

Serving Sizes for Vegetables and Fruits for Grades K-12 in the Afterschool Snack Program

This guidance applies to the meal pattern for grades K-12 in the U.S. Department of Agriculture's (USDA) Afterschool Snack Program (ASP) of the National School Lunch Program (NSLP). For more information, see the Connecticut State Department of Education's (CSDE) handouts, *ASP Meal Pattern for Grades K-12* and *Menu Planning Guidance for Grades K-12 in the ASP*. For detailed guidance on the ASP meal pattern requirements for grades K-12, see the CSDE's guide, *Afterschool Snack Program Handbook*.

Note: The ASP meal pattern requirements are different from the NSLP and School Breakfast Program (SBP) meal pattern requirements because the USDA's final rule (77 FR 4087), *Nutrition Standards for the National School Lunch and School Breakfast Programs*, does not change the ASP meal pattern requirements for grades K-12. For example, in the ASP meal pattern, vegetables and fruits are one component instead of two; and dried fruit and leafy greens credit based on volume. Reimbursable snacks cannot include only two servings of vegetables, two servings of fruits, or one serving of vegetables and one serving of fruits. For example, a snack of carrot sticks and apple juice does not comply with the ASP meal pattern for grades K-12 because both items are from the vegetables/fruits component.



Meal Pattern Requirements

School food authorities (SFAs) must ensure that snack menus provide the required components and serving sizes in the ASP meal pattern for grades K-12. The four snack components include milk, meat/meat alternates, vegetables/fruits, and grains/breads. Snack menus must include two of the four components.



Healthy Food Certification Requirements

In addition to meeting the ASP meal pattern, ASP snacks served to grades K-12 in public schools that choose the healthy food option of Healthy Food Certification (HFC) under Section 10-215f of the Connecticut General Statutes must comply with the Connecticut Nutrition Standards (CNS). The following fruit and vegetable products are exempt from all nutrient standards of the CNS:

- fresh and frozen fruits and vegetables with no added ingredients except water;
- canned fruits with no added ingredients except water or that are packed in 100 percent juice, extra light syrup or light syrup, all without added artificial sweeteners, nonnutritive sweeteners, or sugar alcohols, and no added fats (including chemically altered fat substitutes); and
- low sodium or no salt added canned vegetables with no added fats.

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All other fruit and vegetable products are not exempt and must meet the CNS. For example, dried cranberries with added sugar do not meet the CNS and cannot be served in ASP snacks. For more information on the CNS, visit the CSDE's [HFC](#), [CNS](#), and [List of Acceptable Foods and Beverages](#) webpages.

Crediting Overview

Vegetables include fresh, frozen, canned, and rehydrated dried vegetables; and pasteurized full-strength vegetable juice. A serving of cooked vegetables must be drained. For example, a serving of canned corn cannot include the water in which it is packed, and a serving of baked beans cannot include the sauce in which it is packed. Dried vegetables (such as potato flakes) credit when rehydrated if the manufacturer's product formulation statement (PFS) provides specific documentation on the amount of vegetables per serving. Dried vegetables used for seasonings (such as dried onion and dried parsley) do not credit. Legumes credit as either the vegetables component or the meat/meat alternates component, but not both in the same snack. For information on crediting legumes, see the CSDE's handout, [Crediting Legumes in the NSLP and SBP](#).



Fruits include fresh, frozen, canned (in light syrup, water, or fruit juice), and dried fruits; and pasteurized full-strength fruit juice. Fresh and frozen coconut credit. Dried coconut, coconut flour, and coconut oil do not. A serving of canned fruit may include the 100 percent juice in which the fruit is packed, but cannot include water or syrup.

The minimum serving size for the vegetables/fruits component is $\frac{3}{4}$ cup for all grades. Vegetables and fruits credit based on the yields in the USDA's [Food Buying Guide for Child Nutrition Programs](#) (FBG). School food authorities (SFAs) must obtain a PFS (or Child Nutrition (CN) label, if available) to document the crediting of processed commercial combination foods that contain vegetables or fruits, such as vegetable egg rolls, hummus, and fruit-filled turnovers. For more information, see the CSDE's handouts, [Child Nutrition \(CN\) Labeling Program](#), [Product Formulation Statements](#), [Accepting Processed Product Documentation](#), and [Crediting Commercial Meat/Meat Alternate Products in the NSLP and SBP](#).



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Menu Planning

School food authorities (SFAs) may choose to serve one vegetable, one fruit, or a combination of several vegetables and fruits to meet the required $\frac{3}{4}$ -cup serving. The minimum creditable amount of fruits and vegetables is $\frac{1}{8}$ cup. The following examples show menu items that provide the full $\frac{3}{4}$ -cup serving of the vegetables/fruits component:

- $\frac{3}{4}$ cup of oranges;
- $\frac{3}{4}$ cup of carrots;
- $\frac{1}{2}$ cup of blueberries and $\frac{1}{4}$ cup of strawberries;
- $\frac{1}{2}$ cup of broccoli and $\frac{1}{4}$ cup of red peppers;
- $\frac{3}{4}$ cup of dried mixed fruit;
- $\frac{1}{2}$ cup of salad greens and $\frac{1}{4}$ cup of tomatoes;
- $\frac{3}{4}$ cup of mixed vegetables (e.g., peas and carrots);
- $\frac{3}{4}$ cup of mixed fruits (e.g., fruit salad);
- $\frac{3}{4}$ cup of mixed vegetables and fruits (e.g., carrot-raisin salad); and
- $\frac{1}{4}$ cup of carrots, $\frac{1}{4}$ cup of oranges, and $\frac{1}{4}$ cup of strawberries.

Menu planners should consider the serving size of menu items and plan snack menus to make it easy for students to take a reimbursable snack. When snack menus include the minimum $\frac{3}{4}$ -cup serving from more than one fruit or vegetable, children must take the full $\frac{3}{4}$ -cup serving to count as one of the two required snack components. OVS is not allowed in the ASP. Students must take the full serving of both snack components for a reimbursable snack.

Fresh Vegetables and Fruits

SFAs should use the yields in the FBG to ensure that fresh vegetables and fruits provide the full $\frac{3}{4}$ -cup serving required by the ASP meal pattern for grades K-12. Table 1 shows the required serving size for some common fruits and vegetables listed in the FBG.

Food	FBG serving size	Amount for $\frac{3}{4}$ cup
Broccoli	1 medium spear = about $\frac{1}{4}$ cup	3 medium spears
Carrot sticks	3 sticks (4 inches by $\frac{1}{2}$ inch) = $\frac{1}{4}$ cup	9 sticks (4 inches by $\frac{1}{2}$ inch)
Celery sticks	3 sticks (4 inches by $\frac{1}{2}$ inch) = $\frac{1}{4}$ cup	9 sticks (4 inches by $\frac{1}{2}$ inch)
Cucumber sticks, pared or unpared	3 sticks (4 inches by $\frac{3}{4}$ inch) = $\frac{1}{4}$ cup	9 sticks (4 inches by $\frac{3}{4}$ inch)

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Table 1. Required serving size for common fresh vegetables and fruits, continued		
Radishes	7 small radishes = $\frac{1}{4}$ cup	21 small radishes
Tomato slices, medium (2 $\frac{1}{8}$ to 2 $\frac{1}{4}$ inch diameter)	5 slices ($\frac{1}{8}$ -inch thick) = $\frac{1}{4}$ cup	15 slices ($\frac{1}{8}$ -inch thick)
Tomato slices, large (2 $\frac{1}{2}$ to 2 $\frac{3}{4}$ inch diameter)	4 slices ($\frac{1}{8}$ -inch thick) = $\frac{1}{4}$ cup	12 slices ($\frac{1}{8}$ -inch thick)
Tomatoes, cherry	3 whole cherry tomatoes = $\frac{1}{4}$ cup 5 half cherry tomatoes = $\frac{1}{4}$ cup	9 whole cherry tomatoes 15 half cherry tomatoes
Apples, 125-138 count ¹	1 apple = 1 cup $\frac{1}{4}$ apple = $\frac{1}{4}$ cup	$\frac{3}{4}$ apple
Apples, 100 count ¹	1 apple = 1 $\frac{1}{4}$ cups $\frac{1}{5}$ apple = $\frac{1}{4}$ cup	$\frac{3}{5}$ apple
Banana, 150 count (petite) or 100-120 count ¹	1 banana = $\frac{1}{2}$ cup $\frac{1}{2}$ banana = $\frac{1}{4}$ cup	1 $\frac{1}{2}$ bananas
Grapes, seedless, large	7 grapes = $\frac{1}{4}$ cup 14 grape halves = $\frac{1}{4}$ cup	21 grapes 42 grape halves
Orange, 138 count ¹ (Arizona or California)	$\frac{1}{2}$ orange = $\frac{1}{4}$ cup 1 orange = $\frac{1}{2}$ cup	1 $\frac{1}{2}$ oranges
Orange, 125 count ¹ (Florida or Texas)	$\frac{1}{2}$ orange = $\frac{1}{4}$ cup 1 orange = $\frac{5}{8}$ cup	1 $\frac{1}{2}$ oranges
Orange, 113 count ¹ (Arizona or California)	$\frac{1}{2}$ orange = $\frac{1}{4}$ cup 1 orange = $\frac{5}{8}$ cup	1 $\frac{1}{2}$ oranges
Pear, 150 count ¹	$\frac{1}{2}$ pear = $\frac{1}{4}$ cup 1 pear = $\frac{1}{2}$ cup	1 $\frac{1}{2}$ pears
Pear, 120 count ¹	$\frac{1}{2}$ pear = $\frac{3}{8}$ cup 1 pear = $\frac{3}{4}$ cup	1 pear
Pear, 100 count ¹ (D'Anjou or Bosc or Bartlett)	1 pear = 1 $\frac{1}{4}$ cups $\frac{1}{2}$ pear = $\frac{5}{8}$ cup	$\frac{2}{3}$ pear
¹ The count pack is the number of whole fruits that that fit into a case. The smaller the count, the larger the size of the fruit.		

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For additional portioning information, see the portion control charts, *Start with Half a Cup: Fresh Fruit Portioning Guide for Schools* and *Start with Half a Cup: Fresh Vegetable Portioning Guide for Schools*.

Whole Fresh Fruit

The crediting information for one piece of fresh fruit (whole or cut-up) varies depending on its type and size (count pack). The count pack is the number of pieces of fruit that fit into a case. The smaller the count, the larger the size of one piece of fruit. For example, the FBG indicates that:

- one 60-count plum, one 88-count peach, and one clementine each credit as $\frac{3}{8}$ cup of fruit;
- one 100-120-count banana, one 150-count pear, one 80-count peach, one 138-count orange, and one 45-count (2-inch diameter) plum each credit as $\frac{1}{2}$ cup of fruit;
- one 113-count and 125-count orange each credit as $\frac{5}{8}$ cup of fruit;
- one size 56-64 nectarine, one size 56 peach, and one 120-count pear each credit as $\frac{3}{4}$ cup of fruit; and
- one 125-138-count apple credits as 1 cup of fruit.

A few types of fruits provide at least $\frac{3}{4}$ cup of the vegetables/fruits component in one piece, including a size 56-64 nectarine, size 56 peach, and 120-count pear. A 125-138-count apple credits as 1 cup of fruit.



SFAs must ensure that an individual piece of fresh fruit (whole or cut-up) provides the full-required $\frac{3}{4}$ -cup serving for grades K-12. If the amount is less than the full serving, the snack menu must include the additional amount from the vegetables/fruits component to meet the full-required $\frac{3}{4}$ -cup serving.

For example, one 113-count orange credits as $\frac{5}{8}$ cup of fruit, which is less than the full-required $\frac{3}{4}$ -cup serving. To credit as the full vegetables/fruits component, the snack menu must include an additional $\frac{1}{8}$ cup of the vegetables/fruits component. The additional serving may be from the same fruit, a different fruit, or a vegetable. **Note:** For a reimbursable snack, students must take both fruit items (one component) and the full serving of the other snack component. OVS is not allowed in the ASP.

Table 2 lists the FBG's meal pattern contribution of some fresh fruits and the additional amount needed to provide the minimum serving of the vegetables/fruits component in the ASP meal pattern for grades K-12.

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Table 2. Meal pattern contribution of whole fresh fruits

Fruit (one piece, whole or cut-up)	Meal pattern contribution from FBG	Additional amount for $\frac{3}{4}$ cup ¹
Apple, 125-138 count	1 cup	0
Apricot, medium (1 $\frac{3}{8}$ -inch diameter)	$\frac{1}{4}$ cup	$\frac{1}{2}$ cup
Banana, 150 count, petite	$\frac{1}{2}$ cup	$\frac{1}{4}$ cup
Banana, 100-120 count, regular	$\frac{1}{2}$ cup	$\frac{1}{4}$ cup
Clementine, whole, peeled	$\frac{3}{8}$ cup	$\frac{3}{8}$ cup
Grapefruit, 27-32 count, large	1 cup	0
Kiwi, 33-39 count	$\frac{1}{4}$ cup	$\frac{1}{2}$ cup
Nectarine, size 88-96 (2 $\frac{1}{4}$ -inch diameter)	$\frac{1}{2}$ cup	$\frac{1}{4}$ cup
Nectarine, size 56-64 (2 $\frac{3}{4}$ -inch diameter)	$\frac{3}{4}$ cup	0
Orange, Arizona or California, 113 count	$\frac{5}{8}$ cup	$\frac{1}{8}$ cup
Orange, Florida or Texas, 125 count	$\frac{5}{8}$ cup	$\frac{1}{8}$ cup
Orange, Arizona or California, 138 count	$\frac{1}{2}$ cup	$\frac{1}{4}$ cup
Peach, size 88 and 84 (2 $\frac{1}{8}$ -inch diameter)	$\frac{3}{8}$ cup	$\frac{3}{8}$ cup
Peach, size 64 and 60 (2 $\frac{1}{2}$ -inch diameter)	$\frac{2}{3}$ cup	$\frac{1}{8}$ cup
Peach, size 80	$\frac{1}{2}$ cup	$\frac{1}{4}$ cup
Peach, size 56	$\frac{3}{4}$ cup	0
Peach, size 56	$\frac{3}{4}$ cup	0
Pear, 150 count	$\frac{1}{2}$ cup	$\frac{1}{4}$ cup
Pear, 120 count	$\frac{3}{4}$ cup	0
Pear, D'Anjou, Bosc or Bartlett, 100 count	1 $\frac{1}{4}$ cups	0
Plum, purple, red, or black, size 45 and 50 (2-inch diameter)	$\frac{1}{2}$ cup	$\frac{1}{4}$ cup

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Table 2. Meal pattern contribution of whole fresh fruits, continued

Fruit (one piece, whole or cut-up)	Meal pattern contribution from FBG	Additional amount for $\frac{3}{4}$ cup ¹
Plum, purple, red, or black, 2 $\frac{1}{2}$ -inch diameter	$\frac{5}{8}$ cup	$\frac{1}{8}$ cup
Plum, Japanese or hybrid, size 60 and 65	$\frac{3}{8}$ cup	$\frac{3}{8}$ cup
Tangerine, 120 count	$\frac{3}{8}$ cup	$\frac{3}{8}$ cup

¹ The minimum amount of the vegetables/fruits component is $\frac{3}{4}$ cup. The additional required amount of fruit can be from the same fruit, a different fruit, or a vegetable. **Note:** Students must take the full $\frac{3}{4}$ -cup serving to count as one of the two required snack components. OVS is not allowed in the ASP.

Resources

Afterschool Snack Program (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Afterschool-Snack-Program>

Afterschool Snack Program Handbook (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/ASP/ASPHandbook.pdf>

Afterschool Snack Program Meal Pattern for Grades K-12 (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/ASP/ASPmealpatternK12.pdf>

Afterschool Snack Program Sample Menu for Grades K-12 (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/ASP/ASPsamplemenuk12.pdf>

Comparison of Meal Pattern Requirements for Preschoolers and Grades K-12 in the ASP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/ASP/ASPComparisonPreschoolK12.pdf>

Connecticut Nutrition Standards (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Connecticut-Nutrition-Standards>

Crediting Foods for Grades K-12 in School Nutrition Programs (CSDE webpage):

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

Crediting Legumes in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CreditLegumes.pdf>

Crediting Smoothies for Grades K-12 in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CreditSmoothie.pdf>

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Crediting Soup in the NSLP and SBP:

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CreditSoup.pdf>

Food Buying Guide for Child Nutrition Programs (USDA):

<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>

Healthy Food Certification (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Healthy-Food-Certification>

List of Acceptable Foods and Beverages (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/List-of-Acceptable-Foods-and-Beverages>

Menu Planning Guidance for Grades K-12 in the ASP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/ASP/ASPmenuguidanceK12.pdf>

Product Formulation Statement for Vegetables and Fruits (USDA):

https://fns-prod.azureedge.net/sites/default/files/resource-files/PFS_Documenting_Vegetables_Subgroups_Fruits.pdf

Product Formulation Statements (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/PFS.pdf>

Sample Completed Product Formulation Statement for Fruits (USDA):

<https://fns-prod.azureedge.net/sites/default/files/resource-files/PFSsamplefruits.pdf>

Sample Completed Product Formulation Statement for Vegetables (USDA):

<https://fns-prod.azureedge.net/sites/default/files/resource-files/PFSsamplevegetables.pdf>

Start with Half a Cup: Fresh Fruit Portioning Guide for Schools:

<https://portal.ct.gov/-/media/SDE/Nutrition/SWHAC/PortionGuideFruit85x14.pdf>

Start with Half a Cup: Fresh Vegetable Portioning Guide for Schools:

<https://portal.ct.gov/-/media/SDE/Nutrition/SWHAC/PortionGuideVeg85x14.pdf>

USDA Memo SP 40-2019, CACFP 17-2019 and SFSP17-2019: Smoothies Offered in Child Nutrition Programs:

<https://www.fns.usda.gov/cn/smoothies-offered-child-nutrition-programs>

Vegetable Subgroups in the NSLP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/VegSubgroup.pdf>

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For more information, review the CSDE's *ASP Handbook* and visit the CSDE's [ASP](#) webpage, or contact the [school nutrition programs staff](#) in the CSDE's Bureau of Health/Nutrition, Family Services and Adult Education, 450 Columbus Boulevard, Suite 504, Hartford, CT 06103-1841.

This document is available at <https://portal.ct.gov/-/media/SDE/Nutrition/ASP/aspVF-servingk12.pdf>.

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- (3) email: program.intake@usda.gov.

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