES**

**Contains 4 food items  
(2 grains, 1 fruit and 1 milk)**

Connecticut State Department of Education • Revised November 2015 178

The student selects the 2-ounce bagel, banana and milk. Is this a reimbursable meal?

Yes. The selected meal contains four food items, including two grains from the 2-ounce bagel (2 ounce equivalents), one fruit from the  $\frac{1}{2}$  cup of fruit and one milk.

**Student Selects**

**Reimbursable Meal?** **NO**

**Contains only 2 food items  
(1 fruit and 1 milk)**

Connecticut State Department of Education • Revised November 2015 179

The student selects the orange and milk. Is this a reimbursable meal?

No. The selected meal contains two food items: one fruit ( $\frac{1}{2}$  cup of fruit) and milk. Students must select a minimum of three food items including at least  $\frac{1}{2}$  cup of fruit. The student must select at least one other food item to make a reimbursable meal.

**Student Selects**

Reimbursable Meal? **YES**

Contains **3 food items**  
(2 fruits and 1 milk)


Connecticut State Department of Education • Revised November 2015 180

The student selects the orange, banana and milk. Is this a reimbursable meal?

Yes. The selected meal contains three food items (two fruits and one milk).

### Planned Breakfast

BREAKFAST MENU	
Food and Amount	Food Items
Whole-grain waffles, 2.4 ounces (2 oz eq)	2 grains
Orange juice (½ cup)	1 fruit
Green grapes (½ cup)	1 fruit
Milk choice (1 cup)	1 milk
<b>TOTAL FOOD ITEMS</b>	
<b>5</b>	




Connecticut State Department of Education • Revised November 2015 181

This meal is planned to include **five** food items:

- Two grains from 2.4 ounces whole-grain waffles (1.2 ounces of waffles provide 1 ounce equivalent therefore 2.4 ounces provide two grain items);
- two fruits from ½ cup of orange juice (one fruit) and ½ cup of grapes (one fruit); and
- one milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.

**Student Selects**



**Reimbursable Meal? YES**


**Contains 3 food items  
(2 grains and 1 fruit)**

Connecticut State Department of Education • Revised November 2015 182

The student selects the waffles and orange juice. Is this a reimbursable meal?

Yes. The selected meal contains three food items (two grains and one fruit).

**Student Selects**



**Reimbursable Meal?** **NO**

Contains **3 food items** (2 grains and 1 milk)  
but **MISSING** at least  $\frac{1}{2}$  cup of fruit



Connecticut State Department of Education • Revised November 2015 183

The student selects the waffles and milk. Is this a reimbursable meal?

No. The selected meal contains three food items (two grains and milk) but is missing at least  $\frac{1}{2}$  cup of fruit.



**Student Selects**



**Reimbursable Meal?** NO


**Contains only 2 food items  
(1 fruit and 1 milk)**

Connecticut State Department of Education • Revised November 2015 184

The student selects the orange juice and milk. Is this a reimbursable meal?

No. The selected meal contains only two food items (one fruit and one milk). The student must select at least one other food item to make a reimbursable meal.

**Student Selects**



**Reimbursable Meal? YES**

**Contains 3 food items  
(2 fruits and 1 milk)**


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The student selects the grapes, orange juice and milk. Is this a reimbursable meal?

Yes. The selected meal three food items (two fruits and one milk).

## Planned Breakfast

BREAKFAST MENU	
Food and Amount	Food Items
<b>Strawberry smoothie with ½ cup of low-fat milk</b> <ul style="list-style-type: none"> <li>■ ½ cup of pureed strawberries</li> <li>■ ½ cup of yogurt <i>M/MA substitution (1 oz eq)</i></li> </ul>	<b>1 fruit</b> <b>1 grain</b>
<b>Corn muffin, 1.2 ounces (1 oz eq)</b>	<b>1 grain</b>
<b>Orange wedges (½ cup)</b>	<b>1 fruit</b>
<b>Milk choice (1 cup)</b>	<b>1 milk</b>
<b>TOTAL FOOD ITEMS</b>	<b>5</b>



Connecticut State Department of Education • Revised November 2015 186

This meal is planned to include **five** food items:


- two fruits from ½ cup of orange wedges (one fruit) and ½ cup of pureed strawberries in the smoothie (one fruit);
- two grains – one grain from the ½ cup of yogurt as a meat/meat alternate substitution and one grain from 2-ounce corn muffin; and
- one milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.

Remember that corn muffins credit based on 1.2 ounces weight equals 1 ounce equivalent. All other muffins credit based on 2 ounces weight equaling 1 ounce equivalent of grains.

Pureed fruit in school-made smoothies credits only as **juice** toward the daily and weekly meal pattern requirements for fruits. Menu planners must include these amounts in the calculation of the weekly juice limits at breakfast.

The milk in this smoothie does not credit because it is less than 1 cup. Remember that the milk in smoothies credits toward the fluid milk requirement only if it includes the **full 1-cup serving**. When smoothies are offered on the serving line in school meal programs, the fluid milk component must also be offered on the serving line to meet the requirement for a variety of milk options.

**Student Selects**



**Reimbursable Meal? YES**

**Contains 3 food items (2 grains including 1 M/MA substitution and 1 fruit)**


Connecticut State Department of Education • Revised November 2015 187

The student selects the corn muffin and smoothie. Is this a reimbursable meal?

Yes. The selected meal contains three food items, including:

- two grains, including one grain from the 2-ounce corn muffin (1 ounce equivalent) and one grain from the ½ cup of yogurt (1 ounce equivalent) in the smoothie, which is a meat/meat alternate as a grain substitution; and
- one fruit from the ½ cup of pureed strawberries in the smoothie.

**Student Selects**



**Reimbursable Meal? YES**

**Contains 3 food items (1 grain as M/MA substitution and 2 fruits)**


Connecticut State Department of Education • Revised November 2015 188

The student selects the corn muffin and smoothie. Is this a reimbursable meal?

Yes. The selected meal contains three food items, including:

- one grain from the  $\frac{1}{2}$  cup of yogurt (1 ounce equivalent) in the smoothie, which is a meat/meat alternate as a grain substitution); and
- two fruits from the  $\frac{1}{2}$  cup of pureed strawberries in the smoothie and the  $\frac{1}{2}$  cup of sliced oranges.

**Student Selects**



**Reimbursable Meal?** **NO**

**Contains only 2 food items  
(1 grain and 1 fruit)**


Connecticut State Department of Education • Revised November 2015 189

The student selects the smoothie. Is this a reimbursable meal?

No. The selected meal contains only two food items, including:

- one grain from the  $\frac{1}{2}$  cup of yogurt (1 ounce equivalent) in the smoothie, which is a meat/meat alternate as a grain substitution; and
- one fruit from the  $\frac{1}{2}$  cup of pureed strawberries in the smoothie.

**Student Selects**



**Reimbursable Meal? YES**

**Contains 3 food items (1 grain as M/MA substitution, 1 fruit and 1 milk)**

Connecticut State Department of Education • Revised November 2015

190


The student selects the smoothie and milk. Is this a reimbursable meal?

Yes. The selected meal contains three food items, including:

- one grain from the ½ cup of yogurt (1 ounce equivalent) in the smoothie, which is a meat/meat alternate as a grain substitution);
- one fruit from the ½ cup of pureed strawberries in the smoothie; and
- one milk

## Planned Breakfast

BREAKFAST MENU	
Food and Amount	Food Items
Whole-grain 2-ounce blueberry muffin (1 oz eq)	1 grain
Whole-grain cereal flakes (1 cup)	1 grain
Kiwi slices (1 cup)	1 fruit
Milk choice (1 cup)	1 milk
<b>TOTAL FOOD ITEMS</b>	
<b>4</b>	



Connecticut State Department of Education • Revised November 2015 191

This meal is planned to include **four** food items that meet the minimum required serving sizes and meal components for the SBP:


- two grains from the 2-ounce whole-grain blueberry muffin (one grain) 1 cup of whole-grain flaked cereal (one grain);
- one fruit from the ½ cup of kiwi slices; and
- one milk from the choice of 1 cup of fat-free unflavored or favored milk or low-fat unflavored milk (1 milk).

Remember that all muffins except corn muffins credit based on 2 ounces weight equaling 1 ounce equivalent of grains. Corn muffins credit based on 1.2 ounces weight equals 1 ounce equivalent.

Note that the menu planner chose to count the 1 cup-serving of kiwi as one food item. The menu planner could also have chosen to count the 1 cup kiwi as two food items (two ½-cup servings of fruit).



**Student Selects**



**Reimbursable Meal? YES**


**Contains 3 food items  
(1 grain, 1 fruit and 1 milk)**

Connecticut State Department of Education • Revised November 2015 192

The student selects the muffin, kiwi and milk. Is this a reimbursable meal?

Yes. The selected meal contains three food items, including one grain from the 2-ounce muffin (1 ounce equivalent), one fruit from the ½ cup of kiwi and one milk.

**Student Selects**



**Reimbursable Meal?** **NO**

Contains **3 food items** (2 grains and 1 milk)  
but **MISSING** at least ½ cup of fruit

Connecticut State Department of Education • Revised November 2015 193

The student selects the muffin, cereal and milk. Is this a reimbursable meal?

No. The selected meal contains three food items: two grains from the muffin (1 ounce equivalent) and the cereal (1 ounce equivalent) and one milk, but is missing at least ½ cup of fruit.

**Student Selects**

**Reimbursable Meal?** **NO**

**Contains only 2 food items  
(1 grain and 1 fruit)**


Connecticut State Department of Education • Revised November 2015 194

The student selects the muffin and kiwi. Is this a reimbursable meal?

No. The selected meal contains only two food item (one grain and one fruit). The 2-ounce muffin counts as only 1 ounce equivalent, and therefore as only one grain item.

The student must select at least one other food item to make a reimbursable meal.

**Student Selects**



**Reimbursable Meal?** **NO**


**Contains only 2 food items (2 grains) and MISSING at least ½ cup of fruit**

Connecticut State Department of Education • Revised November 2015 195

The student selects the muffin and cereal. Is this a reimbursable meal?

No. The selected meal contains only two food items (two grains) and is missing ½ cup of fruit.

**Student Selects**



**Reimbursable Meal?** **NO**

**Contains only 2 food items (1 grain and 1 milk) and MISSING at least ½ cup of fruit**


Connecticut State Department of Education • Revised November 2015 196

The student selects the muffin and milk. Is this a reimbursable meal?

No. The selected meal contains only two food items (one grain and one milk) and is missing at least ½ cup of fruit.

## Planned Breakfast

BREAKFAST MENU	
Food and Amount	Food Items
<b>Blueberry yogurt (½ cup) *</b> <i>* M/MA substitution (1 oz eq)</i>	<b>1 grain</b>
<b>Whole-grain granola cereal (¼ cup)</b>	<b>1 grain</b>
<b>Strawberries (1 cup)</b>	<b>1 fruit</b>
<b>Milk choice (1 cup)</b>	<b>1 milk</b>
<b>TOTAL FOOD ITEMS</b>	<b>4</b>



Connecticut State Department of Education • Revised November 2015 197


This meal is planned to include **four** food items:

- two grains from ½ cup of blueberry yogurt (meat/meat alternate substitution that counts as one grain) and ¼ cup of granola (one grain);
- one fruit from 1 cup of sliced strawberries; and
- one milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.

Note that the menu planner chose to count the 1 cup-serving of strawberries as one food item. The menu planner could also have chosen to count the 1 cup of strawberries as two food items (two ½-cup servings of fruit).

Remember that ¼ cup of granola cereal provides 1 ounce equivalent of grains.

**Student Selects**



**Reimbursable Meal? YES**


**Contains 3 food items**  
**(1 grain, 1 fruit and 1 milk)**

Connecticut State Department of Education • Revised November 2015 198

The student selects the granola, strawberries and milk. Is this a reimbursable meal?

Yes. The selected meal contains three food items: one grain, one fruit and one milk.

**Student Selects**



**Reimbursable Meal? YES**

**Contains 3 food items**  
**(1 grain from M/MA substitution,**  
**1 fruit and 1 milk)**

Connecticut State Department of Education • Revised November 2015


199

The student selects the yogurt, strawberries and milk. Is this a reimbursable meal?

Yes. The selected meal contains three food items (one grain from the yogurt as a meat/meat alternate substitution), one fruit (½ cup strawberries) and one milk.



**Student Selects**



**Reimbursable Meal? YES**


**Contains 3 food items  
(2 grains including 1 from M/MA  
substitution and 1 fruit)**

Connecticut State Department of Education • Revised November 2015 200

The student selects the yogurt, granola and strawberries. Is this a reimbursable meal?

Yes. The selected meal contains three food items (two grains from the granola and the yogurt as a meat/meat alternate substitution) and one fruit (½ cup strawberries).

**Student Selects**



**Reimbursable Meal?** **NO**

**Contains only 2 food items (2 grains including 1 M/MA as grain substitution) and MISSING ½ cup of fruit)**


Connecticut State Department of Education • Revised November 2015 201

The student selects the yogurt and granola. Is this a reimbursable meal?

No. The selected meal contains only two food items (two grains from the granola and the yogurt as a meat/meat alternate substitution) and is missing ½ cup of fruit.

### Planned Breakfast

BREAKFAST MENU	
Food and Amount	Food Items
Sunflower butter (1 tablespoon) * <i>* M/MA substitution (½ oz eq)</i>	0
Whole-wheat toast (1 oz eq)	1 grain
Crunchy red apple slices (½ cup)	1 fruit
Red grapes (½ cup)	1 fruit
Milk choice (1 cup)	1 milk
<b>TOTAL FOOD ITEMS</b>	<b>4</b>



Connecticut State Department of Education • Revised November 2015 202

This meal is planned to include **four** food items:

- one grain from one slice of whole-wheat toast (1 ounce equivalent)
- two fruits from ½ cup of red apple and ½ cup of purple grapes; and
- one milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk (1 milk).

Note that in this example, the sunflower butter does **not** count as a food item because the menu planner chose to offer **½ ounce** (1 tablespoons), which is less than the full minimum required daily serving of 1 ounce equivalent.

Remember that amounts less than 1 full ounce equivalent do not count as a food item for OVS. When counting grains and meat/meat alternates as a food item for OVS, menu planners must **round down** to the nearest whole number of ounce equivalents. Since the toast and peanut butter together provide **1 ½ ounce equivalents**, this rounds down to 1 ounce equivalent.

The menu planner would have to serve 2 tablespoons of sunflower butter to provide 1 ounce equivalent and count as one food item (meat/meat alternate as grains substitution).

**Student Selects**

Reimbursable Meal? **NO**

Contains only **2 food items**  
(1 grain and 1 fruit)

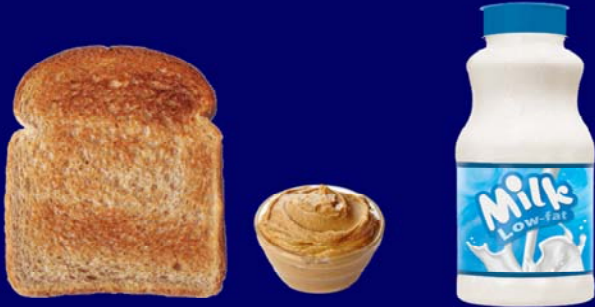
Connecticut State Department of Education • Revised November 2015 203

The student selects the toast with sunflower butter and apple. Is this a reimbursable meal?

No. The selected meal contains only two food items: one grain from the toast and one fruit ( $\frac{1}{2}$  cup of apple). The student must select at least one other food item to make a reimbursable meal.

Remember that the sunflower butter does **not** count as a food item because the menu planner chose to offer  $\frac{1}{2}$  **ounce** (1 tablespoons), which is less than the **full minimum required serving of 1 ounce equivalent**.

**Student Selects**



**Reimbursable Meal? NO**

**Contains only 2 food items (1 grain and 1 milk) and MISSING at least ½ cup of fruit**

Connecticut State Department of Education • Revised November 2015 204

The student selects the toast with sunflower butter and milk. Is this a reimbursable meal?

No. The selected meal contains only two food items (one grain and milk) and is missing at least ½ cup of fruit.

Remember that the sunflower butter does **not** count as a food item because the menu planner choose to offer ½ ounce (1 tablespoons), which is less than the **full minimum required serving of 1 ounce equivalent**.

**Student Selects**

Reimbursable Meal? **NO**

Contains only **2 food items**  
(1 grain and 1 fruit)


Connecticut State Department of Education • Revised November 2015 205

The student selects the toast with sunflower butter and grapes. Is this a reimbursable meal?

No. The selected meal contains only two food items: one grain from the toast and one fruit (grapes). The student must select at least one other food item to make a reimbursable meal.

Remember that the sunflower butter does **not** count as a food item because the menu planner choose to offer  $\frac{1}{2}$  **ounce** (1 tablespoons), which is less than the **full minimum required serving of 1 ounce equivalent**.

**Student Selects**



**Reimbursable Meal? YES**


**Contains 3 food items  
(2 fruits and 1 milk)**

Connecticut State Department of Education • Revised November 2015 206

The student selects the apple, grapes and milk. Is this a reimbursable meal?

Yes. The selected meal contains three food items (two fruits and one milk).

Planned Breakfast	
BREAKFAST MENU	
Food and Amount	Food Items
<b>Egg, Cheese and Ham * on 2-ounce WGR English muffin (2 oz eq) *</b> <i>* ½ egg, ½ ounce cheese and ½ ounce ham as M/MA substitution</i>	4 grains
<b>Fruit cup (1 cup)</b>	2 fruits
<b>Milk choice (1 cup)</b>	1 milk
<b>TOTAL FOOD ITEMS</b>	<b>7</b>



Connecticut State Department of Education • Revised November 2015 207

This meal is planned to include **seven** food items :


- four grains from the 2-ounce English muffin (two grains) and two grains from meat/meat alternate substitutions including ½ egg (one grain), ½ ounce of cheese (½ ounce equivalent, which equals ½ grain) and ½ ounce of ham (½ ounce equivalent, which equals ½ grain);
- two fruits from 1 cup of fruit salad (two ½-cup servings); and
- one milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.

Note that in this example, the menu planner chose to count the 1 cup-serving of fruit salad as two food items (two ½-cup servings of fruit).

In this example, the menu planner choose to count the 1 cup-serving of fruit salad as two food items (two ½-cup servings of fruit). The menu planner also could have chosen to count it as one food item. USDA allows this flexibility, but for practical purposes of increasing reimbursable meals, it makes the most sense to offer all fruits (and vegetable substitutions) in ½-cup servings and count each one as one fruit item.



**Student Selects**



**Reimbursable Meal?** **NO**


Contains **5 food items** (4 grains including 2 M/MA substitutions and 1 milk) but **MISSING** at least ½ cup of fruit

Connecticut State Department of Education • Revised November 2015 208

The student selects the English muffin breakfast sandwich and milk. Is this a reimbursable meal?

No. The selected meal contains three food items (milk and two grains from the English muffin) but is missing at least ½ cup of fruit.

**Student Selects**



**Reimbursable Meal? YES**


**Contains 6 food items (4 grains including  
2 M/MA substitutions and 2 fruits)**

Connecticut State Department of Education • Revised November 2015 209

The student selects the English muffin breakfast sandwich and fruit salad. Is this a reimbursable meal?

Yes. The selected meal contains six food items: four grains from the English muffin (two grains and two grains from meat/meat alternate substitutions) and two fruits.

**Student Selects**



**Reimbursable Meal? YES**

**Contains 3 food items  
(2 fruits and 1 milk)**


Connecticut State Department of Education • Revised November 2015 210

The student selects fruit salad and milk. Is this a reimbursable meal?

Yes. The selected meal contains three food items (two fruits and one milk).

## Planned Breakfast

BREAKFAST MENU	
Food and Amount	Food Items
Whole-wheat 2-ounce bagel (2 oz eq)	2 grains
Whole-grain cereal flakes (1 cup)	1 grain
Raisins (½ cup) * <i>* Dried fruit credits at twice the volume served</i>	2 fruits
Milk choice (1 cup)	1 milk
<b>TOTAL FOOD ITEMS</b>	<b>6</b>




Connecticut State Department of Education • Revised November 2015 211

This meal is planned to include **six** food items that meet the minimum required serving sizes and meal components for the SBP:

- three grains from a 2-ounce whole-wheat bagel (two grains) and 1 cup of whole-grain flaked cereal (one grain);
- two fruits from ½ cup of raisins (1 cup total); and
- one milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.

Remember that dried fruit credits as **twice** the volume served, e.g., ½ cup of raisins equal 1 cup of fruit. In this example, the menu planner choose to count the ½ cup-serving of raisins as two food items (two ½-cup servings of fruit). The menu planner also could have chosen to count it as one food item. USDA allows this flexibility, but for practical purposes of increasing reimbursable meals, it makes the most sense to offer all fruits (and vegetable substitutions) in ½-cup servings and count each one as one fruit item.

**Student Selects**



**Reimbursable Meal? NO**

Contains only **2 food items** (1 grain and 1 milk) and **MISSING** at least ½ cup of fruit

Connecticut State Department of Education • Revised November 2015 212

The student selects the cereal and milk. Is this a reimbursable meal?

No. The selected meal contains only two food items (one grain and one milk) and is missing at least ½ cup of fruit.

**Student Selects**

**Reimbursable Meal? YES**


**Contains 4 food items  
(2 grains and 2 fruits)**

Connecticut State Department of Education • Revised November 2015 213

The student selects the bagel and raisins. Is this a reimbursable meal?

Yes. The selected meal contains four food items: two grains from the 2-ounce bagel (2 ounce equivalents) and 1 fruit. The menu planner chose to count the ½ cup-serving of raisins as two food items (two ½-cup servings of fruit).

**Student Selects**



**Reimbursable Meal? YES**


**Contains 3 food items  
(1 grain and 2 fruits)**

Connecticut State Department of Education • Revised November 2015 214

The student selects the cereal and raisins. Is this a reimbursable meal?

Yes. The selected meal contains three food items (one grain and two fruits). The menu planner chose to count the ½ cup-serving of raisins as two food items (two ½-cup servings of fruit).

**Student Selects**



**Reimbursable Meal? YES**

**Contains 3 food items  
(2 fruits and 1 milk)**

Connecticut State Department of Education • Revised November 2015 215

The student selects the raisins and milk. Is this a reimbursable meal?

Yes. The selected meal contains three food items (two fruits and one milk). The menu planner chose to count the ½ cup-serving of raisins as two food items (two ½-cup servings of fruit).



**Student Selects**

Reimbursable Meal? **YES**


Contains **5 food items**  
(3 grains and 2 fruits)

Connecticut State Department of Education • Revised November 2015 216

The student selects the bagel, cereal and raisins. Is this a reimbursable meal?

Yes. The selected meal contains five food items: three grains (two grains from the bagel and one grain from the cereal) and two fruits. The menu planner chose to count the ½ cup-serving of raisins as two food items (two ½-cup servings of fruit).

**Student Selects**



**Reimbursable Meal? YES**

**Contains 4 food items  
(1 grain, 2 fruits and 1 milk)**

Connecticut State Department of Education • Revised November 2015


217

The student selects the cereal, raisins and milk. Is this a reimbursable meal?

Yes. The selected meal contains four food items (one grain, two fruits and one milk). The menu planner chose to count the ½ cup-serving of raisins as two food items (two ½-cup servings of fruit).

## Planned Breakfast

BREAKFAST MENU	
Food and Amount	Food Items
Whole-grain bread (2 oz eq)	2 grains
Scrambled egg (1 egg) * * <i>M/MA substitution (1 egg = 2 oz eq)</i>	2 grains
Tomato salsa (½ cup)** ** <i>vegetable substitution</i>	1 fruit
Fresh peaches (½ cup)	1 fruit
Milk choice (1 cup)	1 milk
<b>TOTAL FOOD ITEMS</b>	<b>7</b>




Connecticut State Department of Education • Revised November 2015 218

This meal is planned to include **seven** food items that meet the minimum required serving sizes and meal components for the SBP:

- four grains from a 2-ounce whole-grain bread (2 ounce equivalents which equals two grains) and one scrambled egg (2 ounce equivalents) as a meat/meat alternate planned as grains substitution (two grains);
- two fruits from ½ cup of cup of fresh peaches and ½ cup of salsa as a vegetable substitution); and
- one milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.

**Student Selects**



**Reimbursable Meal? YES**

**Contains 4 food items  
(2 grains as M/MA substitution,  
1 fruit and 1 milk)**


Connecticut State Department of Education • Revised November 2015

219

The student selects scrambled eggs, peaches and milk. Is this a reimbursable meal?

Yes. The selected meal contains four food items: two grains from one egg as a meat/meat alternate substitution, one fruit and one milk.

**Student Selects**



**Reimbursable Meal? YES**


**Contains 3 food items (2 grains from M/MA substitution and 1 fruit from vegetable substitution)**

Connecticut State Department of Education • Revised November 2015 220

The student selects scrambled eggs and salsa. Is this a reimbursable meal?

Yes. The selected meal contains three food items: two grains from one egg as a meat/meat alternate substitution and one fruit from salsa as a vegetable substitution.

**Student Selects**



**Reimbursable Meal?** **NO**


**Contains 5 food items (1 milk and 4 grains including 2 M/MA as grain substitution) but MISSING at least ½ cup of fruit**

Connecticut State Department of Education • Revised November 2015 221

The student selects scrambled eggs, bread and milk. Is this a reimbursable meal?

No. The selected meal contains five food items: four grains (two grains from the whole-grain roll and two grains from eggs as meat/meat alternate substitution) and one milk). However, it is missing at least ½ cup of fruit.

**Student Selects**



**Reimbursable Meal? YES**

**Contains 3 food items (2 fruits including 1 vegetable substitution and 1 milk)**

Connecticut State Department of Education • Revised November 2015

222

The student selects the salsa, peaches and milk. Is this a reimbursable meal?

Yes. The selected meal contains three food items: two fruits (including one vegetable substitution) and one milk.

**Student Selects**

Reimbursable Meal? **YES**

Contains **4 food items**  
(2 grains, 1 fruit and 1 milk)

Connecticut State Department of Education • Revised November 2015 223

The student selects the bread, peaches and milk. Is this a reimbursable meal?

Yes. The selected meal contains four food items: two grains from the 2-ounce equivalent roll, one fruit and one milk.



**Student Selects**

**Reimbursable Meal? YES**


**Contains 3 food items  
(2 grains and 1 fruit)**

Connecticut State Department of Education • Revised November 2015 224

The student selects the bread and peaches. Is this a reimbursable meal?

Yes. The selected meal contains three food items: two grains from the 2-ounce equivalent roll and one fruit.

**Student Selects**



**Reimbursable Meal?** **NO**

**Contains 4 food items (4 grains including 2 M/MA as grain substitution) but MISSING at least ½ cup of fruit**


Connecticut State Department of Education • Revised November 2015 225

The student selects the scrambled eggs and bread. Is this a reimbursable meal?

No. The selected meal contains four food items: four grains (two grains from whole-grain roll and two grains from one egg as meat/meat alternate substitution). However, it is missing at least ½ cup of fruit.

### Planned Breakfast

BREAKFAST MENU	
Food and Amount	Food Items
Oatmeal (½ cup)	1 grain
Blueberry muffin, 4 ounces (2 oz eq)	2 grains
Cantaloupe (1 cup)	2 fruits
Milk choice (1 cup)	1 milk
<b>TOTAL FOOD ITEMS</b>	<b>6</b>



Connecticut State Department of Education • Revised November 2015 226

This meal is planned to include **six** food items:

- three grains from ½ cup of oatmeal (1 ounce equivalent) and a 4-ounce blueberry muffin (2 ounce equivalents);
- two fruits from 1 cup of cantaloupe (one fruit); and
- one milk from choice of 1 cup of fat-free unflavored or flavored milk or low-fat unflavored milk.

Remember that all muffins except corn muffins credit based on 2 ounces weight equaling 1 ounce equivalent of grains. Corn muffins credit based on 1.2 ounces weight equals 1 ounce equivalent.

In this example, the menu planner choose to count the 1 cup of cantaloupe as two fruit items (two ½-cup servings). The menu planner also could have chosen to count it as one food item. USDA allows this flexibility, but for practical purposes of increasing reimbursable meals, it makes the most sense to offer all fruits (and vegetable substitutions) in ½-cup servings and count each one as one fruit item.

**Student Selects**

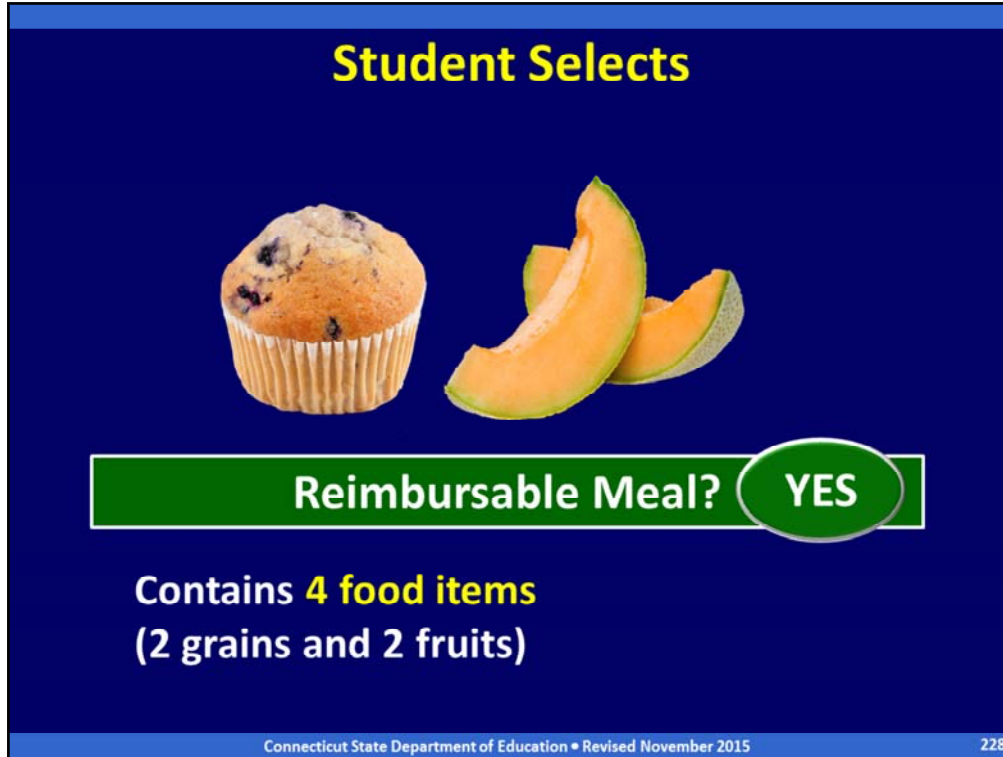
Reimbursable Meal? **YES**

Contains **5 food items**  
(3 grains and 2 fruits)

Connecticut State Department of Education • Revised November 2015 227

The student selects the oatmeal, blueberry muffin and cantaloupe. Is this a reimbursable meal?

Yes. The selected meal contains five food items: three grains (one grain from the ½ cup of oatmeal and two grains from the 4-ounce blueberry muffin) and two fruits (1 cup of cantaloupe).



**Student Selects**

**Reimbursable Meal? YES**

**Contains 4 food items  
(2 grains and 2 fruits)**

Connecticut State Department of Education • Revised November 2015 228

The student selects the blueberry muffin and cantaloupe. Is this a reimbursable meal?

Yes. The selected meal contains three food items: two grains from the 4-ounce blueberry muffin and two fruits (1 cup of cantaloupe).

**Student Selects**

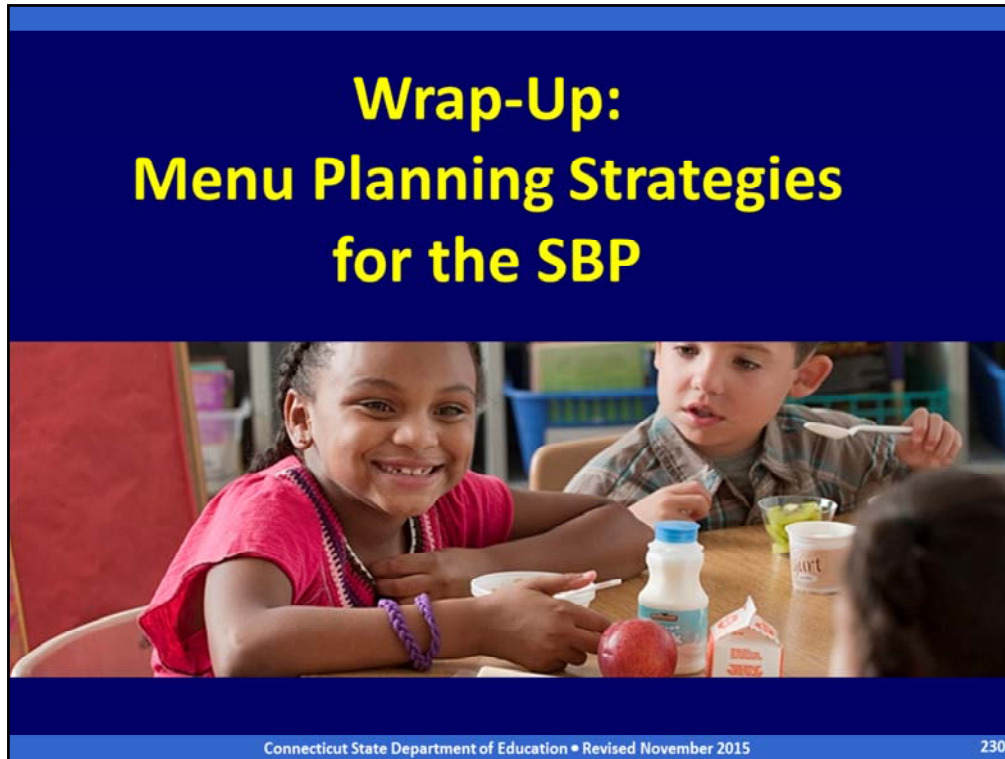
Reimbursable Meal? **YES**

Contains **3 food items**  
(1 grain and 2 fruits)

Connecticut State Department of Education • Revised November 2015 229

The student selects the oatmeal and cantaloupe. Is this a reimbursable meal?

Yes. The selected meal contains three food items: one grain from the  $\frac{1}{2}$  cup of oatmeal and two fruits (1 cup of cantaloupe).

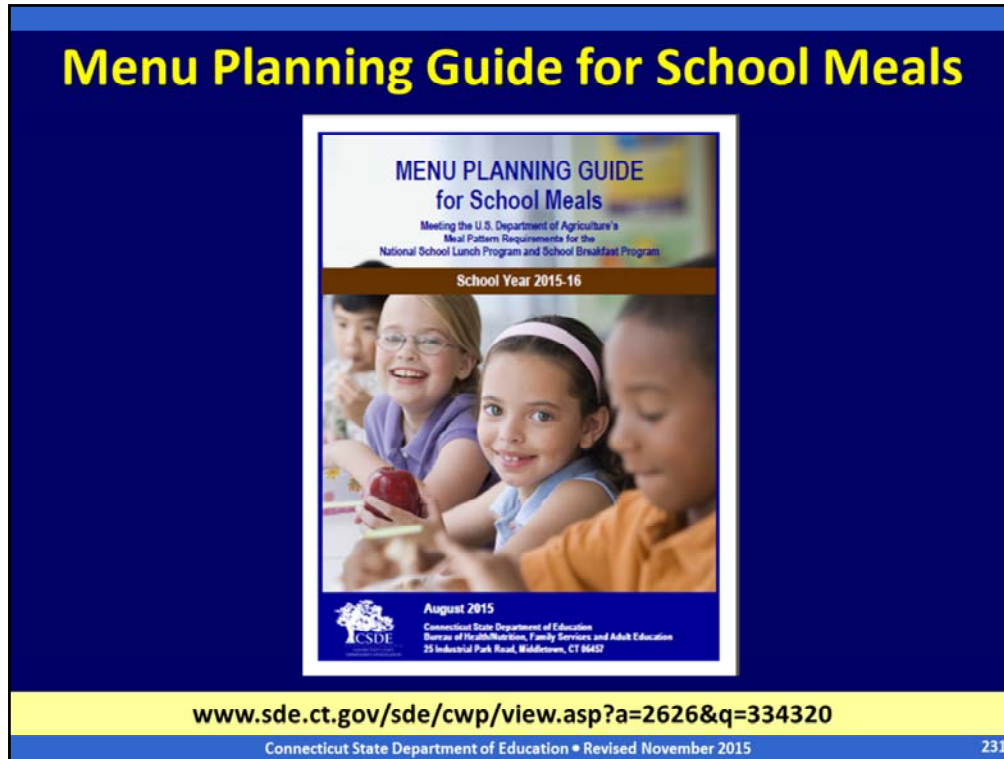


We have discussed a lot of information today about the meal pattern requirements for the SBP. This activity will help us review the key strategies regarding how to plan meals to meet the SBP requirements and encourage student selections of reimbursable meals under OVS.

Take out your handout, Menu Planning for the School Breakfast Program.

**Instructions:**

- Pair up with someone that you have not partnered with before. Together, take three minutes to review the handout – Menu Planning for the SBP. The person with the darkest shoes reads page 1 and the other person reads page 2.
- Share with each other one thing about menu planning strategies that is either new to you or a good reminder to use in your programs.
- **Modification:** If time is short, have participants partner with someone at their table.
- Ask a few teams to share their information. Adjust the number of people you ask to share as needed to accommodate the schedule.
- Remind participants about the handout in their packet, “Resources for School Meals,” containing links to many key resources to assist with menu planning for the NSLP and SBP.



The CSDE's *Menu Planning Guide for School Meals* contains comprehensive information and guidance on planning menus to meet the USDA meal patterns for the National School Lunch Program (NSLP), School Breakfast Program (SBP) and Seamless Option (SSO) of the NSLP, based on USDA regulations and policy and Connecticut statutes and regulations.

Remember to use this guide as the definitive resource to help menus comply with the meal pattern requirements. It is available at the link indicated on this slide.





**Connecticut Breakfast Expansion Team (CBET)**


CBET can provide assistance with your  
School Breakfast Program

Contact Jackie Schipke at  
860-807-2123 • [jackie.schipke@ct.gov](mailto:jackie.schipke@ct.gov)

Connecticut State Department of Education • Revised November 2015 232

### CSDE School Nutrition Programs Staff

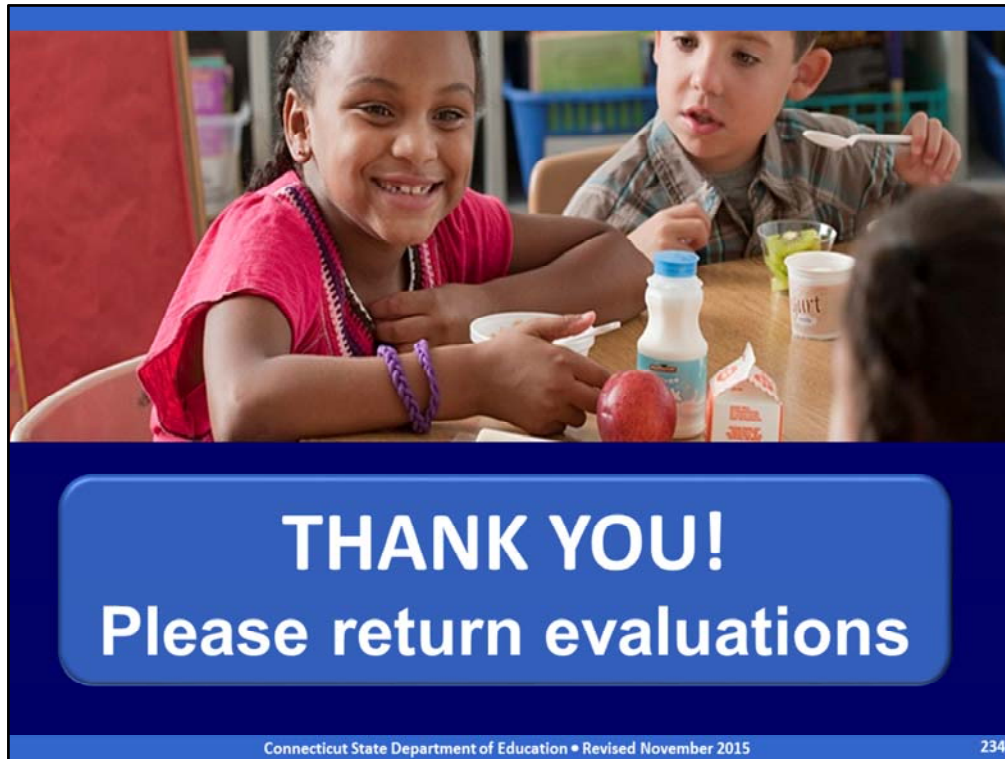
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Connecticut State Department of Education • Revised November 2015

233

Please contact your assigned consultant with any questions.



Thank you for participating in today's workshop.

Before you leave, please complete and return your evaluation. When you give us your evaluation, you will receive a certificate of attendance.

**INSTRUCTOR NOTES:** Position yourself near the exit and hand out certificates only when you receive an evaluation.