

Crediting Juice in the Preschool Meal Patterns for the School Nutrition Programs

This guidance applies to the U.S. Department of Agriculture’s (USDA) preschool meal patterns (ages 1-5) for the National School Lunch Program (NSLP), School Breakfast Program (SBP), Seamless Summer Option (SSO) of the NSLP, and Afterschool Snack Program (ASP) of the NSLP. The SSO follows the NSLP and SBP preschool meal patterns. The requirements for the preschool meal patterns are the same as the Child and Adult Care Food Program (CACFP) meal patterns for children. For information on the preschool meal patterns and crediting foods, refer to the CSDE’s [Menu Planning Guide for the Preschool Meal Patterns of the School Nutrition Programs](#) and visit the CSDE’s [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.



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Crediting Smoothies in the Preschool Meal Patterns for the School Nutrition Programs

Creditable Ingredients

Smoothie ingredients that credit toward the preschool meal patterns include full-strength vegetable juice and pureed vegetables (vegetables component); full-strength fruit juice and pureed fruits (fruits component); low-fat or fat-free milk (milk component); and yogurt or soy yogurt (meats/meat alternates (MMA) component).



Creditable ingredients in smoothies must provide at least the minimum creditable amount to credit toward the meal patterns. The minimum creditable amounts are $\frac{1}{8}$ cup for the vegetables component and the fruits component, $\frac{1}{4}$ cup for the milk component (applies only to milk in smoothies), and $\frac{1}{8}$ cup ($\frac{1}{4}$ ounce) for yogurt.

If a smoothie contains less than the full serving of a component, the menu must include an additional food from that component to meet the full requirement.

School food authorities (SFAs) must maintain appropriate documentation to indicate the crediting information for smoothies. For example, to credit a strawberry smoothie as $\frac{1}{2}$ cup of the fruits component and 1 oz eq of the MMA component, the documentation must indicate that the serving contains $\frac{1}{2}$ cup of pureed strawberries and $\frac{1}{2}$ cup of yogurt.

Required Crediting Documentation

To credit smoothies made from scratch, SFAs must have a standardized recipe that indicates the meal pattern contribution of each component in the serving. For information on standardized recipes, visit the “[Crediting Foods Made from Scratch](#)” section of the CSDE’s [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.

To credit commercial smoothies, SFAs must obtain a product formulation statement (PFS). A Child Nutrition (CN) label may be available for some commercial smoothies that contain yogurt. For information on CN labels and PFS forms, refer to the CSDE’s resources, [Using Child Nutrition \(CN\) Labels in the School Nutrition Programs](#), [Using Product Formulation Statements in the School Nutrition Programs](#); and the USDA’s PFS forms and [Tips for Evaluating a Manufacturer’s Product Formulation Statement](#). Additional guidance on documentation for commercial products is available in the “[Crediting Commercial Processed Products](#)” section of the CSDE’s Meal Patterns for Preschoolers in School Nutrition Programs webpage.

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Training on the requirements for CN labels and PFS forms is available in Module 6: Meal Pattern Documentation of the CSDE's training program, [What's in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12](#).

Recommended Daily Limit for Smoothies

The USDA recommends limiting smoothies to one preschool meal or snack per day. For example, if a smoothie is served at breakfast, the preschool menus for lunch and snack should not include a smoothie.

Crediting Fruits and Vegetables in Smoothies

Pureed fruits and vegetables in smoothies credit only as juice toward the vegetables component or fruits component. Crediting is based on the volume (cups) of pureed fruits and vegetables per serving. For example, a smoothie that contains $\frac{1}{2}$ cup of pureed strawberries credits as $\frac{1}{2}$ cup of fruit juice. SFAs must document the amount of pureed fruits and vegetables per serving (refer to "[Required Crediting Documentation](#)" in this document). Menu planners must follow the guidance below when crediting fruits and vegetables in smoothies.

Juice limit

Juice credits as the vegetables component or fruits component at only one preschool meal or ASP snack per day. The juice limit includes all types of 100 percent juice (e.g., fruit juice, vegetable juice, and juice blends; pureed fruits and vegetables in smoothies; frozen juice pops made from 100 percent juice; and juice from canned fruit served in 100 percent juice). For example, if the menu planner credits pureed blueberries in a smoothie as the fruits component at breakfast, juice cannot credit as the fruits component or the vegetables component at lunch or ASP snack. For more information, refer to the CSDE's resource, [Crediting Juice in the Preschool Meal Patterns for the School Nutrition Programs](#).

Mixed fruits and vegetables

Smoothies that contain a mix of pureed fruits and vegetables, or 100 percent fruit and vegetable juice blends, credit based on the greatest fruit or vegetable ingredient. Commercial smoothies credit as the fruits component if the first juice ingredient is fruit juice or fruit puree, and credit as the vegetables component if the first juice ingredient is vegetable juice or vegetable puree. Smoothies made from scratch credit as the fruits component if the greatest juice ingredient in the standardized recipe is fruit juice or fruit puree, and credit as the vegetables component if vegetable juice or vegetable puree is the greatest juice ingredient.

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Smoothies at Breakfast

The preschool breakfast meal pattern requires a serving of vegetables, fruits, or both. Smoothies that contain the required amount of juice (including pureed fruits and vegetables) for each age group may credit as the entire vegetables and fruits component at breakfast. For example, a serving of smoothie that contains $\frac{1}{2}$ cup of pureed strawberries credits as the full fruits component for ages 3-5.

Smoothies at lunch

The preschool lunch meal pattern requires a serving of the fruits component and a serving of vegetables component. Lunch menus cannot offer a smoothie and juice as the only two servings of fruits and vegetables because both credit as juice. For example, the lunch menu cannot offer a strawberry smoothie as the fruits component and tomato juice as the vegetables component. At least one of the required servings of the vegetables component or fruits component must be a whole fruit or vegetable, i.e., fresh, frozen, canned, or dried.

Smoothies at snack

The [ASP preschool meal pattern](#) requires two of the five meal components (milk, MMA, vegetables, fruits, and grains). Pureed fruits and vegetables in smoothies may credit as either the entire fruits component or the entire vegetables component but cannot credit as both components in the same snack. Smoothies containing juice and milk may credit as either juice or milk but cannot credit as both components in the same snack. The snack menu cannot include juice (including pureed fruits and vegetables in smoothies) when milk is the only other meal component at snack.

The examples below show how these requirements apply to the preschool meal patterns for age 2 and ages 3-5. These smoothies cannot credit as the milk component for age 1 because the CACFP meal patterns for children require whole milk for age 1.

- **Example 1:** A smoothie recipe's serving contains $\frac{1}{2}$ cup of pureed fruit (credits as fruit juice) and $\frac{1}{2}$ cup of unflavored low-fat milk. The menu planner may choose to credit the smoothie as either the fruits component or the milk component but cannot credit the smoothie as both components in the same snack. To be reimbursable, the snack must include the full serving of a second component, i.e., MMA, grains, or vegetables.
- **Example 2:** A smoothie recipe's serving contains $\frac{1}{2}$ cup of pureed fruit (credits as fruit juice) and $\frac{1}{4}$ cup of unflavored low-fat milk. The pureed fruit credits as the fruits component. However, the milk does not credit as the milk component because the

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serving is less than $\frac{1}{2}$ cup. To be reimbursable, the snack must include the full serving of a second component, i.e., MMA, grains, or vegetables.

Crediting Milk in Smoothies

Milk in smoothies credits as the milk component based on the amount per serving. For example, a smoothie that contains $\frac{1}{2}$ cup of milk credits as $\frac{1}{2}$ cup of the milk component. SFAs must document the amount of milk per serving (refer to “[Required Crediting Documentation](#)” in this document).

Allowable types of milk

For age 1, milk must be unflavored whole milk. For ages 2-5, milk must be unflavored low-fat (1%) or fat-free milk. Flavored milk does not credit in the preschool meal patterns.

Minimum creditable amount

The minimum creditable amount of milk in a smoothie is $\frac{1}{4}$ cup. SFAs must have a standardized recipe or PFS to document the type and amount of milk per serving (refer to “[Required Crediting Documentation](#)” in this document).



Crediting Yogurt in Smoothies

Yogurt and soy yogurt that meets the preschool sugar limit credits as the MMA component when it is used as an ingredient in smoothies. The meal pattern contribution is based on the amount per serving. Yogurt and soy yogurt used in smoothies cannot contain more than 23 grams of total sugars per 6 ounces (no more than 3.83 grams per ounce).

Effective with school year 2025-26 (beginning July 1, 2025), the USDA final rule, [Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans](#), changes the product-based limit for yogurt from total sugars to added sugars. Yogurt cannot exceed 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce).

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A ½-cup serving of yogurt credits as 1 oz eq of the MMA component. The minimum creditable amount is ⅛ cup. CACFP facilities must document the amount of yogurt or soy yogurt per serving with a recipe for smoothies made from scratch and a PFS for commercial products (refer to “[Required Crediting Documentation](#)” in this document). For information on the crediting requirements for yogurt, refer to the CSDE’s resource, [Crediting Yogurt in the Preschool Meal Patterns for the School Nutrition Programs](#).

The addition of yogurt to a smoothie is not a substitution for fluid milk in the NSLP and SBP meal patterns. Fluid milk must be offered in all meals to meet the milk component requirement.

Additional Ingredients

Smoothies may include additional noncreditable ingredients to improve flavor and consistency, such as oatmeal and peanut butter. However, these ingredients do not credit toward the preschool meal patterns.

Smoothie Crediting Example

The example below shows how to credit a smoothie made with blueberry puree, low-fat yogurt, fat-free milk, and oatmeal. This smoothie recipe credits toward the fruits, MMA, and milk components for ages 2-5; and toward the fruits and MMA components for age 1. It cannot credit as the milk component for age 1 because the preschool meal patterns require unflavored whole milk for age 1.

Ingredient	Meal pattern contribution
Frozen blueberry puree, ½ cup	½ cup of fruit juice (fruits component) ¹
Low-fat blueberry yogurt, ½ cup	1 oz eq of MMA
Low-fat milk, 4 fluid ounces	4 fluid ounces of milk ²
Oatmeal, 2 tablespoons	None (does not credit in smoothies)

¹ Pureed fruits and vegetables in smoothies count toward the juice limit.

² The minimum creditable amount of milk in a smoothie is ¼ cup.

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Commercial Products

Commercial smoothies credit the same as smoothies made from scratch. However, product formulation and labeling can vary greatly because commercial smoothies do not have a Food and Drug Administration (FDA) standard of identity. To credit commercial smoothies in preschool meals and snacks, SFAs must obtain a PFS (or CN label, if available) stating the amount of all creditable ingredients per serving, such as pureed fruits and vegetables, juice, yogurt, and milk (refer to “[Required Crediting Documentation](#)” in this document) and follow the guidance below.

Crediting pureed vegetables/fruits

Commercial smoothies made with juice or pureed fruits/vegetables credit only as juice toward the fruits component or vegetables component. Crediting is based on the volume of fruits/vegetables after pureeing and before freezing. The product label must include a statement regarding the “percent juice content,” which is required by the FDA for beverages made with fruit/vegetable juice or puree. For example, an 8-fluid ounce smoothie made from fruit puree that is labeled with “contains 50% juice” credits as 4 fluid ounces ($\frac{1}{2}$ cup) of juice. SFAs may need to obtain a PFS from the manufacturer to document the amount of pureed fruit in the product.

Concentrated fruit puree and concentrated juice are added sugars and do not credit in smoothies unless they are reconstituted to full-strength fruit puree or full-strength juice.



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Crediting milk

The type of milk used as an ingredient in commercial smoothies must be consistent with the preschool meal pattern requirements (refer to “[Allowable types of milk](#)” in this document). The manufacturer’s product documentation must attest that commercial mixes with milk are made using ingredients that meet federal, state, and local definitions for fluid milk.

Crediting yogurt

Yogurt and soy yogurt that meets the preschool sugar limit credits as the MMA component when used as an ingredient in commercial smoothies (refer to “[Crediting Yogurt in Smoothies](#)” in this document). The product documentation must attest that commercial mixes with yogurt are made in compliance with the federal definition for yogurt.

The addition of yogurt to a smoothie is not a substitution for fluid milk in the preschool meal patterns. Fluid milk must be offered in all meals to meet the milk component requirement.

Limit for crediting amount

The total creditable amount in a smoothie cannot exceed the volume served. For example, ½ cup of a commercial smoothie cannot credit as 1 cup of juice.

Noncreditable commercial smoothies

Probiotic dairy drinks, drinkable yogurt, and yogurt drinks are not smoothies, and do not credit in the preschool meal patterns. Commercial smoothies that contain dietary supplements (such as whey protein powder) or herbal supplements (such as ginkgo biloba, ginseng, and echinacea) do not credit in the preschool meal patterns.

Review accuracy of PFS

Prior to including commercial smoothies in reimbursable meals, CACFP facilities must check the manufacturer’s PFS for accuracy. Check that the listed volumes of pureed fruits and vegetables are prior to freezing. Check that milk and yogurt (if included) meet the meal pattern requirements, i.e., milk is low-fat or fat-free and yogurt meets the federal definition for yogurt.

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Signage

The USDA encourages SFAs to provide information, as appropriate, that helps children understand what foods are in their meals and snacks. For example, the preschool menu could list “peach and milk smoothie” or “strawberry, yogurt, and milk smoothie” or use graphics or photos to show the meal components included in the smoothie. Menu planners should also inform serving staff when meals include smoothies, so they are aware of how these foods contribute to the preschool meal patterns.

Resources

Accepting Processed Product Documentation in the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/accepting_processed_product_documentation_snp.pdf

Calculating Sugar Limits for Yogurt in the CACFP (USDA handouts in English and Spanish):

<https://www.fns.usda.gov/tn/calculating-sugar-limits-yogurt-cacfp>

Choose Yogurts that are Lower in Sugar (USDA handouts in English and Spanish):

<https://www.fns.usda.gov/tn/choose-yogurts-are-lower-sugar>

Crediting Juice in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_juice_snp_preschool.pdf

Crediting Yogurt in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_yogurt_snp_preschool.pdf

Food Buying Guide for Child Nutrition Programs (USDA):

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

Fruits Component (“Related Resources” section of CSDE’s Meal Patterns for Preschoolers in School Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/related-resources#Fruits>

Meal Patterns for Preschoolers in School Nutrition Programs (CSDE webpage)

<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/documents>

Menu Planning Guide for the Preschool Meal Patterns of the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/menu_planning_guide_preschool.pdf

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Milk Component (“Related Resources” section of CSDE’s Meal Patterns for Preschoolers in School Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/related-resources#Milk>

Product Formulation Statement (Product Analysis) for Meat/Meat Alternate (M/MA) Products in Child Nutrition Programs (USDA):

https://fns-prod.azureedge.us/sites/default/files/resource-files/PFS_Meats-Meat_Alternates_Fillable_508.pdf

Product Formulation Statement for Documenting Vegetables and Fruits in the Child and Adult Care Food Program, Summer Food Service Program, and NSLP Afterschool Snacks (USDA):

https://fns-prod.azureedge.us/sites/default/files/resource-files/PFS_Document_Total_Veg_Fruits.pdf

Resources for the Preschool Meal Patterns (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/resources_preschool_meal_patterns.pdf

Reviewer’s Checklist for Evaluating Manufacturer Product Formulation Statements (Product Analysis) for Meat/Meat Alternate (M/MA) Products

https://fns-prod.azureedge.us/sites/default/files/reviewer_checklist.pdf

Serving Milk in the CACFP (USDA handouts, training slides, and webinars in English and Spanish):

<https://www.fns.usda.gov/tn/serving-milk-cacfp>

Smoothies (New England Dairy):

<https://www.newenglanddairy.com/smoothies/>

Tips for Evaluating a Manufacturer’s Product Formulation Statement (USDA):

<https://fns-prod.azureedge.us/sites/default/files/resource-files/manufacturerPFStipsheet.pdf>

Upcoming Meal Pattern Changes (CSDE’s Meal Patterns for Grades K-12 in School Nutrition Programs webpage):

https://portal.ct.gov/sde/nutrition/meal-patterns-school-nutrition-programs#Upcoming_Meal_Pattern_Changes

USDA Final Rule: Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans (89 FR 31962):

<https://www.federalregister.gov/documents/2024/04/25/2024-08098/child-nutrition-programs-meal-patterns-consistent-with-the-2020-2025-dietary-guidelines-for>

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USDA Memo SP 02-2024, CACFP 02-2024, and SFSP 02-2024: Revised: Crediting Tofu and Soy Yogurt Products in the School Meal Programs, CACFP, and SFSP:

<https://www.fns.usda.gov/cn/crediting-tofu-and-soy-yogurt-products-school-meal-programs-and-cacfp>

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

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

Using Child Nutrition (CN) Labels in the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/cn_labels_snp.pdf

Using Product Formulation Statements in the School Nutrition Programs (CSDE):

<https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/pfs.pdf>

Vegetable Subgroups in the Child and Adult Care Food Program (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/cacfp/crediting/vegetable_groups_cacfp.pdf

Vegetables Component (“Related Resources” section of CSDE’s Meal Patterns for Preschoolers in School Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/related-resources#Vegetables>

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For more information, visit the CSDE's [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage or contact the [school nutrition programs staff](#) at the Connecticut State Department of Education, Bureau of Child Nutrition Programs, 450 Columbus Boulevard, Suite 504, Hartford, CT 06103-1841. This document is available at https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_smoothies_snp_preschool.pdf.

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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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