

# Requirements for Alternate Protein Products in the National School Lunch Program and School Breakfast Program

This guidance applies to the meal patterns for grades K-12 and preschoolers (ages 1-4) in the U.S. Department of Agriculture's (USDA) National School Lunch Program (NSLP), School Breakfast Program (SBP), Seamless Summer Option (SSO) of the NSLP, and Afterschool Snack Program (ASP) of the NSLP. For information on the meal pattern and crediting requirements for grades K-12, visit the Connecticut State Department of Education's (CSDE) [Meal Patterns for Grades K-12 in School Nutrition Programs](#) and [Crediting Foods in School Nutrition Programs](#) webpages. For information on the meal pattern and crediting requirements for preschoolers, visit the CSDE's [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.

Quantities for the meat/meat alternates component are indicated as ounce equivalents (oz eq) in the NSLP meal pattern for grades K-12 and as ounces in the ASP meal pattern for grades K-12 and the NSLP and ASP preschool meal patterns. The amount that credits as 1 oz eq or 1 ounce of meat/meat alternates (MMA) is the same. This document refers to oz eq for simplicity.



Alternate protein products (APPs) credit as meat alternates in the meal patterns for the school nutrition programs. APPs are food ingredients that may be used alone or in combination with meat, poultry, or seafood. They are processed from soy or other vegetable protein sources and may be dehydrated granules, particles, or flakes. Some examples include soy flours, soy concentrates, soy isolates, whey protein concentrate, whey protein isolates, and casein. APPs may be used in the dry (nonhydrated), partially hydrated, or fully hydrated form.

APPs are generally used as part of a formed meat patty or in a vegetarian patty resembling a meat product. Examples of foods that might contain added APPs include beef patties, beef crumbles, pizza topping, meat loaf, meat sauce, taco filling, burritos, and tuna salad.



Processed food items such as vegetarian burgers may contain APP, but the food item itself is not an APP because it contains other ingredients such as seasonings or breading. APPs do not include tofu, surimi, seitan, or tempeh.

A 1-ounce serving of a creditable APP provides 1 oz eq of the MMA component for the school nutrition programs. The total MMA contribution cannot exceed the weight of product.

# Requirements for Alternate Protein Products in the NSLP and SBP

## Criteria for APPs

APPs must meet the USDA's requirements specified in [appendix A](#) of the NSLP regulations (7 CFR 210) and [appendix A](#) of the SBP regulations (7 CFR 220). These regulations specify that APPs may credit for part or all the MMA requirement if they meet the three criteria below.

1. The APP must be processed so that some portion of the non-protein constituents of the food is removed. This refers to the manufacturing process for APP. APP must be safe and suitable edible products produced from plant or animal sources.
2. The biological quality of the protein in the APP must be at least 80 percent of casein (milk protein), determined by performing a Protein Digestibility Corrected Amino Acid Score (PDCAAS). The PDCAAS is a method of evaluating protein quality.
3. The APP contains at least 18 percent protein by weight when fully hydrated or formulated. "When hydrated or formulated" refers to a dry APP and the amount of water, fat, oil, colors, flavors, or any other substances that have been added.

Menu planners cannot determine if an APP product meets these criteria by reading the product's label. The labeling laws of the USDA's Food Safety Inspection Service (FSIS) and Food and Drug Administration (FDA) require manufacturers to list product ingredients, but percentage labeling is voluntary. For example, a product may list whey protein concentrate and hydrolyzed soy protein in the ingredients but will not indicate the percentage of these protein ingredients by weight. Therefore, manufacturers must provide the appropriate crediting documentation. For more information, refer to the USDA's [Questions and Answers on Alternate Protein Products](#).



# Requirements for Alternate Protein Products in the NSLP and SBP

## Required Documentation for APPs

The USDA's *Food Buying Guide for Child Nutrition Programs* does not contain yield information for APPs. SFAs must obtain documentation from the manufacturer that the product meets the USDA's APP criteria. Without appropriate documentation, APPs cannot credit in the school nutrition programs. Acceptable documentation for APPs is:

- the original Child Nutrition (CN) label from the product carton or a photocopy or photograph of the CN label shown attached to the original product carton; or
- a product formulation statement (PFS) from the manufacturer with supporting documentation on company letterhead that the APP ingredient meets the USDA's requirements. Sample APP documentation is on page 6 of the USDA's *Questions and Answers on Alternate Protein Products*.

The manufacturer's documentation should include information on the percent protein contained in the dry alternate protein product and in the prepared product. For an APP product mix, manufacturers should provide information on the amount by weight of dry APP in the package, hydration instructions, and instructions on how to combine the mix with meat or other meat alternates.

If the PFS for a commercial product lists APP ingredients that are being credited as the MMA component, the manufacturer must provide supporting documentation to indicate that the APP ingredients meet the USDA's APP requirements. APP ingredients without this supporting documentation cannot credit in the school nutrition programs.

The USDA's *Questions and Answers on Alternate Protein Products (APP)* provides additional guidance on documenting the APP requirements. For information on CN labels and PFS forms, refer to the CSDE's *Using Product Formulation Statements in the School Nutrition Programs* and *Child Nutrition (CN) Labeling Program*, and the USDA's *Tips for Evaluating a Manufacturer's Product Formulation Statement*.

Training on the requirements for CN labels and PFS forms and how to evaluate a PFS 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*.

# Requirements for Alternate Protein Products in the NSLP and SBP

## Nutrition Disclosure for APPs

The NSLP regulations (7 CFR 210.10 (n)) require that schools must accurately represent foods on lunch and breakfast menus. Menus cannot claim that a food item is beef, pork, poultry (such as chicken or turkey), or seafood (such as fish or tuna) if the food item contains more than 30 percent APPs. The names used for these menu items must reflect that they are not 100 percent meat, poultry, or fish.

## Considerations for Reducing Choking Risks for Young Children

Children younger than 4 are at the highest risk of choking. Some APP foods may be choking hazards, such as tube-shaped meats like hotdogs, sausage, and meat sticks. Consider children's age and developmental readiness when deciding what types of APP foods to offer in school menus. Modify menus as appropriate and use preparation techniques to reduce choking risk. For additional guidance, visit the "Choking Prevention" section of the CSDE's [Food Safety for Child Nutrition Programs](#) webpage.

## Resources

Accepting Processed Product Documentation in the NSLP and SBP (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Accepting\\_Processed\\_Product\\_Documentation\\_SNP.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Accepting_Processed_Product_Documentation_SNP.pdf)

Afterschool Snack Program Handbook (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/ASP/ASP\\_Handbook.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/ASP/ASP_Handbook.pdf)

Child Nutrition (CN) Labeling Program (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CN\\_Labeling\\_Program.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CN_Labeling_Program.pdf)

Crediting Commercial Meat/Meat Alternate Products in the NSLP and SBP (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit\\_Commercial\\_MMA\\_SNP.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit_Commercial_MMA_SNP.pdf)

Crediting Deli Meats in the NSLP and SBP (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit\\_Deli\\_SNP.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit_Deli_SNP.pdf)

Crediting Tofu and Tofu Products in the NSLP and SBP (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit\\_Tofu\\_SNP.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit_Tofu_SNP.pdf)

Meal Patterns for Grades K-12 in School Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-School-Nutrition-Programs>

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

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-Preschoolers-in-School-Nutrition-Programs/Documents>

## Requirements for Alternate Protein Products in the NSLP and SBP

Meat/Meat Alternates Component for Grades K-12 (CSDE webpage):

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

Meat/Meat Alternates Component for Preschoolers (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-Preschoolers-in-School-Nutrition-Programs/Related-Resources#MMA>

Menu Planning Guide for Preschoolers in the NSLP and SBP (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Preschool/Menu\\_Planning\\_Guide\\_Preschool.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Preschool/Menu_Planning_Guide_Preschool.pdf)

Menu Planning Guide for School Meals for Grades K-12 (CSDE):

<https://portal.ct.gov/SDE/Nutrition/Menu-Planning-Guide-for-School-Meals>

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

[https://www.fns.usda.gov/sites/default/files/resource-files/PFS\\_Meats-Meat\\_Alternates\\_Fillable\\_508.pdf](https://www.fns.usda.gov/sites/default/files/resource-files/PFS_Meats-Meat_Alternates_Fillable_508.pdf)

Questions and Answers on Alternate Protein Products (APP) (USDA):

<https://www.fns.usda.gov/questions-and-answers-alternate-protein-products-app>

Resources for the Preschool Meal Patterns (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Preschool/Resources\\_Preschool\\_Meal\\_Patterns.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Preschool/Resources_Preschool_Meal_Patterns.pdf)

Resources for the School Meal Patterns for Grades K-12 (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/MealPattern/Resources\\_School\\_Meal\\_Patterns\\_grades\\_K-12.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/MealPattern/Resources_School_Meal_Patterns_grades_K-12.pdf)

Reviewer's Checklist for Evaluating Manufacturer Product Formulation Statements for Meat/Meat Alternates (USDA):

[https://fns-prod.azureedge.us/sites/default/files/reviewer\\_checklist.pdf](https://fns-prod.azureedge.us/sites/default/files/reviewer_checklist.pdf)

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

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

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

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Product\\_Formulation\\_Statements.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Product_Formulation_Statements.pdf)

What's in a Meal Module 6: Meal Pattern Documentation (CSDE's Training Program,

What's in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12):

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

# Requirements for Alternate Protein Products in the NSLP and SBP



For more information, refer to the CSDE's guides, *Menu Planning Guide for School Meals for Grades K-12* and *Menu Planning Guide for Preschoolers in the NSLP and SBP* 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/APP\\_Requirements\\_SNP.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/APP_Requirements_SNP.pdf).

In accordance with federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, this institution is prohibited from discriminating on the basis of race, color, national origin, sex (including gender identity and sexual orientation), disability, age, or reprisal or retaliation for prior civil rights activity.

Program information may be made available in languages other than English. Persons with disabilities who require alternative means of communication to obtain program information (e.g., Braille, large print, audiotope, American Sign Language), should contact the responsible state or local agency that administers the program or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339.

To file a program discrimination complaint, a Complainant should complete a Form AD-3027, USDA Program Discrimination Complaint Form which can be obtained online at: <https://www.usda.gov/sites/default/files/documents/ad-3027.pdf>, from any USDA office, by calling (866) 632-9992, or by writing a letter addressed to USDA. The letter must contain the complainant's name, address, telephone number, and a written description of the alleged discriminatory action in sufficient detail to inform the Assistant Secretary for Civil Rights (ASCR) about the nature and date of an alleged civil rights violation. The completed AD-3027 form or letter must be submitted to USDA by:

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](mailto:program.intake@usda.gov)

This institution is an equal opportunity provider.

The Connecticut State Department of Education is committed to a policy of equal opportunity/affirmative action for all qualified persons. The Connecticut Department of Education does not discriminate in any employment practice, education program, or educational activity on the basis of race; color; religious creed; age; sex; pregnancy; sexual orientation; workplace hazards to reproductive systems, gender identity or expression; marital status; national origin; ancestry; retaliation for previously opposed discrimination or coercion, intellectual disability; genetic information; learning disability; physical disability (including, but not limited to, blindness); mental disability (past/present history thereof); military or veteran status; status as a victim of domestic violence; or criminal record in state employment, unless there is a bona fide occupational qualification excluding persons in any of the aforementioned protected classes. Inquiries regarding the Connecticut State Department of Education's nondiscrimination policies should be directed to: Attorney Louis Todisco, Connecticut State Department of Education, by mail 450 Columbus Boulevard, Hartford, CT 06103-1841; or by telephone 860-713-6594; or by email [louis.todisco@ct.gov](mailto:louis.todisco@ct.gov).