

## REQUIREMENTS FOR ALTERNATE PROTEIN PRODUCTS

The USDA allows the use of alternate protein products (APPs) to provide more flexibility in menu planning for the Child Nutrition Programs. APPs are generally single ingredient powders that are added to foods. Some examples include soy flours, soy concentrates, soy isolates, whey protein concentrate, whey protein isolates, and casein.

APPs include vegetable protein products (VPPs). The term “vegetable protein products” is commonly used to describe all APPs. USDA regulations use the term “alternate protein products” because it is more technically correct, since not all APPs are vegetable based.

APPs may be used alone or in combination with meat or other meat alternates. Examples of foods with added APPs include beef patties, beef crumbles, pizza topping, meat loaf, meat sauce, taco filling, burritos, and tuna salad. APPs may be used in the dry (nonhydrated), partially hydrated or fully hydrated form. Processed food items such as vegetarian burgers may contain APPs, but the food item itself is not an APP because it contains other ingredients such as seasonings or breading.



### USDA Criteria for APPs

All APPs must meet the USDA requirements specified in appendix A of the National School Lunch Program (7 CFR 210) and School Breakfast Program regulations (7 CFR 220). These regulations specify that APPs used alone or in combination with meat or other meat alternates may credit for part or all the meat/meat alternates requirement only 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 APPs. APPs 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 three criteria by reading the product’s label. The USDA Food Safety Inspection Service (FSIS) and Food and Drug Administration (FDA) labeling laws 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.

For any APPs used to meet the meat/meat alternates component, the school food authority (SFA) must obtain manufacturer documentation indicating that the product meets the USDA APP criteria. Manufacturers should provide information on the percent protein contained in the dry APP 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.

Manufacturers can provide this documentation with a product formulation statement (PFS) or a signed letter from a company official attesting that the requirements are met. Child Nutrition (CN) labeled products provide information on how APP foods credit toward the USDA meal patterns. Without this documentation, SFAs cannot use commercial products to credit toward the meat/meat alternates component or any other meal pattern components.

## REQUIREMENTS FOR APP, continued

### Resources

*Accepting Processed Product Documentation:*  
[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/acceptdoc.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/acceptdoc.pdf)

*Child Nutrition (CN) Labeling Program:*  
[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/cnlabel.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/cnlabel.pdf)

*Crediting Commercial Meat/Meat Alternate Products:*  
[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/mmaproducts.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/mmaproducts.pdf)

*Food Buying Guide for School Meal Programs:*  
[www.fns.usda.gov/tn/food-buying-guide-school-meal-programs](http://www.fns.usda.gov/tn/food-buying-guide-school-meal-programs)

*Menu Planning Guide for School Meals:*  
[www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=334320](http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=334320)

*Product Formulation Statements:*  
[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/pfs.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/pfs.pdf)

*Questions and Answers on Alternate Protein Products (APP):*  
[www.fns.usda.gov/sites/default/files/APPindustryfaqs.pdf](http://www.fns.usda.gov/sites/default/files/APPindustryfaqs.pdf)

*Reviewer's Checklist for Evaluating Manufacturer Product Formulation Statements for Meat/Meat Alternates:*  
[www.fns.usda.gov/sites/default/files/reviewer\\_checklist.pdf](http://www.fns.usda.gov/sites/default/files/reviewer_checklist.pdf)

*Tips for Evaluating a Manufacturer's Product Formulation Statement:*  
[www.fns.usda.gov/sites/default/files/cn/manufacturerepfsipsheet.pdf](http://www.fns.usda.gov/sites/default/files/cn/manufacturerepfsipsheet.pdf)

*USDA Sample Product Formulation Statement for Meat/Meat Alternates:*  
[www.fns.usda.gov/sites/default/files/pfsmma.pdf](http://www.fns.usda.gov/sites/default/files/pfsmma.pdf)



For more information, see the Connecticut State Department of Education's (CSDE) [Menu Planning Guide for School Meals](#) and [Meal Patterns](#) and [Crediting Foods](#) Web pages or contact the [school nutrition programs](#) staff in the CSDE Bureau of Health/Nutrition, Family Services and Adult Education, 25 Industrial Park Road, Middletown, CT 06457.

This handout is available at  
[www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/aapreq.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/aapreq.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;
- (2) fax: (202) 690-7442; or
- (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).

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