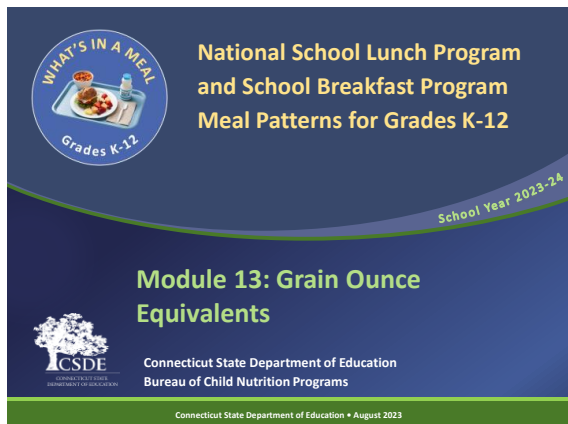


Module 13: Grain Ounce Equivalents



WHAT'S IN A MEAL
Grades K-12

National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12

School Year 2023-24

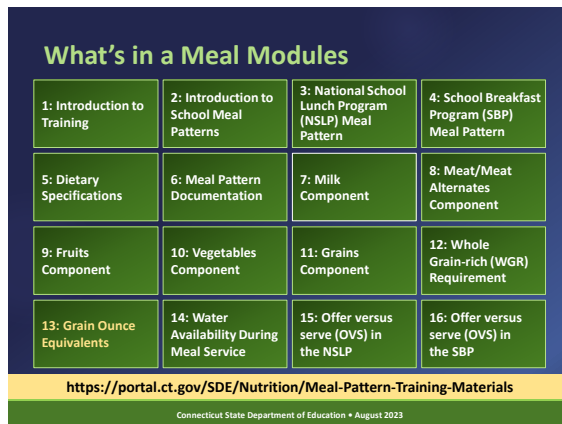
Module 13: Grain Ounce Equivalents

CSDE
CONNECTICUT STATE DEPARTMENT OF EDUCATION

Connecticut State Department of Education
Bureau of Child Nutrition Programs

Connecticut State Department of Education • August 2023

1



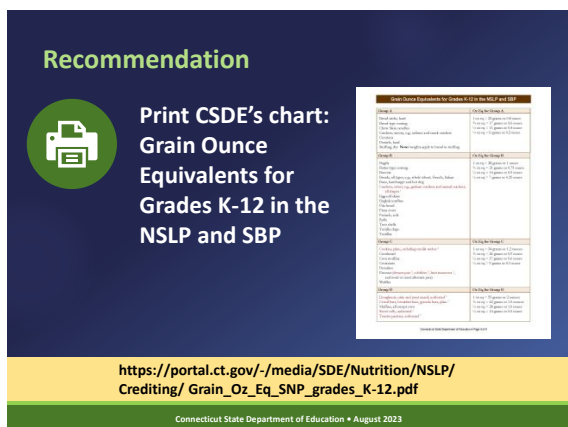
What's in a Meal Modules

1: Introduction to Training	2: Introduction to School Meal Patterns	3: National School Lunch Program (NSLP) Meal Pattern	4: School Breakfast Program (SBP) Meal Pattern
5: Dietary Specifications	6: Meal Pattern Documentation	7: Milk Component	8: Meat/Meat Alternates Component
9: Fruits Component	10: Vegetables Component	11: Grains Component	12: Whole Grain-rich (WGR) Requirement
13: Grain Ounce Equivalents	14: Water Availability During Meal Service	15: Offer versus serve (OVS) in the NSLP	16: Offer versus serve (OVS) in the SBP

<https://portal.ct.gov/SDE/Nutrition/Meal-Pattern-Training-Materials>

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Recommendation

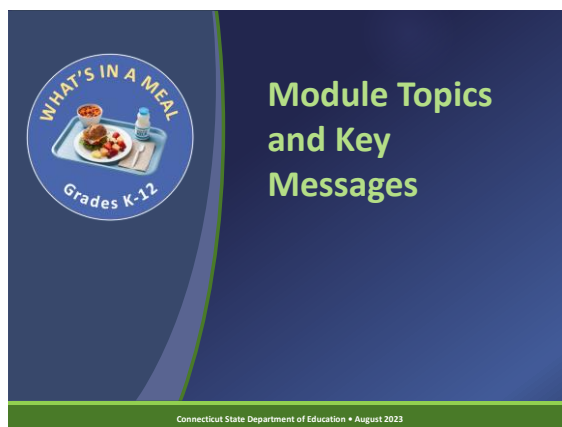
Print CSDE's chart: Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP

Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP	NSLP/Meal Pattern	SBP/Meal Pattern
Breads	1 slice of whole wheat bread	1 slice of whole wheat bread
Cereals	1/2 cup of dry cereal	1/2 cup of dry cereal
Grains	1/2 cup of dry cereal	1/2 cup of dry cereal
Legumes	1/2 cup of dry beans	1/2 cup of dry beans
Nuts	1/2 cup of dry beans	1/2 cup of dry beans
Seeds	1/2 cup of dry beans	1/2 cup of dry beans
Starches	1/2 cup of dry beans	1/2 cup of dry beans
Vegetables	1/2 cup of dry beans	1/2 cup of dry beans
Whole Grains	1/2 cup of dry beans	1/2 cup of dry beans

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Grain_Oz_Eq_SNP_grades_K-12.pdf

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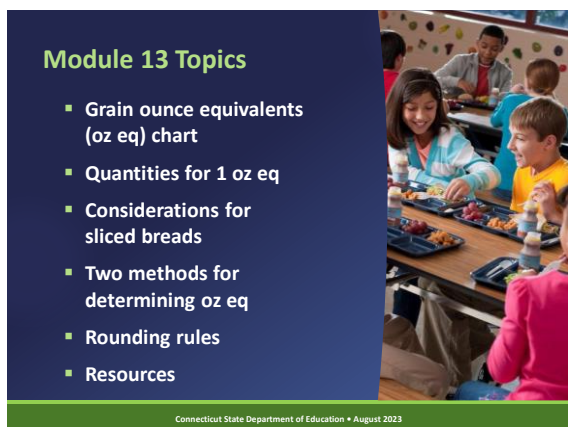


WHAT'S IN A MEAL
Grades K-12

Module Topics and Key Messages


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Module 13 Topics

- Grain ounce equivalents (oz eq) chart
- Quantities for 1 oz eq
- Considerations for sliced breads
- Two methods for determining oz eq
- Rounding rules
- Resources



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Key Messages About Grain Ounce Equivalents

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Key Messages About Grain Oz Eq

- Grain foods credit by
 - weight (ounces or grams)
 - volume (cups)
- Minimum creditable amount = $\frac{1}{4}$ oz eq
- For many grain foods, 1 oz eq does not equal 1 ounce
- Serving size on commercial product's package may or may not equal 1 oz eq
- Two methods to determine oz eq
 - Method 1: Weight or volume
 - Method 2: Creditable grains

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Introduction to Grain Oz Eq

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Grain Oz Eq


Amount of a grain product that is equal to or contains 1 ounce of the grains component

- 1 oz eq = 16 grams of creditable grains
- 1 oz eq whole grain-rich (WGR) = 16 grams of creditable grains including ≥ 8 grams of whole grains

Terms to Know

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How much = 1 oz eq?

- For many grain foods, 1 oz eq does not equal 1 ounce
- Depends on amount of creditable grains in serving

Must review each grain item to determine required quantity for 1 oz eq

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How much = 1 oz eq?

- 1 oz eq = 1 ounce for some grain foods

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How much = 1 oz eq?

- 1 oz eq = less than 1 ounce for some grain foods

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Module 13: Grain Ounce Equivalents

How much = 1 oz eq?

- 1 oz eq = more than 1 ounce for some grain foods

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How much = 1 oz eq?

- Defined in USDA's Exhibit A: Grain Requirements for Child Nutrition Programs

<https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/ExhibitA.pdf>

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Exhibit A Overview

- 9 grain groups (A-I)
 - Weight or volume
- Includes required grain quantities for all Child Nutrition Programs
 - Grain oz eq
 - Grains/breads servings

Food Products per Group	Grain Requirement (oz eq)	Minimum Servings Size
Group A	1 ounce (28 g) of whole grain flour	1 ounce (28 g) of whole grain flour
Group B	1 ounce (28 g) of whole grain flour	1 ounce (28 g) of whole grain flour
Group C	1 ounce (28 g) of whole grain flour	1 ounce (28 g) of whole grain flour
Group D	1 ounce (28 g) of whole grain flour	1 ounce (28 g) of whole grain flour
Group E	1 ounce (28 g) of whole grain flour	1 ounce (28 g) of whole grain flour
Group F	1 ounce (28 g) of whole grain flour	1 ounce (28 g) of whole grain flour
Group G	1 ounce (28 g) of whole grain flour	1 ounce (28 g) of whole grain flour
Group H	1 ounce (28 g) of whole grain flour	1 ounce (28 g) of whole grain flour
Group I	1 ounce (28 g) of whole grain flour	1 ounce (28 g) of whole grain flour

<https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/ExhibitA.pdf>

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Required Grain Quantities in Exhibit A

Program		Grain Oz Eq	Grains/Breads Servings
NSLP	preschool	X	
	grades K-12	X	
SBP	preschool	X	
	grades K-12	X	
ASP	preschool	X	
	grades K-12		X

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CSDE Resource

CSDE's Grain Ounce Equivalents for Grades K-12 in the National School Lunch Program and School Breakfast Program

- Includes only oz eq

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Grain_Oz_Eq_SNP_grades_K-12.pdf

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WHAT'S IN A MEAL
Grades K-12


Overview of Grain Oz Eq Chart

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Overview of CSDE's Grain Oz Eq Chart

- Lists Exhibit A oz eq that apply to NSLP and SBP meal patterns for grades K-12
 - Grain groups A-I
 - Quantity required for 1 oz eq




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Overview of CSDE's Grain Oz Eq Chart

- Grain-based desserts listed in red
 - Footnote 1 = lunch or breakfast
 - Footnote 2 = lunch only (≤ 2 oz eq)




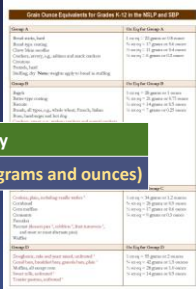
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Required Quantities

- Weight or volume

Grain group	Credits by
A-G: Baked goods	Weight (grams and ounces)


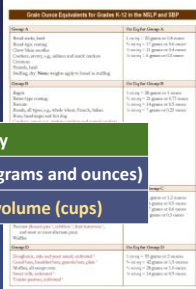
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Required Quantities

- Weight or volume

Grain group	Credits by
A-G: Baked goods	Weight (grams and ounces)
H: Cereal grains	Cooked volume (cups)


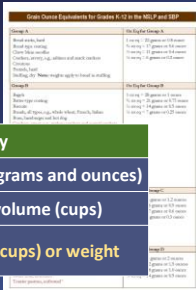
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Required Quantities

- Weight or volume

Grain group	Credits by
A-G: Baked goods	Weight (grams and ounces)
H: Cereal grains	Cooked volume (cups)
I: Ready-to-eat (RTE) breakfast cereals	Volume (cups) or weight

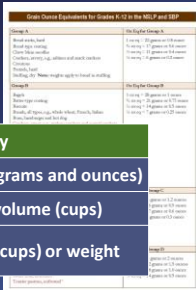
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Required Quantities

- Weight or volume

Grain group	Credits by
A-G: Baked goods	Weight (grams and ounces)
H: Cereal grains	Cooked volume (cups)
I: Ready-to-eat (RTE) breakfast cereals	Volume (cups) or weight



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Required Quantities

- Weight or volume
- Four different serving sizes for groups A-G

Group A	Oz Eq for Group A
Bread-type coating	1 oz eq = 22 grams or 0.8 ounce ½ oz eq = 17 grams or 0.6 ounce ¼ oz eq = 11 grams or 0.4 ounce ⅓ oz eq = 6 grams or 0.2 ounce
Breadsticks, hard	
Chow mein noodles	
Crackers, savory, e.g., saltines and snack crackers	
Croutons	
Pretzels, hard	
Stuffing, dry (weights apply to bread in stuffing)	

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Required Quantities

- Weight or volume
- Four different serving sizes for groups A-G

Group A	Oz Eq for Group A
Bread-type coating	1 oz eq = 22 grams or 0.8 ounce ½ oz eq = 17 grams or 0.6 ounce ¼ oz eq = 11 grams or 0.4 ounce ⅓ oz eq = 6 grams or 0.2 ounce
Breadsticks, hard	
Chow mein noodles	
Crackers, savory, e.g., saltines and snack crackers	
Croutons	
Pretzels, hard	
Stuffing, dry (weights apply to bread in stuffing)	

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Required Quantities

- Weight or volume
- Four different serving sizes for groups A-G

Group A	Oz Eq for Group A
Bread-type coating	1 oz eq = 22 grams or 0.8 ounce ½ oz eq = 17 grams or 0.6 ounce ¼ oz eq = 11 grams or 0.4 ounce ⅓ oz eq = 6 grams or 0.2 ounce
Breadsticks, hard	
Chow mein noodles	
Crackers, savory, e.g., saltines and snack crackers	
Croutons	
Pretzels, hard	
Stuffing, dry (weights apply to bread in stuffing)	

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Required Quantities

- Weight or volume
- Four different serving sizes for groups A-G

Group A	Oz Eq for Group A
Bread-type coating	1 oz eq = 22 grams or 0.8 ounce ½ oz eq = 17 grams or 0.6 ounce ¼ oz eq = 11 grams or 0.4 ounce ⅓ oz eq = 6 grams or 0.2 ounce
Breadsticks, hard	
Chow mein noodles	
Crackers, savory, e.g., saltines and snack crackers	
Croutons	
Pretzels, hard	
Stuffing, dry (weights apply to bread in stuffing)	

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Required Quantities for Groups A-G: Baked Goods

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Groups A-G: Required Weight for 1 Oz Eq

 Group A 22 grams	 Group B 28 grams	 Group C 34 grams
 Group D 55 grams	 Group E 69 grams	 Group F 82 grams
	 Group G 125 grams	

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Considerations for Sliced Breads (Group B)

- 1 oz eq = 1 ounce (28 grams)
- 1 slice might not weigh 1 ounce
 - Thin bread
 - Low calorie bread
 - Reduced calorie bread
 - Light

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Considerations for Sliced Breads (Group B)

- Thin
- Very Thin
- Low calorie
- Reduced calorie
- Light
- Lite

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Considerations for Sliced Breads (Group B)

- Number of slices per serving
- If serving is 2 slices, divide serving weight by 2

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Example 1: Multigrain Bread

Nutrition Facts	
Serving Size	2 slices (44g)
Servings per container	about 26
Amount per serving	
Calories	45

Does 1 slice provide ≥ 1 oz eq?

No

1 slice = 22 grams

Oz eq per slice
 $22 \text{ grams} \div 28 \text{ grams} = 0.78 \text{ oz eq}$

0.75 or $\frac{3}{4}$ oz eq

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Example 3: Enriched Sandwich Bread

Nutrition Facts	
Serving Size	2 slices (50g)
Servings per container	9
Amount per serving	
Calories	130

Does 1 slice provide ≥ 1 oz eq?

No


1 slice = 25 grams

Oz eq per slice
 $25 \text{ grams} \div 28 \text{ grams} = 0.89 \text{ oz eq}$

0.75 or $\frac{3}{4}$ oz eq

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Required Quantities for Group H: Cereal Grains

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Group H: Cereal Grains

- Pasta
- Rice
- Cooked breakfast cereals
- Cereal grains




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Required Quantity for Cereal Grains

Type of cereal grain	1 oz eq =
Cooked	½ cup
Dry	28 grams (1 ounce)



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Required Quantities for Group I: RTE Breakfast Cereals

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Group I: RTE Breakfast Cereals

- Puffed cereals
- Round or flaked cereals
- Granola




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Required Quantities for RTE Breakfast Cereals

Type of cereal	1 oz eq = 1 ounce (28 grams)
Round or flaked cereals	1 cup
Puffed cereals	1½ cups
Granola	¾ cup
Weight or volume, whichever is less	



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Overview of Methods to Determine Oz Eq

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Methods to Determine Oz Eq

1
Weight or volume
(Exhibit A)


https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Grain_Oz_Eq_SNP_grades_K-12.pdf

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Methods to Determine Oz Eq

1
Weight or volume
(Exhibit A)



2
Creditable
grains






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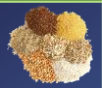
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Methods to Determine Oz Eq

1
Weight or volume
(Exhibit A)



2
Creditable
grains




Method used depends on type of grain food

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Overview of Method 1: Weight or Volume (Exhibit A)



- Commonly used for most commercial grain products
 - Cannot use for some commercial products
- May use for foods made from scratch if know cooked weight or volume

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To Use Method 1 for Commercial Grain Products or Standardized Recipes



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To Use Method 1 for Commercial Grain Products or Standardized Recipes


Groups	Must know	Documentation
A-G: Baked goods 	Serving weight	Commercial products <ul style="list-style-type: none"> Nutrition Facts PFS
H: Cereal grains, e.g., pasta, rice 	<ul style="list-style-type: none"> Volume of cooked serving OR Dry weight of uncooked serving 	Foods made from scratch <ul style="list-style-type: none"> Standardized recipe Yield study
I: RTE cereals 	Serving weight or volume	

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Reminder: To Use Method 1 for Foods Made from Scratch

- Must know cooked serving
 - weight (groups A-G) **OR**
 - volume (groups H-I)
- If not indicated
 - Conduct yield study **OR**
 - Use method 2




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CSDE Resource

Yield Study Data Form for Child Nutrition Programs




https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Yield_Study_Form.pdf

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Overview of Method 2: Creditable Grains

- Based on grams of creditable grains per serving
- May use for any commercial grain products
 - Required for some commercial products
- Common for foods made from scratch



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Overview of Method 2: Creditable Grains

Grams of Creditable Grains Depends On

Crediting	Grain Group
<ul style="list-style-type: none"> Enriched WGR 	<ul style="list-style-type: none"> A-G: Baked goods H: Cereal grains I: RTE cereals

Must contain minimum quantity of creditable grains

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Overview of Method 2: Creditable Grains

1 oz eq of grains component =	
Groups	Creditable grains
A-G	16 grams
H-I	28 grams

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
Overview of Method 2: Creditable Grains

1 oz eq of WGR food =	
Groups	Creditable grains
A-G	16 grams including ≥ 8 grams whole grains
H-I	28 grams including ≥ 14 grams whole grains

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To Use Method 2 for Commercial Grain Products or Standardized Recipes


Must know	Documentation
<ul style="list-style-type: none"> Grams of each creditable grain Combined grams of noncreditable grains 	<ul style="list-style-type: none"> Commercial products: PFS Foods made from scratch: standardized recipe <ul style="list-style-type: none"> Convert pounds and ounces to grams If weight not listed, convert volume to grams

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CSDE Resource


Calculation Methods for Grain Ounce Equivalents for Grades K-12 in the National School Lunch Program and School Breakfast Program



https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Grain_Calculation_SNP_grades_K-12.pdf

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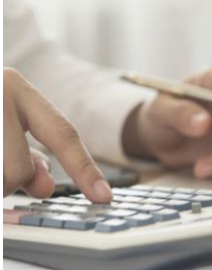
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Choosing the Oz Eq Calculation Method

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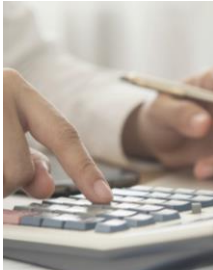
Choosing the Oz Eq Calculation Method

- May use either method but document method used for each product or recipe
- May result in different crediting contributions


Method 1: Weight or volume in Exhibit A
Method 2: Creditable grains

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Crediting Example

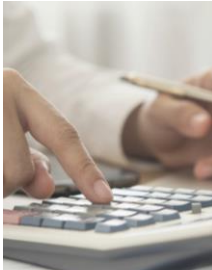


1 ounce whole-grain bagel	
Method	Oz eq
1: Weight (group B in Exhibit A)	1
2: Creditable grains (information in PFS)	1½

Method 1: Weight or volume in Exhibit A
Method 2: Creditable grains

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Choosing the Oz Eq Calculation Method

- Use same method for same product each time

Method 1: Weight or volume in Exhibit A
Method 2: Creditable grains

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Rounding Rules for Calculating Oz Eq

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Rounding Rules

1. Oz eq contribution
2. Number of pieces per oz eq



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Rounding Rule 1

Oz Eq Contribution

- Round **DOWN** to nearest $\frac{1}{4}$ oz eq

1.49 oz eq bagel
= 1.25 oz eq





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Rounding Rule 1

Oz Eq Contribution

- Round **DOWN** to nearest $\frac{1}{4}$ oz eq

1.27 oz eq muffin
= 1.25 oz eq





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Rounding Rule 1

Oz Eq Contribution

- Round **DOWN** to nearest $\frac{1}{4}$ oz eq

1.24 oz eq bread
= 1 oz eq




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Rounding Rule 2

Number of Pieces

- Round **UP** to next whole number



1 oz eq =	Must serve
4.2 crackers	5 crackers


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Rounding Rule 2

Number of Pieces

- Round UP to next whole number




1 oz eq =	Must serve
6.7 pretzels	7 pretzels

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Remember: Summary of Rounding Rules

- Oz eq contribution: Round DOWN to nearest ¼ oz eq
- Number of pieces per oz eq: Round UP to next whole number

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Using Method 1 (Exhibit A) for Commercial Grain Products


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Ways to Calculate Oz Eq with Method 1


USDA's Exhibit A Grains Tool

- USDA website
- USDA mobile app



Manual Calculations

- Nutrition Facts label or PFS
- Exhibit A chart




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Method 1 with USDA's Exhibit A Grains Tool

- Determines meal pattern contribution of commercial grain products
 - Grain oz eq NSLP and SBP meal patterns for grades K-12
 - Grains/breads servings ASP meal pattern for grades K-12




<https://www.fns.usda.gov/tn/food-buying-guide-interactive-web-based-tool>

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Method 1 with USDA's Exhibit A Grains Tool

- Create free account to save crediting information



<https://www.fns.usda.gov/tn/food-buying-guide-interactive-web-based-tool>

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Module 13: Grain Ounce Equivalents

Method 1 with USDA's Exhibit A Grains Tool

- Enter name of product
- Choose oz eq
- Search for food in Exhibit A

<https://www.fns.usda.gov/tn/food-buying-guide-interactive-web-based-tool>

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Method 1 with USDA's Exhibit A Grains Tool

- Instructions

<https://www.fns.usda.gov/tn/food-buying-guide-interactive-web-based-tool>

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USDA Resource

Exhibit A Grains Tool to the Rescue

<https://www.fns.usda.gov/tn/exhibit-grains-tool-rescue>

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USDA Resource

How to Maximize the Exhibit A Grains Tool

<https://www.fns.usda.gov/tn/food-buying-guide-training-resources>

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Method 1 with Manual Calculations

Commercial Grain Products

Divide

- Manufacturer's serving weight or volume

By

- Required weight or volume for 1 oz eq from Exhibit

Different steps depending on type of product

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Method 1 with Manual Calculations

Different steps for

Multiple small pieces per serving	Multiple large pieces per serving	One piece per serving


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Method 1 with Manual Calculations

Example: Whole-grain Crackers

Steps for multiple small pieces per serving




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Step 1: Determine required weight for 1 oz eq

22 grams

Group A	Oz Eq for Group A
Bread-type coating	
Breadsticks, hard	1 oz eq = 22 grams or 0.8 ounce
Chow mein noodles	¼ oz eq = 17 grams or 0.6 ounce
Crackers, savory, e.g., saltines and snack crackers	½ oz eq = 11 grams or 0.4 ounce
Croutons	¼ oz eq = 6 grams or 0.2 ounce
Pretzels, hard	
Stuffing, dry (weights apply to bread in stuffing)	



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Step 2: Use Nutrition Facts label to find serving weight and number of pieces

Nutrition Facts	
About 9 Servings per container	
Serving Size	6 crackers (28g)
Amount per serving	
Calories	120

Serving weight = 28 grams

Pieces per serving = 6 crackers



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Step 3: Determine weight per piece

Nutrition Facts
About 9 Servings per container
Serving Size 6 crackers (28g)
Amount per serving
Calories 120

Divide serving weight by number of pieces

Serving weight	Number of pieces	Weight per piece
28 grams	÷ 6 crackers	= 4.67 grams




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Step 4: Determine number of pieces for 1 oz eq

Divide Exhibit A weight by weight per piece

Exhibit A weight for 1 oz eq (group A)	Weight per piece	Number of pieces = 1 oz eq
22 grams	÷ 4.67 grams	= 4.7 crackers
Round up to next whole number		5 crackers




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Method 1 with Manual Calculations

Example: Enriched Pancakes

Steps for multiple large pieces per serving




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Step 1: Determine required weight for 1 oz eq

34 grams

Group C	Oz Eq for Group C
Cookies, plain, including vanilla wafers ²	
Cornbread	1 oz eq = 34 grams or 1.2 ounces
Corn muffins	¾ oz eq = 26 grams or 0.9 ounce
Croissants	½ oz eq = 17 grams or 0.6 ounce
Pancakes	¼ oz eq = 9 grams or 0.3 ounce
Piecrust (dessert pies ² , cobblers ² , fruit turnovers ¹ , and meat or meat alternate pies)	
Waffles	



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Step 2: Use Nutrition Facts label to find serving weight and number of pieces

Nutrition Facts	
4 Servings per container	
Serving Size	3 pancakes (116g)
Amount per serving	
Calories	280

Serving weight = 116 grams

Pieces per serving = 3 pancakes



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Step 3: Determine weight per piece

Nutrition Facts	
4 Servings per container	
Serving Size	3 pancakes (116g)
Amount per serving	
Calories	280

▪ Divide serving weight by number of pieces

Serving weight	Number of pieces	Weight per piece
116 grams	÷ 3 pancakes	= 38.67 grams




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Step 4: Determine oz eq per piece

▪ Divide weight of 1 piece by Exhibit A weight for 1 oz eq

Weight of piece (1 pancake)	Exhibit A weight for 1 oz eq (group C)	Oz eq per piece
38.67 grams	÷ 34 grams	= 1.14 oz eq
Round down to nearest ¼ oz eq		1 oz eq




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Method 1 with Manual Calculations

Steps for one piece per serving

Example: WGR blueberry muffin





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Step 1: Determine required weight for 1 oz eq

Group C	Oz Eq for Group C
Cookies, plain, including vanilla wafers ²	
Cornbread	1 oz eq = 34 grams or 1.2 ounces
Corn muffins	¾ oz eq = 26 grams or 0.9 ounce
Croissants	½ oz eq = 17 grams or 0.6 ounce
Pancakes	¼ oz eq = 9 grams or 0.3 ounce
Piecrust (dessert pies ² , cobblers ² , fruit turnovers ¹ , and meat or meat alternate pies)	
Waffles	
Group D	Oz Eq for Group D
Doughnuts, cake and yeast raised, unfrosted ¹	1 oz eq = 55 grams or 2 ounces
Cereal bars, breakfast bars, granola bars, plain ¹	¾ oz eq = 42 grams or 1.5 ounces
Muffins, all except corn	½ oz eq = 28 grams or 1.0 ounce
Sweet rolls, unfrosted ¹	¼ oz eq = 14 grams or 0.5 ounce
Toaster pastries, unfrosted ¹	


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Step 1: Determine required weight for 1 oz eq

55 grams

Group D	Oz Eq for Group D
Doughnuts, cake and yeast raised, unfrosted ¹	1 oz eq = 55 grams or 2 ounces ¼ oz eq = 42 grams or 1.5 ounces ½ oz eq = 28 grams or 1.0 ounce ¾ oz eq = 14 grams or 0.5 ounce
Cereal bars, breakfast bars, granola bars, plain ¹	
Muffins, all except corn	
Sweet rolls, unfrosted ¹	
Toaster pastries, unfrosted ¹	




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Step 2: Use Nutrition Facts label to find serving weight

Nutrition Facts	
Serving Size	1 muffin (57g)
Servings per container	6
Amount per serving	
Calories	210

Serving weight = 57 grams




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Step 3: Determine oz eq per piece

▪ Divide manufacturer's serving weight by required weight for 1 oz eq from Exhibit A

Serving weight	Exhibit A weight for 1 oz eq (group D)	Oz eq per serving (1 muffin)
57 grams	÷ 55 grams	= 1.04 oz eq
Round down to nearest ¼ oz eq		1 oz eq




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CSDE Resource


How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program



https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/How_to_Use_Grain_Ounce_Equivalents_Chart_NSLP_SBP.pdf

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Using Method 2 for Commercial Products

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PFS Must Indicate

1. Grams of each creditable grain
2. Combined grams of noncreditable grains




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Verify Accuracy of PFS

- Must include
 - all required elements
 - correct crediting calculations

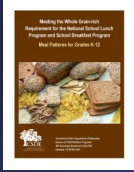


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Verify Accuracy of PFS

- Guidance in section 6



https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/WGR_Requirement_SNP_grades_K-12.pdf




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Verify Accuracy of PFS

- Cannot accept if missing or incorrect information
 - Request supporting documentation and updated PFS
- Maintain PFS and crediting documentation on file



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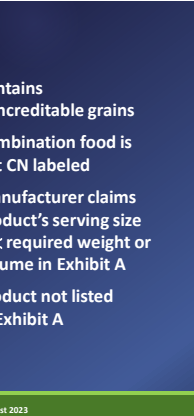
When Method 2 is Required for Commercial Grain Products

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When Method 2 is Required

1. Whole grain is not first ingredient, but > 1 whole grain
2. Whole grain is first ingredient and ≥ 2 enriched grains
3. First ingredient is flour blend of whole and enriched flour
4. Creditable grain is not first ingredient, but > 1 creditable grain
5. Contains noncreditable grains
6. Combination food is not CN labeled
7. Manufacturer claims product's serving size is < required weight or volume in Exhibit A
8. Product not listed in Exhibit A




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When Method 2 is Required

1. Whole grain is not first ingredient, but > 1 whole grain



Ingredients: Unbleached enriched wheat flour [flour, malted barley flour, reduced iron, niacin, thiamin mononitrate (vitamin B1), riboflavin (vitamin B2), folic acid], whole-wheat flour, whole oats, sugar, yeast, soybean oil, salt






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When Method 2 is Required

1. Whole grain is not first ingredient, but > 1 whole grain

Ingredients: Unbleached enriched wheat flour [flour, malted barley flour, reduced iron, niacin, thiamin mononitrate (vitamin B1), riboflavin (vitamin B2), folic acid], whole-wheat flour, whole oats, sugar, yeast, soybean oil, salt



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When Method 2 is Required

2. Whole grain is first ingredient and ≥ 2 enriched grains

Ingredients: Whole-wheat flour, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), enriched corn meal (corn meal, ferrous sulfate, niacin, thiamin mononitrate, riboflavin, folic acid), yeast, soybean oil, sugar, salt, baking soda




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When Method 2 is Required

2. Whole grain is first ingredient and ≥ 2 enriched grains

Ingredients: Whole-wheat flour, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), enriched corn meal (corn meal, ferrous sulfate, niacin, thiamin mononitrate, riboflavin, folic acid), yeast, soybean oil, sugar, salt, baking soda

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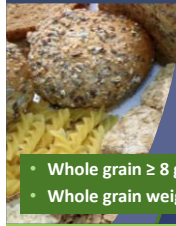

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When Method 2 is Required

3. First ingredient is flour blend of whole and enriched flour

Ingredients: Flour blend (whole wheat flour, enriched flour [wheat flour, niacin, iron, thiamine mononitrate, riboflavin, folic acid]), sugar, egg, oil, salt

- Whole grain ≥ 8 grams per oz eq (groups A-G) OR
- Whole grain weighs more than first ingredient after flour blend



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When Method 2 is Required

4. Creditable grain is not first ingredient, but > 1 creditable grain

Ingredients: Sugar, whole-grain corn flour, whole-wheat flour, enriched flour (wheat flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid), eggs, canola oil, milk whey, baking soda), sugar, nonfat milk




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When Method 2 is Required

4. Creditable grain is not first ingredient, but > 1 creditable grain

Ingredients: Sugar, whole-grain corn flour, whole-wheat flour, enriched flour (wheat flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid), eggs, canola oil, milk whey, baking soda), sugar, nonfat milk



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When Method 2 is Required

4. Creditable grain is not first ingredient, but > 1 creditable grain

Ingredients: Sugar, whole-grain corn flour, whole-wheat flour, enriched flour (wheat flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid), eggs, canola oil, milk whey, baking soda), sugar, nonfat milk

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When Method 2 is Required

4. Creditable grain is not first ingredient, but > 1 creditable grain

↓

Ingredients: Sugar, whole-grain corn flour, whole-wheat flour, enriched flour (wheat flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid), eggs, canola oil, milk whey, baking soda), sugar, nonfat milk



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When Method 2 is Required

5. Contains noncreditable grains not listed

- after “contains 2% or less”
- in non-grain ingredient
- in non-grain portion of combination food

Ingredients: Whole-wheat flour, sugar, wheat starch, contains 2% or less of each of the following: honey, salt, yeast, molasses






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When Method 2 is Required

6. Combination food that is not CN labeled

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When Method 2 is Required

7. Manufacturer claims serving is < weight or volume in Exhibit A

“This ¼-ounce WGR bagel credits as 1 oz eq”

Group B: 1 ounce = 1 oz eq





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When Method 2 is Required

8. Product not listed in Exhibit A



Grain Ounce Equivalents for Grades K-12 in the NSLP and CDB	
Group A:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group B:	1 ounce (28 g) dry cereal, pasta, rice, or other grain product
Group C:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group D:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group E:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group F:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group G:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group H:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group I:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group J:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group K:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group L:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group M:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group N:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group O:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group P:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group Q:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group R:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group S:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group T:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group U:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group V:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group W:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group X:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group Y:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product
Group Z:	1/2 cup (125 mL) cooked cereal, pasta, rice, or other grain product


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Module 13: Grain Ounce Equivalents

CSDE Resource

When Commercial Grain Products Require a Product Formulation Statement to Credit in the School Nutrition Programs




https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/When_Commercial_Grain_Products_Require_NFS_SNP.pdf

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USDA Webpage

Product Formulation Statement for Documenting Grains in Child Nutrition Programs




<https://www.fns.usda.gov/cn/labeling/food-manufacturersindustry>

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CSDE Resource

Using Product Formulation Statements in the School Nutrition Programs



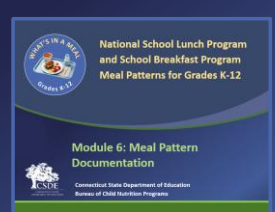
https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Product_Formulation_Statements.pdf

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More Information on PFS

- Module 6: Meal Pattern Documentation



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Using Method 2 for Foods Made from Scratch

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Reminder: Grams of Creditable Grains per Oz Eq for Groups A-G

Grains Component	WGR Food
1 oz eq = 16 grams	1 oz eq = 16 grams including ≥ 8 grams whole grains



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Standardized Recipe for Multi-grain Roll

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Grain ingredients	Weight (pounds)
Whole-wheat flour	1
Enriched flour	½
Enriched cornmeal	½

2 Yield 100 servings

3 Serving size 1 piece




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Step 1: Determine Total Weight (Pounds) of Creditable Grains

Grain ingredients	Weight (pounds)
Whole-wheat flour	1
Enriched flour	½
Enriched cornmeal	½
Total creditable grains	2




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Step 2: Convert Pounds to Grams

- 1 pound = 453.6 grams

Pounds of creditable grains in recipe	Grams per pound	Grams of creditable grains in recipe
2 pounds	\times 453.6	$=$ 907.2 grams




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Step 3: Determine Grams of Creditable Grains per Serving

- Divide total grams of creditable grains by number of servings

Creditable grains in recipe	Number of recipe servings	Creditable grains per serving
907.2 grams	\div 100	$=$ 9.072 grams




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Step 4: Determine Oz Eq per Recipe Serving

- Groups A-G: 16 grams = 1 oz eq


Creditable grains per serving	Divide by	Oz eq per serving
9.072 grams	\div 16	$=$ 0.567 oz eq
Round down to nearest ¼ oz eq		0.5 oz eq



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Summary: When to Use Each Oz Eq Method



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Summary: When to Use Each Oz Eq Method

Grain food	Most common method	Considerations
Commercial products	Method 1 (Exhibit A)	Some products require method 2 (creditable grains)
Foods made from scratch	Method 2 (creditable grains)	Cannot use method 1 for groups A-G unless know serving weight

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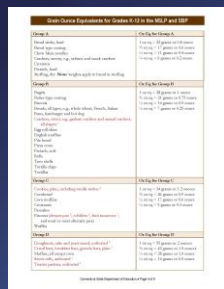
Resources for Grain Oz Eq

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CSDE Resource

Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP



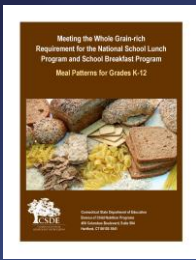
https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Grain_Oz_Eq_SNP_grades_K-12.pdf

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CSDE Resource

Meeting the Whole Grain-rich Requirement for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12



https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/WGR_Requirement_SNP_grades_K-12.pdf


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USDA Resource

Food Buying Guide for Child Nutrition Programs

Recipe Analysis Workbook




<https://www.fns.usda.gov/tn/food-buying-guide-interactive-web-based-tool>

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CSDE Webpage

Crediting Foods in School Nutrition Programs



<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs/Documents#Grains>

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Module 13: Grain Ounce Equivalents

CSDE Webpage

Crediting Foods in School Nutrition Programs

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs/Documents#Grains>

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CSDE Resource

Resources for the School Meal Patterns for Grades K-12

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/MealPattern/Resources_School_Meal_Patterns_grades_K-12.pdf

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Questions?

Contact the school nutrition programs staff

<https://portal.ct.gov/-/media/SDE/Nutrition/CNstaff/countyassign.pdf>

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Thank you for participating in module 13!

<https://portal.ct.gov/SDE/Nutrition/Meal-Pattern-Training-Materials>

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1. mail: U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410; or
2. fax: (833) 256-1665 or (202) 690-7442; or
3. email: program.intake@usda.gov

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