



Food and  
Nutrition  
Service

Park Office  
Center

3101 Park  
Center Drive  
Alexandria  
VA 22302

DATE: September 23, 2019

MEMO CODE: SP 40-2019, CACFP 17-2019, SFSP 17-2019

SUBJECT: Smoothies Offered in Child Nutrition Programs<sup>1</sup>

TO: Regional Directors  
Special Nutrition Programs  
All Regions

State Directors  
Child Nutrition Programs  
All States

This memorandum clarifies juice and yogurt allowances based on the child care and preschool meal pattern updates and incorporates the meal pattern flexibilities related to flavored milk. The flavored milk flexibilities apply to the National School Lunch Program (NSLP), School Breakfast Program (SBP), the Child and Adult Care Food Program (CACFP), and the Special Milk Program for Children effective beginning in school year 2019-2020 (July 1, 2019). Lastly, this memorandum changes the policy for commercially prepared smoothies. Commercially prepared smoothies can now contribute to the meat/meat alternate, fruit, vegetable, and milk components of the Federal meal requirements for all Child Nutrition Programs (CNPs). Allowing commercially prepared products provides variety to Program operators seeking to include appealing and nutritious smoothies on their menus. This memorandum supersedes all previous guidance on smoothies including SP 10-2014 (v.3), CACFP 05-2014 (v.3), SFSP 10-2014 (v.3).

### **Use of Smoothies in the Child Nutrition Programs**

Since 2012, the Food and Nutrition Service (FNS) has allowed crediting for milk contained in fruit smoothies, provided those smoothies were prepared in-house. Effective immediately, smoothies containing milk are no longer required to be prepared in-house and may credit as long as the manufacturer adequately documents how the product meets Federal meal requirements through a *Product Formulation Statement* or CN Label. This includes attesting that commercial mixes with milk are made using ingredients that meet Federal, State, and local definitions for fluid milk in the area where served. School food service staff must ensure that the required 8 oz. of fluid milk is available to each child served and that at least one other unflavored, fat-free, or low-fat fluid milk is offered to meet the variety requirement for school meals.

FNS also allows for the crediting of yogurt in smoothies as a meat/meat alternate for all meals and snacks, including snacks and suppers served under CACFP and the Summer

---

<sup>1</sup> Pursuant to the Congressional Review Act (5 U.S.C. §801 et seq.), the Office of Information and Regulatory Affairs designated this memorandum as not a major rule, as defined by 5 U.S.C. § 804(2).

Food Service Program (SFSP). It is important for Program operators to recognize that the addition of yogurt to a smoothie does not serve as a substitution for fluid milk. Fluid milk must be offered to meet the milk component requirement in all CNPs. (Please note, adults in CACFP may be offered 6 ounces of yogurt in place of 8 ounces of fluid milk once a day). Effective immediately, smoothies containing yogurt are no longer required to be prepared in-house and may credit as long as the manufacturer adequately documents how the product meets Federal meal requirements. This includes attesting that yogurt in commercial mixes are made in compliance with Federal definitions for yogurt.

### **Crediting of Fruits and Specific Vegetables**

Smoothies containing vegetables have become more popular, and some Program operators wish to provide this option to contribute toward the meal pattern requirements. FNS permits the crediting of any vegetables contained in smoothies. Pureed vegetables and fruits, (fresh, frozen, or canned), when served in a smoothie, credit as juice, and as such are subject to the limitations regarding juice service. Vegetables from the dry beans and peas subgroup may credit toward the vegetable meal pattern requirement as vegetable juice when served in a smoothie. This policy on the crediting of vegetables in smoothies applies in all CNP meals and snacks.

State agencies are reminded to distribute this memorandum to Program operators. Program operators should direct any questions concerning this guidance to their State agency. State agencies with questions should contact the appropriate FNS Regional Office.

**Original Signed**

Angela Kline  
Director,  
Policy and Program Development Division

Attachment

## Questions and Answers

The guidance below provides Program operators with clarification on how smoothies may be credited under the Food and Nutrition Service (FNS), Child Nutrition Programs (CNP). This guidance includes questions from prior guidance on smoothies.

### 1. Can smoothies prepared by operators or purchased commercially be offered to meet the fluid milk, meat/meat alternate, vegetable, fruit, and grain components?

Milk may be credited toward the fluid milk requirement in smoothies to meet meal pattern requirements for all meals, including snacks. Fruits and vegetables may be credited as juice in smoothies to meet meal pattern requirements for all meals, including snacks. See question two for additional information on juice and juice blends. Yogurt may be credited as a meat alternate in smoothies for all meals, including snacks. This does not include *probiotic dairy drinks*, *drinkable yogurt*, or *yogurt drinks* as these are not creditable in CNPs. Yogurt in smoothies for CACFP participants must not exceed 23 grams of sugar per 6 ounces of yogurt. The CACFP Adult Meal Pattern allows six ounces by weight or  $\frac{3}{4}$  cup by volume of yogurt to be used to meet the equivalent of 8 ounces of fluid milk once per day when yogurt is not served as a meat alternate in the same meal. However, grains may not be credited when served in a smoothie. As an example, this  $1\frac{1}{2}$  cup blueberry, yogurt, and milk smoothie could contribute the following to meal requirements:

<u>Ingredient</u>	<u>Crediting</u>
8 fl oz fat free milk	1 c milk
$\frac{1}{2}$ c blueberry puree, prior to freezing	$\frac{1}{2}$ c fruit juice
4 oz low fat yogurt	1 oz meat alternate

### 2. Can smoothies containing a blend of different vegetables, vegetable juice blends, or fruit and vegetable juice blends contribute toward a specific vegetable subgroup for school meals?

Yes. Smoothies containing a mix of fruit and vegetables may contribute to the fruit and/or vegetable subgroup requirement. Smoothies with pureed fruits and/or pureed vegetables may contribute to the fruit and/or vegetable requirements as juice and are subject to the applicable juice limitations.

Schools should use a manufacturer's Product Formulation Statement (PFS) provided by the manufacturer that clearly documents the amount of fruit and/or vegetable included in the commercial product. See question 10 for more information about PFSs. In-house recipes must be documented following FNS guidance for all other recipes made in-house, such as the *Recipe Analysis Worksheet* included with the *Food Buying Guide for Child Nutrition Programs*. For example, if a smoothie mixture provides 25 percent pureed spinach, 25 percent pureed avocado, and 25 percent pureed banana, then a 1 cup serving of this blend provides  $\frac{1}{4}$  cup spinach (dark green vegetable subgroup),  $\frac{1}{4}$  cup avocado (other vegetable subgroup), and  $\frac{1}{4}$  cup banana, all of which is counted as juice toward the fruit and vegetable

requirements. Service of this fruit and vegetable smoothie does not require monitoring that each portion contains the documented amounts.

Vegetable combinations that contain at least  $\frac{1}{8}$  cup of different vegetable subgroups credit toward the appropriate subgroups.

**3. Can Program operators blend smoothies before the point of sale such as in a satellite kitchen?**

Yes. Blending after the point of sale is not a requirement; smoothies may be served directly from the service line. Smoothies also may be purchased from a commercial vendor provided the manufacturer adequately documents how the product meets Federal meal requirements with either a CN Label or a PFS.

**4. Can smoothies include grain such as oatmeal and meat/meat alternates such as peanut butter to improve flavor and consistency even though such ingredients in smoothies do not contribute to meal pattern requirements?**

Yes. Yogurt is the only creditable meat/meat alternate allowed in a smoothie. Though other (extra) ingredients in smoothies do not contribute to meal pattern requirements, all added ingredients in smoothies must be counted toward the weekly limits on calories, saturated fat, and sodium in school meals.

**5. Must smoothies include the full milk, fruit, vegetable, or meat alternate components if served?**

No. Smoothies do not have to contain the full fluid milk, fruit, vegetable, or meat alternate meal pattern requirement. Again, yogurt is the only crediting option for meat/meat alternates in smoothies. Program operators must always make certain that all components are offered in the required quantities to meet meal pattern requirements (see Question 8). The minimum amount of creditable milk in a smoothie is  $\frac{1}{4}$  cup. The minimum creditable amount for fruits and vegetables is  $\frac{1}{8}$  cup as served. The minimum amount of creditable meat alternate is a quarter ounce equivalency (for example, 1 ounce of yogurt is 0.25-ounce equivalent).

**6. What type of milk must be used when making smoothies?**

The type of milk used in smoothies must be consistent with CNP guidance for each specific meal service and age group being served. For School Meal Programs and CACFP, the types of allowable milk include low-fat (1 percent milk fat or less, unflavored or flavored) or fat-free (unflavored or flavored), in accordance with age restrictions (children under age 6 may not be offered flavored milk, and children 1 year of age must be offered whole, unflavored milk). For SFSP, all types of milk are allowable (whole milk, reduced fat milk, low-fat milk and fat-free milk, flavored or unflavored). Operators may use Ultra High Temperature Milk, Acidified Milk, Cultured Milk, and Lactose Reduced Milk as long as these types meet the specific fat levels and flavor requirements allowed by Program and age groups. Non-dairy milk substitutions for CNPs must follow existing FNS guidance for milk substitutions.

**7. How does pureed fruit or vegetable credit toward the meal pattern requirement?**

The crediting of fruits or vegetables is determined on a volume as served basis. The Food Buying Guide for Child Nutrition Programs currently has yield information for pureed blackberries, figs, guava, papaya, plums, and raspberries. For other fruits or vegetables, Program operators and commercial vendors should determine crediting based on the volume AFTER pureeing and before freezing. For example, Program operators may determine the volume of blueberry puree obtained from one cup of whole blueberries by separately pureeing the blueberries and recording the resulting amount of puree. For additional crediting of commercially prepared smoothies, see question 10.

Remember, the total volume of pureed fruit or vegetable included in a smoothie must be counted as juice toward the daily and weekly fruit requirements. Program operators must limit the amount of juice offered to children to no more than half (50 percent) of the weekly fruit or vegetable offerings in the School Meal Programs. SFSP operators must limit the amount of juice offered to children to no more than half (50 percent) of the fruit/vegetable component at lunch and supper. CACFP operators must limit the amount of vegetable or fruit juice offered to children to one serving per day. Pureed fruit or vegetable included in a smoothie may be counted as the entire fruit/vegetable component at breakfast and snack in the CACFP and SFSP. However, at snack, a smoothie containing juice and milk can credit as either juice or milk as long as there is a separate, second component served in addition to the fruit or vegetable and milk smoothie. Juice may not be served when milk is served as the only other component at snack in NSLP Afterschool Snack Service, CACFP, and SFSP. Furthermore, the total creditable amount in a smoothie may not exceed the volume served.

**8. When smoothies are offered during a meal, do additional fruits, vegetables, and /or milk need to be offered?**

When smoothies are offered as part of any CNP meal, additional fruit, vegetable, meat/meat alternate and/or milk must be offered if the amount served in the smoothie does not fulfill the minimum serving sizes needed to meet the meal pattern requirements.

When smoothies with milk are offered on the serving line in the School Meal Programs, the fluid milk component also must be offered on the serving line in the required quantity to meet the meal requirements. This is necessary in order to meet the requirement to offer a variety of milk options for the School Meal Programs.

When the smoothie meets the daily requirements for fruits and vegetables, FNS strongly encourages Program operators to offer additional fruit and vegetable options for children particularly during a snack service where only two components are required. This promotes variety and may assist in increasing offerings for *Offer Versus Serve* purposes. It would also allow a child that does not take a smoothie the option to select a fruit and/or vegetable.

A smoothie containing milk and yogurt may credit toward two components (milk for the fluid milk component and yogurt as the meat/meat alternate component) and could be a reimbursable snack in CACFP and for the NSLP Afterschool Snack Service. A smoothie

containing yogurt and juice or pureed fruits/vegetables credits as two components (juice for the fruit/vegetable component and yogurt as the meat/meat alternate component) and could be a reimbursable snack in CACFP and for the NSLP Afterschool Snack Service. In both examples above, the required component amounts are documented using a PFS, CN Label, or standardized recipe.

## **9. How do I identify the food components in the smoothie to students?**

Consistent with the nutrition standards for school meals regulations, SFAs must identify the food components offered to students, and smoothies are subject to this same requirement. Schools serving smoothies should inform students about the components by using signs that list the components of the smoothie, for example, fruit or vegetable and milk smoothie, fruit and vegetable smoothie, or fruit and yogurt smoothie on the serving line. SFAs should consult with State agencies if they have any questions regarding methods of identification that are appropriate and sufficient. Although this level of identification is not required in CACFP or SFSP, FNS encourages Program operators to convey this information to Program participants as a best practice and in a way that is suitable for the age group served.

## **10. How do commercially prepared smoothies credit toward meal pattern requirements?**

Commercially prepared smoothies (those not prepared by Program operators) credit toward all of the same components as those prepared in-house by Program operators. See question one for component details. Manufacturers must adequately document how the product meets all Federal meal requirements using a PFS or CN Label. All CNP operators should thoroughly review a PFS, checking for volumes of pureed ingredients prior to freezing and documentation that any milk or yogurt included meets specific Program requirements. Commercially prepared smoothies may credit based on the creditable ingredients identified in the CN Label or PFS. For more information, please see:

- CN Labeling at <https://www.fns.usda.gov/cnlabeling/child-nutrition-cn-labeling-program>
- The Manufacturer's Product Formulation Statement section of the CN Labeling Program website at <https://www.fns.usda.gov/cnlabeling/food-manufacturersindustry>

Prepackaged smoothies do not have a Federal standard of identity, which means that product formulation and labeling can vary widely. Some frozen fruit products may be labeled as "fruit smoothie" even though they may actually meet the Federal standard of identity for Frozen Desserts, which do not qualify for contributing to the reimbursable meal as fruit. Fruit or vegetable purees made into a slush-type product may or may not have "smoothie" in the product name. Program operators should purchase products that have a label that includes a statement regarding the "percent juice content" required by the Food and Drug Administration for beverages made with fruit and/or vegetable juice or puree. Only the portion of 100 percent juice could credit towards the fruit or vegetable component. For example, an 8.0 fluid ounce smoothie made from fruit puree with the juice content labeled as "contains 50% juice" would credit as 4.0 fluid ounces or ½ cup of juice. The volume of pureed fruit and juice included in the commercially prepared smoothie counts as juice toward the daily and weekly fruit requirement. Smoothies with less than 100 percent juice content

are the only instance when less than 100 percent juice may be offered for meeting Federal meal requirements.

When considering the use of commercially prepared smoothies, SFAs need to be aware of how non-contributing ingredients may impact calories and saturated fat. As with any menu item, the entire recipe will impact the dietary specifications for calories, saturated fat, and sodium, within the weekly menu.

**11. Are smoothies containing nutritional supplements such as whey protein powder and herbal supplements such as Ginkgo biloba creditable in CNPs?**

No. Smoothies with dietary and herbal supplements are not creditable for CNP. However, smoothies can be made with juice that has been fortified with vitamins and minerals, such as orange juice with calcium and Vitamin D added.

**12. Can concentrated fruit puree and concentrated fruit juice contribute to meal requirements when used in smoothies?**

Concentrated fruit puree and concentrated juice can only be used in meeting Federal meal requirements when they are reconstituted to full-strength fruit puree or full-strength juice. Without being reconstituted to the full strength, concentrated fruit puree and concentrated juice do not contribute to Federal meal requirements for School Meal Programs and CACFP.

**13. Are smoothies allowed at breakfast, lunch, supper, and snack?**

Yes. Smoothies may be offered at any meal, including snacks. It is not recommended to offer a smoothie at more than one meal per day, including snack.

**14. Does soy yogurt in smoothies credit toward the meat/meat alternate component?**

Yes. Both dairy and soy yogurt in smoothies can credit toward the meat/meat alternate component at breakfast in the SBP, lunch in the NSLP, and any meal or snack in CACFP or NSLP Afterschool Snack. Only dairy yogurt in smoothies can credit toward the meat/meat alternate component at any meal or snacks for SFSP.