



Food and Nutrition Service  
U.S. DEPARTMENT OF AGRICULTURE

# Child Nutrition Labeling Manual



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# About the Child Nutrition (CN) Labeling Manual

## **Section 1: Introduction**

The introduction for this manual provides an overview of the Child Nutrition (CN) Labeling Program and describes the steps needed to successfully apply for and obtain approval for a product label with a CN crediting statement.

The CN Labeling Program is a voluntary Federal labeling program for the Child Nutrition Programs (CNP). The labeling program is run by USDA, Agricultural Marketing Service (AMS) in collaboration with Food and Nutrition Service (FNS) and Food Safety and Inspection Service (FSIS), and the U.S. Department of Commerce's National Oceanic and Atmospheric Administration Seafood Inspection Program (NOAA SIP). The CN Labeling Program verifies the accuracy of the meal pattern contribution statement declared by the manufacturer. A CN label on a product provides CNP operators with a guarantee that the product contributes to the meal pattern requirements as printed on the product label.

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## **Section 2: Child Nutrition (CN) Label Application Process**

This section provides guidance on the entire CN label application process. The application process differs slightly depending upon whether the food is a meat and poultry product, a meat alternate product, or a seafood product. The steps to complete the application and obtain approval are described within this section.

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## **Section 3: Child Nutrition (CN) Contribution Statements and Calculations**

This section walks through the calculations needed to determine the contribution statement, which identifies the contribution of a specific portion of a meat/meat alternate product toward the meal pattern requirements. Examples of calculations to determine the contribution toward the grains, vegetables, and/or fruits components of the CNP meal pattern requirements are included.

# Appendixes

## **Appendix A: Sample Inspection Stamps and Child Nutrition (CN) Labels**

This appendix provides samples of CN labels, demonstrating use and placement of the contribution statement and the correct placement of the inspection legend for different types of CN labeled items.

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## **Appendix B: Food Buying Guide for Child Nutrition Programs (CNP)**

This appendix provides information on the *Food Buying Guide for Child Nutrition Programs* with a link to access the Food Buying Guide's suite of resources.

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## **Appendix C: Questions and Answers on Alternate Protein Products (APP)**

This appendix provides policy guidance on products that meet the requirements for Alternate Protein Products (APP).

This publication provides food manufacturers with instructions on how to apply and obtain approval for a product label with a Child Nutrition (CN) crediting statement. It also contains instructions for calculating the contribution that meat, meat alternate, poultry, and seafood products make toward the meal pattern requirements for Child Nutrition Programs (CNP).

## What Is the Child Nutrition (CN) Labeling Program?

The Child Nutrition (CN) Labeling Program is a voluntary Federal labeling program for Child Nutrition Programs (CNP). The CN label on a product communicates how the product contributes to CNP meal pattern requirements. CN labeled products provide CNP operators with a warranty against audit claims when the product is prepared according to the manufacturer's instructions.

## Who Runs the Program?

USDA, Agricultural Marketing Service (AMS) manages much of the Child Nutrition (CN) Labeling Program in collaboration with three other Federal agencies: USDA's Food and Nutrition Service (FNS) and Food Safety and Inspection Service (FSIS), and U.S. Department of Commerce's National Oceanic and Atmospheric Administration Seafood Inspection Program (NOAA SIP).

- |                 |   |
|-----------------|---|
| <b>AMS</b>      | is responsible for approving CN label applications from commercial food processing firms.   |
| <b>FNS</b>      | is responsible for regulations that govern the CN Labeling Program.   |
| <b>NOAA SIP</b> | oversees the CN label review and approval process for seafood products.   |
| <b>FSIS</b>     | provides inspection oversight for meat, poultry, and egg products to ensure plants are operating according to Federal food safety guidelines. |
| <b>NOAA SIP</b> | provides continuous on-site and audit-based grading and certification services for seafood items.   |
| <b>AMS</b>      | provides oversight on the quality control (QC) program and verification visits for all other products.  |



## How Does the Program Work?

The Child Nutrition (CN) Labeling Program requires an evaluation of a product's formulation to determine its contribution toward Child Nutrition Programs (CNP) meal pattern requirements. It allows manufacturers to state this contribution on their labels. The existence of a CN label on a product provides CNP operators with a guarantee that the product contributes to the meal pattern requirements as printed on the product label.

Specific requirements include:

- ✓ Foods must be produced under Federal inspection, equal-to-Federal/State inspection, or Canadian inspection.
- ✓ Food processing firms must have a federally approved quality control (QC) program. Guidance for developing a QC program and the Standard Operating Procedures (SOPs) for submitting a QC document for approval are available on the CN Labeling website at <https://www.fns.usda.gov/cn/labeling/food-manufacturersindustry>.
- ✓ Food processing firms must allow Federal personnel to perform verification services. Verification services ensure products are in compliance with the approved QC programs.

The SOPs for verification services are also available on the CN Labeling website at <https://www.fns.usda.gov/cn/labeling/food-manufacturersindustry>.

- ✓ The U.S. Department of Agriculture's Agricultural Marketing Service (AMS) or the U.S. Department of Commerce's National Oceanic and Atmospheric Administration Seafood Inspection Program (NOAA SIP) will conduct an evaluation of a product's formulation to determine its contribution toward meal pattern requirements. Once approved, the manufacturer may state the contribution by adding the approved CN label to the product packaging.







## What Products Can Be Child Nutrition (CN) Labeled?

Main dish products contributing to the meats/meat alternates (M/MA) component of the meal pattern requirements are eligible for a Child Nutrition (CN) label. M/MA include:

- meat,
- poultry,
- seafood,
- cheese,
- yogurt and soy yogurt,
- dry beans, peas and lentils,
- whole eggs,
- tofu,
- nuts and seeds,
- nut and seed butters,
- shelf-stable, dried and semi-dried meat, poultry, and seafood products,
- surimi seafood, and
- tempeh

Examples of CN labeled products made with M/MA include beef patties, cheese or meat pizzas, meat or cheese and bean burritos, egg rolls, and breaded seafood portions. Products contributing only to the grains, fruits and/or vegetables components are not eligible for the CN label.



### A CN labeled M/MA product must:

- ✓ Contain a minimum of 0.50 oz. equivalent M/MA per serving;
- ✓ Contain meat, poultry, seafood, and/or a meat alternate;
- ✓ Be produced under Federal inspection, equal-to-Federal/State inspection, or Canadian inspection; and
- ✓ Be produced under an approved quality control (QC) program or, for seafood products, be produced under the U.S. Department of Commerce's National Oceanic and Atmospheric Administration Seafood Inspection Program (NOAA SIP)'s Approved Establishment (AE) or Approved Establishment and Quality Management Program (AE QMP).

## What Must Be Declared on the Child Nutrition (CN) Label?

The contribution of the meal component(s) in the CN labeled product must be determined using yields in the *Food Buying Guide for Child Nutrition Programs* (FBG) (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>). The CN contribution statement must declare all contributions of a given product to the fullest extent possible. For example, if a formulation provides  $\frac{1}{8}$  cup of red/orange vegetable from tomato paste, it must be declared in the CN contribution statement. Likewise, if a pizza crust contributes 2.00 oz. equivalent grains, then the CN contribution statement must declare the full amount of 2.00 oz. equivalent. The product formulation and CN label must be approved by the respective agency: NOAA SIP for seafood products and the U.S. Department of Agriculture's Agricultural Marketing Service (AMS) for all other products.



# What Information Is on a Child Nutrition (CN) Label?

A Child Nutrition (CN) labeled product must contain the following on the product packaging:

- ✓ The federally required label featuring the product name, inspection legend, ingredient statement, name and address of manufacturer or distributor, and net weight;
- ✓ A unique 6-digit CN identification number (Note: All CN numbers are assigned by the U.S. Department of Agriculture's Agricultural Marketing Service (AMS)); and
- ✓ The CN logo, which has a distinct border;
- ✓ The month and year of AMS or the U.S. Department of Commerce's National Oceanic and Atmospheric Administration Seafood Inspection Program (NOAA SIP) approval.
- ✓ The meal pattern contribution statement;
- ✓ The USDA authorization statement;

## A sample CN label:

**Beef Crumbles With Soy Protein**

Ingredient Statement: Ground beef (no more than 20% fat), textured soy protein product, water, salt, pepper.

**CN** XXXXXX\*


Each 2.20 oz. serving of Cooked Beef Patty Crumbles (By Weight) provides 2.00 oz. equivalent meat/meat alternate for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA mm/yy\*\*).

**CN** **CN**

**CN**

**Net Wt.:** 19.0 pounds

**DFG Food Company**  
1234 Yellow Road    Oaktown, PA 12345



\* The 6-digit CN identification number is assigned by CN Labeling office.

\*\* Date is written using numbers to represent the month/year of final label approval.

# Are Products Served in Child Nutrition Programs (CNP) Required To Be Child Nutrition (CN) Labeled?

There is no Federal requirement for products served in a Child Nutrition Program (CNP) to have a Child Nutrition (CN) label. The decision to procure CN labeled products is made at the State and/or local level. If CN labeled products are desired, CNP operators must clearly state this in their purchasing specifications.



# What Are the Advantages of Using Child Nutrition (CN) Labeled Products?

- A Child Nutrition (CN) label clearly identifies the contribution of a product toward the meal pattern requirements. It protects Child Nutrition Program (CNP) operators from exaggerated claims about a product.
- A CN label provides a warranty against audit claims if the product is prepared according to the manufacturer's directions.
- CN labels simplify cost comparisons of like products.

## The Child Nutrition (CN) Label Verification and Reporting System

The system was developed to assist State agency reviewers, Child Nutrition Program (CNP) operators, and the food industry in verifying the status of a Child Nutrition (CN) label and the validity of a CN label copied with a watermark.

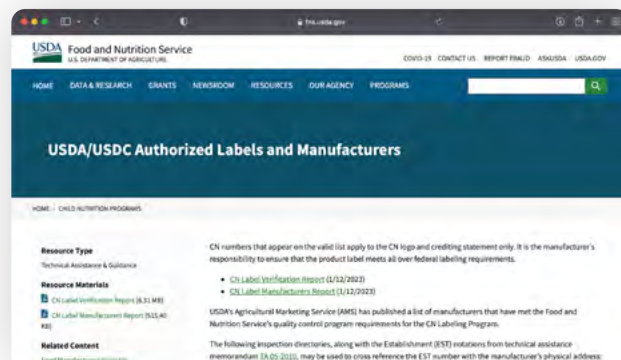
The system produces two comprehensive monthly reports:

CN #	Est #	Product Description	Serving Size	CN Crediting	Expiration	Company Name
024815	717W	FARMLAND SILVER MEDAL BRAND HOT DOGS	Each 2.00 oz. Hot Dog	2.00 oz. Equivalent Meat	6/17/2024	SMITHFIELD FARMLAND CORP.
024860	717W	FARMLAND GOLD MEDAL HOT DOGS	Each 2.00 oz. Hot Dog	2.00 oz. Equivalent Meat	6/17/2024	SMITHFIELD FARMLAND CORP.
025745	420	GOURMET SCRAMBLED EGG SYSTEM FROZEN EGG PRODUCT	One lb. (16.00 oz.) Egg Mix	14.03 oz. Equivalent Meat Alternate	2/22/2026	MICHAEL FOODS EGG PRODUCTS COMPANY
035058	420	GFS FROZEN WHOLE EGGS	One lb. (16.00 oz.) Eggs	18.00 oz. Equivalent Meat Alternate	8/8/2027	MICHAEL FOODS EGG PRODUCTS COMPANY
035919	2132	FULLY COOKED FLAME BROILED BEEF PATTIES WITH ONION	Each 2.60 oz. Patty	2.00 oz. Equivalent Meat/Meat Alternate	8/18/2027	ADVANCE PIERRE FOODS, INC.
041437	P551	GUARBO TURKEY FRANKS W/ NATURAL SMOKE FLAVORING	Each 2.00 oz. Frank	2.00 oz. Equivalent Meat	12/23/2024	JENNIE-O TURKEY STORE SALES, LLC
041438	P551	TURKEY FRANKS	Each One 1.60 oz. Frank	1.50 oz. Equivalent Meat	12/23/2024	JENNIE-O TURKEY STORE SALES, LLC
111916	P2782	REFINED FAT FRANKS	Each 2.00 oz. Frank	2.00 oz. Equivalent Meat	7/18/2025	STONY MOUNTAIN MEATS, LLC

**CN Label Verification Report** includes all information pertaining to a valid CN label; this includes the CN number, product description, serving size, crediting information (meal pattern contribution statement), expiration date, and the manufacturer's establishment number.

Est #	Company Name	Address	City	State	Zip	Phone Number
002F	HIGHLINER FOODS	ONE HIGHLINER AVENUE	PORTSMOUTH	NH	03802-0839	(603) 431-6865
013F	CHANNEL FISH PROCESSING	200 COMMERCE DRIVE	BRAINTREE	MA	02184	(978) 283-4121
045F	ICELANDIC USA, INC.	190 ENTERPRISE DRIVE	NEWPORT NEWS	VA	23603	(757) 820-4000
1	VIENNA BEEF	1000 WEST PERSHING ROAD	CHICAGO	IL	60609	(675) 657-7658
102B	PAPETTI'S HYGRADE EGG PRODUCTS INC.	1 PAPETTI PLAZA	ELIZABETH	NJ	07206	(908) 282-7900
104I	OSI INDUSTRIES, LLC	21876 N. HWY 59	OAKLAND	IA	51560	(712) 482-6640
11115FNS	ATECO, INC., MRS. T'S PIEROGIES	P.O. BOX 600	SHENANDOAH	PA	17976-0606	
1127	M.G. WALDBAUM COMPANY	1009 S. BROOKS STREET	LENEXA	IA	50851	(641) 333-4700
1162	M.C.I. FOODS, INC.	12835 ATLANTIC AVENUE	COMPTON	CA	90221	(310) 635-5664
1162A	M.C.I. FOODS, INC.	13013 MOLETTE STREET	SANTA FE SPRINGS	CA	90670	(310) 635-5664

**CN Label Manufacturers Report** includes contact information for manufacturers, who are authorized to produce CN labeled products. This report allows users to match the manufacturer's list from the CN Label Verification Report.



Both reports may be found at <https://www.fns.usda.gov/cn/labeling/usdausdc-authorized-labels-and-manufacturers>.

# Buy American Provision

The Buy American Provision requires that a school food authority purchase, to the maximum extent practicable, domestic commodities or products. The term “domestic commodity or product” means an agricultural commodity produced in the United States or a food product processed in the United States substantially using agricultural commodities produced in the United States.

The definition of “substantially” means over 51 percent of the final processed product consists of agricultural commodities grown domestically; exceptions for purchasing non-domestic foods are very limited. These limited exceptions are permitted when school food authorities (SFAs) determine that domestic foods are unavailable or prohibitively expensive. SFAs should consider domestic alternatives before purchasing nondomestic items.

The Buy American Provision is specific to the National School Lunch and School Breakfast Programs (NSLP/SBP).



Please refer to SP 38-2017 – Compliance with and Enforcement of the Buy American Provision in the National School Lunch Program (<https://www.fns.usda.gov/school-meals/compliance-enforcement-buy-american>) and <https://www.fns.usda.gov/cn/buy-american-fact-sheet> for more information about the Buy American Provision.

Also, please refer to SP 32-2019 – Buy American and Agriculture Improvement Act of 2018 (<https://www.fns.usda.gov/cn/buy-american-and-agriculture-improvement-act>) for clarification on the treatment of harvested fish under the Buy American requirements.

## Do all Child Nutrition (CN) labeled products meet the Buy American Provision?



No. The U.S. Department of Agriculture’s Agricultural Marketing Service (AMS) only verifies the accuracy of the crediting information found in the Child Nutrition (CN) contribution statement. Child Nutrition Program (CNP) operators must ensure products meet the Buy American Provision. For foods that are unprocessed, agricultural commodities must be domestic, and for foods that are processed, they must be processed domestically using domestic agricultural food products that are comprised of over 51 percent domestically grown items, by weight or volume.



### General Guidance

1. Before a Child Nutrition (CN) number can be assigned, all applicants must have the following:
  - a. An approved quality control (QC) program **or** a signed letter of intent from the U.S. Department of Agriculture's Agricultural Marketing Service (AMS) or the U.S. Department of Commerce's National Oceanic and Atmospheric Administration Seafood Inspection Program (NOAA SIP) approving officer;
  - b. A signed service agreement and completed billing account application on file with the AMS CN Label Program Operations Office.
    - i. Service Agreement for CN Labeling Program: <https://www.fns.usda.gov/service-agreement-cn-labeling-program>
    - ii. Billing form: [https://www.fns.usda.gov/sites/default/files/cnl\\_taxID.pdf](https://www.fns.usda.gov/sites/default/files/cnl_taxID.pdf)
  - c. The above two forms are only required one time when the company first enters the program.
2. CN numbers must be issued before an application can be submitted for review.
3. CN numbers are requested via email to [CNLabeling@usda.gov](mailto:CNLabeling@usda.gov). The following information must be included when requesting CN numbers:
  - a. Product name(s) and Product code(s) (if available);
  - b. Company name; and
  - c. The U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS), Food and Nutrition Service (FNS), or NOAA SIP establishment number(s) where the item(s) will be produced.
4. Each assigned CN number is unique to a specific product name, CN contribution statement, formulation, and establishment number.
5. CN numbers expire 6 months after they are issued, if not associated with an approved CN labeled product.





## Application Process for Meats/Meat Alternates (M/MA)

A completed Child Nutrition (CN) Label Application packet for U.S. Department of Agriculture's Agricultural Marketing Service (AMS) review includes:

1. A completed FSIS 7234-1 Application for Approval of Labels, Marking, or Device form;
2. A clear copy of the product label;
3. Clear copies of the source product label(s) and/or alternate protein product(s) (APP) documentation (when applicable); and
4. Copies of breading, batter, and/or predest formulations on supplier letterhead (for breaded items that use Method 3 (see pages 38-40) to determine the grains contribution).

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Applications for AMS review may be submitted via:

1. An email to [CNLabeling@usda.gov](mailto:CNLabeling@usda.gov) by compiling all necessary documents for a single CN number into a single PDF attachment (1 application per email); or
2. USDA/FSIS Label Submission Approval System (LSAS) (USDA's Food Safety and Inspection Service (FSIS) inspected products **only**).

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Special notes regarding application submission

1. Applications that require FSIS approval should be submitted via LSAS. If an applicant does not have access to LSAS, then it is the applicant's responsibility to notify AMS if their application requires FSIS approval. The AMS office can directly route the application to FSIS after AMS approval. If AMS routes the application to FSIS, AMS will notify the applicant that it has been sent to FSIS. Once the application is in route to FSIS, the applicant must contact the FSIS Distribution Unit for up-to-date information.
2. With the exception of applications that require FSIS approval, approvals will be returned to the applicant in the same manner as they were received (e.g., applications that were emailed will receive their approval via email). Emailed applications that require FSIS approval will be returned by FSIS.
3. For express review, the applicant must state in writing the CN number(s) affected (additional fee applied).

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Tips for completing the CN Labeling Application

1. Type the assigned CN number in box 9 of the FSIS 7234-1 form.
2. Product Formulation (box 15 of the FSIS 7234-1 form):
  - a. All creditable ingredients must match a description found in the Food Buying Guide for Child Nutrition Programs (FBG) (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>).
  - b. Source products should be identified by their CN number and marked "No Substitutions."
  - c. APPs should be identified by their company name and product code and marked "No Substitutions."



## Application Process for Meats and Meat Alternates (continued)

### Source products and APPs

1. Source products must be valid CN labeled products.
2. Applications that contain source products that expire within 6 months will not receive final approval. The applicant can choose to replace the source with another source, hold the application until the source is renewed, or receive a temporary approval set to expire the same date as the source.
3. APPs must have documentation on supplier letterhead for each APP used, indicating that:  
(a) the APP meets requirements in 7 CFR Parts 210, 220, 225, and 226; (b) that a portion of nonprotein constituents has been removed; (c) the Protein Digestibility-Corrected Amino Acid Score (PDCAAS); (d) the percent protein on an as-is basis (not on a moisture-free basis); and (e) that the product provides at least 18 percent protein when fully hydrated. Documentation must identify the common name, brand and code.

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### Processing Procedures (box 16 of the FSIS 7234-1 form)

1. Fill specifications, cooking yields, piece weights, etc. should be noted in this section.
2. The weights or percentages of all creditable ingredients, cook yield, dry yield, piece weights, etc. must be monitored in the QC program and the application should note this statement.
3. The breading, batter, and/or predest supplier's company name and product code must be identified and listed as "no substitutions" for breaded items that use Method 3 to determine the grains contribution.

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### AMS Procedures for Reviewing CN Labels

1. Regular submissions are typically reviewed within 5–10 business days.
2. Express submissions (additional fee applied) are typically reviewed within 2–3 business days.
3. The label reviewer will directly contact the applicant with any comments or questions regarding the application. The application will move into pending status and the review will continue once more information is received.
4. If the applicant does not respond after several attempts, the label reviewer will reject the application and the applicant will be responsible for the 1-hour administration fee.
5. If the applicant cancels the application after the review process has started, the label reviewer will reject the application and the applicant will be responsible for the 1-hour administration fee.





# Application Process for Seafood

The U.S. Department of Commerce's National Oceanic and Atmospheric Administration Seafood Inspection Program (NOAA SIP) provides two inspection program options that establish the eligibility requirements for fish and fishery products bearing the Child Nutrition (CN) label.

Seafood processors may participate in either the NOAA SIP Approved Establishment program (AE) or the Approved Establishment and Quality Management Program (AE QMP).

## Eligibility Requirements

1. Products bearing the CN label must be produced under the NOAA SIP Approved Establishment or Approved Establishment and Quality Management inspection programs.
2. To satisfy USDA CN purchase requirements, designated lots must:
  - a. Meet regulatory requirements
  - b. Meet Quality Assessment Criteria and all applicable NOAA SIP requirements commensurate with the use of NOAA SIP Official Insignia
  - c. Meet USDA CN purchase criteria. All creditable ingredients must match the description found in USDA's FBG (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>).

NOAA SIP Official Insignia encompass the U.S. Grade A Shield, the Processed Under Federal Inspection Mark (PUFI Mark), and the combined U.S. Grade A Shield/PUFI Mark.

The USDA requires that products bear a Federal inspection legend, which is met by the Processed Under Federal Inspection Mark (PUFI Mark). In addition, both the U.S. Grade A shield or the combined U.S. Grade A Shield/PUFI Mark may also be used to meet this requirement.

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## Application Procedures

NOAA SIP uses an online submission form to begin the application process.

To submit an application, please email the NOAA SIP Approval Officer at [nmfs.approval.officer@noaa.gov](mailto:nmfs.approval.officer@noaa.gov).





## Types of Approvals (Applies to all Child Nutrition (CN) Labels)

### Final Approvals

1. Are required to produce a product with the Child Nutrition (CN) label.
2. Require the manufacturer to update the CN label with any edits made during the review prior to printing.
3. Should be resubmitted several weeks before the expiration date in order to avoid production delays.

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### Subsequent Approvals

1. Are submitted to extend the expiration date.
2. Allow companies to adjust the product formulation, add source products and alternate protein products (APPs) if the ingredients statement on the label does not change AND the crediting does not change.
3. Allow companies to adjust the raw weight, cooking yield, or drying yield of their product as long as the serving size and crediting information does not change.
4. Allow companies to replace creditable ingredients with similar ingredients as long as the product name of that ingredient does not change, (i.e., the sub list of the ingredient can be different).
5. May keep the original month/year in the CN contribution statement or update it to the current month/year.
6. Must contain the reason for subsequent approval.
7. Should be submitted with a complete copy of the last approval.

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### Draft Approvals

1. Cannot be used to produce product with the CN label.
2. Must be resubmitted to the U.S. Department of Agriculture's Agricultural Marketing Service (AMS) CN Labeling Program office for FINAL approval within 6 months or the CN number will expire.
3. Will be applied if an application has the CN number handwritten into the CN label.

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### Rejected Applications

1. Will be charged a 1-hour administration fee.
2. May be resubmitted to AMS ([CNLabeling@usda.gov](mailto:CNLabeling@usda.gov)) within 6 months of rejection date or the CN number will expire.

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### Finalized CN Applications that are rejected by the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS)

1. Must be resubmitted to AMS for subsequent approval with the reason for FSIS rejection clearly noted.
2. May require an additional AMS review that will result in another label review fee.



## Types of Approvals (Applies to All CN Labels) (continued)

### Temporary Approvals

1. Temporary approvals will be considered in extreme hardship cases or for plant transfers.
2. Requests must be made on company letterhead and should include the following information: the reason for the request, how many labels are onhand, and the estimated temporary duration.
3. AMS does not have the authority to provide temporary approval for nonmeat labels due to labeling discrepancies. Food and Drug Administration (FDA) consent must be obtained prior to submittal.

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### Generic Approvals

1. Copies of CN label generic approvals no longer need to be submitted to the AMS office.
2. Companies should continue to maintain a separate generic CN label list within their company's records.
3. Generic approvals that fall under FSIS generic approval do not always fall under generic approval in the CN label program. Changes to the product name, ingredient statement, product formulation, CN contribution statement, establishment number, and raw weights/cook yields will require AMS approval.

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### Examples of In-Plant (Generic) Changes

If a CN label has final approval, certain in-plant changes (generic approvals) may be made at the plant level and maintain the same CN number. Specific scenarios not included below can be emailed to [CNLabeling@usda.gov](mailto:CNLabeling@usda.gov) for further guidance.

- a. Directions for opening the container or package are changed.
- b. Net weights not included in the CN contribution statement are changed.
- c. Packaging materials are changed.
- d. Illustrations or vignette changes are made.
- e. Product Code numbers are changed.
- f. Company name and address is added to approved master label.
- g. Signature line is changed.
- h. Brand name is changed.
- i. Special handling instructions are added/deleted.
- j. Certain changes are made to the Nutrition Facts Panel.



## Child Nutrition (CN) Contribution Statement

The contribution statement identifies the contribution of a specific portion of a meats/meat alternates (M/MA) product toward this component of the meal pattern requirements. The statement may also include the contribution toward the grains, vegetables, and/or fruits components of the Child Nutrition Program (CNP) meal pattern requirements.

- All contribution information must be declared to the maximum extent in the Child Nutrition (CN) contribution statement. Companies cannot leave specific contribution information off the CN label if the product is eligible for that contribution.
- At a minimum, the serving size should be expressed to the second decimal point.
- Always round down the answers to contribution calculations. Never round up.
- The contribution statement must accurately reflect the product.

CN		000000
CN	The statement may also include the contribution toward the grains, vegetables, and/or fruits components of the CNP meal pattern requirements.	CN
CN		

### For example:

- A product that contains **only meat, poultry and/or seafood** should state "provides X.XX oz. equivalent **meat**."
- A product that contains **meat, poultry and/or seafood and meat alternate** (such as eggs, dry beans, APP, or cheese) should state "provides X.XX oz. equivalent **meat/meat alternate**."
- A product that contains **only meat alternate** should state "provides X.XX oz. equivalent **meat alternate**."

## Meats/Meat Alternates (M/MA) Contribution

- A product serving must provide a minimum of 0.50 oz. equivalent meat/meat alternate (M/MA). Ounce equivalents should be expressed as a decimal in increments of 0.25 oz., such as, 0.50, 0.75, or 1.00 oz. equivalent meat/meat alternate. Ounce should be abbreviated as "oz." Exception to the increment rule is provided for bulk products only. See sample Child Nutrition (CN) labels in Appendix A for examples.
- The meats/meat alternates credit should be expressed to the second decimal point (e.g., 2.00).
- Prepared ingredients containing meat/poultry/seafood or meat alternate (e.g., cooked pizza topping) that are purchased and used for credit in a CN labeled product are called source products. Source products must be CN labeled and obtain final approval by U.S. Department of Agriculture's Agricultural Marketing Service (AMS) or U.S. Department of Commerce's National Oceanic and Atmospheric Administration Seafood Inspection Program (NOAA SIP) before they may be used.

# Vegetables and/or Fruits Contribution

- A product must provide a minimum of  $\frac{1}{8}$ -cup serving of vegetables or fruits in order to credit toward the vegetables or fruits component. Larger servings must be expressed in increments of  $\frac{1}{8}$ -cup servings (e.g.,  $\frac{1}{4}$ ,  $\frac{3}{8}$ , or  $\frac{1}{2}$  cup servings of vegetables or fruits). Please note:
  - Raw, leafy greens credit at half the volume served in National School Lunch Program (NSLP)/School Breakfast Program (SBP) and the Child and Adult Care Food Program (CACFP).  
**Example:**  $\frac{1}{2}$  cup of romaine lettuce credits as  $\frac{1}{4}$  cup dark green vegetable
  - Cooked leafy greens, such as sautéed spinach, credit based on volume served.  
**Example:**  $\frac{1}{2}$  cup of cooked spinach credits as  $\frac{1}{2}$  cup dark green vegetable
  - Whole dried fruit and whole dried fruit pieces credit at twice the volume served in NSLP/SBP and CACFP.  
**Example:**  $\frac{1}{8}$  cup of dried cranberries credits as  $\frac{1}{4}$  cup fruit
- The vegetable subgroup must be identified in the Child Nutrition (CN) contribution statement.
  - The vegetable subgroups are:
    - dark green
    - red/orange
    - dry beans, peas, and lentils
    - starchy
    - "other"
  - Any quantity remaining after the credit has been determined for each vegetable subgroup is combined to ensure the maximum credit for the vegetables. If this combined quantity provides a minimum of  $\frac{1}{8}$  cup, and includes starchy vegetables, it is credited toward "Additional" Vegetables. If the combined quantity provides a minimum  $\frac{1}{8}$  cup, and is a combination of any subgroup except starchy, it is credited toward "Other" Vegetables.  
**Example:** 0.45 quarter cups of red/orange vegetable plus 0.15 quarter cups starchy vegetable can be combined to 0.60 quarter cups or  $\frac{1}{8}$  cup additional vegetable to help meet the minimum vegetable requirement.

## Dual Declaration for Legumes

- Products that contain at least  $\frac{1}{8}$  cup of legumes must provide two crediting statements; one as a meat alternate (e.g., 0.50 oz. equivalent meat alternate) and one as a legume vegetable (e.g.,  $\frac{1}{8}$  cup legume vegetable).
- If the product contains more than  $\frac{1}{8}$  cup legume vegetable or 0.50 oz. equivalent meat/meat alternate (M/MA) but does not contain enough to credit to the next level (e.g.,  $\frac{1}{4}$  cup legume vegetable or 0.75 oz. equivalent M/MA) then the remainder may be added back to credit toward the M/MA. Note: This addition only applies if the product contains another M/MA in addition to the legumes, such as a bean and cheese burrito.  
**Example:** 0.75 quarter-cups legume vegetable and 1.32 oz. equivalent M/MA credit as:  
 $\frac{1}{8}$  cup legume vegetables and 1.50 oz. equivalent M/MA  
OR 2.00 oz. equivalent M/MA.





## Grains Contribution

- Creditable grain items are those made from whole grains, enriched grains, bran, germ, corn masa, masa harina, hominy, or be an enriched product, such as enriched bread or a fortified cereal.
- Ounce equivalents (oz. equivalent) are used to determine the amount of creditable grains.
- The grains credit should be expressed to the second decimal point (e.g., 2.00).
- One-quarter oz. equivalent (0.25 oz. equivalent) is the smallest amount allowable to be credited toward the grains requirement as specified in program regulations.
- When expressed as “oz. equivalent grains” in the Child Nutrition (CN) contribution statement, the grains are considered to meet the whole grain-rich requirement.<sup>1</sup> When grains on a CN label are credited as “oz. equivalent grains (enriched)” they credit as enriched grains.
- If the grains component contains any non-creditable grains,<sup>2</sup> provide the level (in percentage of product weight) of non-creditable grains.
- The following disclaimer is required to appear directly underneath the CN logo if the product contains 2 percent or more non-creditable grains or 0.25 oz. equivalent non-creditable grains: *“DISCLAIMER: This product contains grains that are not creditable in school meal programs. Additional grains must be served to meet meal pattern requirements.”*



<sup>1</sup> Whole grain-rich is the term designated by FNS to indicate that the grains components in a product are at least 50 percent whole grain with the remaining grains being enriched. This term only refers to FNS criteria for meeting the grains requirements for the NSLP, SBP, and CACFP. The term is not found on product labels and should not be confused with the FDA whole grain health claim.

<sup>2</sup> Non-creditable grains are those that are not whole grains or enriched grains.

# Procedures for Determining the Meats/Meat Alternates (M/MA) Contribution

This section will focus on crediting meats/meat alternates, including step-by-step calculations to determine contributions of different foods. Current food yield data can be found in the Food Buying Guide for Child Nutrition Programs (FBG) (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>).

## Meats/Meat Alternates (M/MA)

Meats and meat alternates (M/MA) include meat, poultry, seafood, cheese, yogurt, soy yogurt, dry beans, peas and lentils, whole eggs, tofu, tempeh, peanut butter or other nut or seed butters, and nuts and seeds. The unit of measure for the M/MA component is "oz. equivalent." To be Child Nutrition (CN) labeled, a serving of a product must provide a minimum of 0.50 oz. equivalent M/MA and the contribution must be expressed in 0.25-oz. increments. Enriched macaroni products with fortified protein when made and used according to USDA regulations (7 CFR Part 210 Appendix A) can also credit toward the M/MA component. Products formulated with alternate protein products (APPs) may meet all or part of the M/MA requirement for Child Nutrition Programs (CNP).

**There are four general steps used in determining the total oz. equivalent of M/MA in a serving of a product:**

- 1 Determine the creditable M/MA ingredients in the product being labeled. The contribution of the meal component(s) in the CN labeled product must be determined using yields in the FBG. Food yield tables are available for download from the FBG.
- 2 Calculate the contribution (oz. equivalent) separately for the meat ingredients, meat alternate ingredients, and APP ingredients. See procedures on the following page.
- 3 Sum the oz. equivalent M/MA calculated separately for the meat ingredients, meat alternate ingredients, and APP ingredients.
- 4 Round down to the nearest 0.25 oz. equivalent M/MA.



## Calculating the Contribution for Meats

**Multiply**



the raw serving size (in ounces) by the percent of meat/poultry/seafood in the raw formula:

$$\text{oz. raw serving size} \times \% \text{ raw meat/poultry/seafood} = \text{oz. raw meat/poultry/seafood per serving}$$

**Multiply**



the ounce raw meat/poultry/seafood per serving by the cooking yield as stated in the FBG:

$$\text{oz. raw meat/poultry/seafood per serving} \times \text{FBG cooking yield} = \text{oz. equivalent meat per serving}$$





## Calculating the Contribution for Dry Beans, Peas, Lentils

### Multiply



the raw serving size (in ounces) by the percent of beans in the raw formula:

$$\text{oz. raw serving size} \times \% \text{ beans} = \text{oz. beans per serving}$$

### Convert



the ounces of beans per serving to pounds of beans/serving by dividing by 16 ounces/pound:

$$\text{oz. beans per serving} \div 16 \text{ oz. per lb} = \text{lb beans per serving}$$

### Multiply



the pounds of beans per serving by the number of ¼ cup servings per purchase unit to calculate the number of ¼-cup servings of beans.

¼ cup cooked beans = 1.00 oz. equivalent meat alternate. Using pinto beans for example, 1 pound as purchased = 21.0 ¼-cup servings cooked pinto beans per the FBG:

$$\text{lb beans per serving} \times 21.0 \text{ ¼-cup servings per lb} = \text{number of ¼-cup servings cooked pinto beans which equals number of oz. equivalent meat alternate per serving}$$

### Round



down to the nearest ⅛ cup or 0.25 oz. equivalent

**NOTE:** Cooked legumes may credit as a meat alternate **OR** as a vegetable, but **not as both** components in the same meal.



## Calculating the Contribution for Dry Beans, Peas, Lentils, Canned

### Multiply



the raw serving size (in ounces) by the percent canned beans in the raw formula:

$$\text{oz. raw serving size} \times \% \text{ canned beans} = \text{oz. canned beans per serving}$$

### Divide



the ounces of beans per serving by the number of ounces in the size can you are using (e.g., a No. 10 can of pinto beans = 108 oz.):

$$\text{oz. canned beans per serving} \div 108 \text{ oz. per can} = \text{the portion (\%) of No. 10 can of pinto beans used}$$

### Multiply



portion (%) of a No. 10 can of pinto beans used by the number of  $\frac{1}{4}$  cup servings per purchase unit to calculate the number of  $\frac{1}{4}$ -cup servings of canned beans.  $\frac{1}{4}$  cup cooked canned beans = 1.00 oz. equivalent meat alternate. Using canned pinto beans for example, one No. 10 can of pinto beans provides 37.2  $\frac{1}{4}$ -cup servings heated, drained pinto beans per the FBG:

$$\text{portion (\%) of No. 10 can of beans used} \times 37.2 \text{ } \frac{1}{4}\text{-cup servings per No. 10 can} = \text{number } \frac{1}{4}\text{-cup servings cooked pinto beans which equals number of oz. equivalent meat alternate per serving}$$



## Calculating the Contribution for Cheese

Cheese includes reduced-fat, low-fat, fat-free, and lite versions of cheese, cheese food, and cheese spread. Any item labeled as imitation cheese or cheese product does **not** credit toward the CNP meal pattern requirements.

### Multiply



the raw serving size (in ounces) by the percent of each cheese in the product formula to determine the oz. equivalent meat alternate per serving:

$$\begin{array}{ccccc} \text{oz. raw} & & \% \text{ cheese per} & & \text{oz. cheese/serving which} \\ \text{servings} & \times & \text{product} & = & \text{equals oz. equivalent} \\ & & & & \text{meat alternate} \end{array}$$

**NOTE:** Cheese is calculated based on a 100-percent yield.  
The contribution for cottage cheese, ricotta cheese, cheese food, and cheese spread, are calculated based on a 50-percent yield.

For example:

**1 oz. of cheddar cheese = 1.00 oz. equivalent meat alternate**

**1 oz. of cottage cheese = 0.50 oz. equivalent meat alternate**



## Calculating the Contribution for Dried Whole Eggs

### Multiply



the raw serving size (in ounces) by the percent of dried whole eggs in the product formula to obtain the ounces of available dried whole eggs:

$$\text{oz. raw serving} \times \% \text{ dried whole eggs} = \text{oz. dried whole eggs per serving}$$

### Convert



ounces of dried whole eggs per serving to pounds of dried whole eggs per serving by dividing by 16 ounces per pound:

$$\text{oz. dried whole eggs per serving} \div 16 \text{ oz. per lb} = \text{lbs dried whole eggs per serving}$$

### Multiply



the pounds of dried whole eggs per serving by the servings per pound to calculate the oz. equivalent meat alternate per serving. 1 pound dried whole eggs = 32 large eggs or 64 oz. equivalent meat alternate per the FBG:

$$\text{lbs dried whole eggs per serving} \times 64 \text{ oz. equivalent per lb} = \text{oz. equivalent meat alternate per serving}$$



## Calculating the Contribution for Frozen Whole Eggs

### Multiply



the raw serving size (in ounces) by the percent of frozen whole eggs in the product formula to obtain the ounce frozen whole eggs per serving:

$$\text{oz. raw serving} \times \% \text{ frozen whole eggs} = \text{oz. frozen whole eggs per serving}$$

### Convert



ounce frozen whole eggs per serving to pound frozen whole eggs per serving by dividing by 16 ounces per pound:

$$\frac{\text{oz. frozen whole eggs per serving}}{16 \text{ oz. per lb}} = \text{lbs frozen whole eggs per serving}$$

### Multiply



the pound frozen whole eggs per serving by the servings per pound to calculate the oz. equivalent meat alternate per serving. 1 pound frozen whole eggs = 9.00 large eggs or 18 oz. equivalent meat alternate per the FBG.

$$\text{lbs frozen whole eggs per serving} \times 18 \text{ oz. equivalent per lb} = \text{oz. equivalent meat alternate per serving}$$



## Calculating the Contribution for Cooked Toppings, Fillings, and Other Bulk Products<sup>3</sup>

1. Determine the ounce raw topping by dividing the ounces of cooked portion (for bulk products, this will generally be one pound or 16 oz.) by the manufacturer's maximum cooking yield:<sup>4</sup>

$$\text{16 oz. cooked topping} \div \text{manufacturer's maximum cooking yield} = \text{oz. raw topping}$$

2. Calculate the oz. equivalent meat contributed by the meat portion of the topping formula (see page 22 for detailed meat calculations):

$$\text{oz. raw topping} \times \% \text{ raw meat} \times \text{FBG cook yield} = \text{oz. equivalent meat for raw meat used}$$

3. If applicable, calculate the oz. equivalent meat alternate contributed by the APP portion of the topping formula (see pages 30–33 for detailed APP calculations):

$$\text{oz. raw topping} \times \% \text{ dry APP} \times \left( \frac{\% \text{ protein for APP}}{18\%} \right) = \text{oz. equivalent meat alternate}$$

4. Add together the oz. equivalent meat and oz. equivalent meat alternate:

$$\text{oz. equivalent meat} + \text{oz. equivalent meat alternate} = \text{oz. equivalent meat/meat alternate}$$

**NOTE:** The credit for bulk products may be expressed to two decimal places without rounding down. The contribution may not be rounded up.

<sup>3</sup> Topping, filling, and bulk product are terms generally used to describe a finished meat mixture that is processed in volume and often used as an ingredient in/on another product.

<sup>4</sup> Manufacturer's maximum cooking yield is based on cooking tests performed in the manufacturer's plant and reflects the cooking yield for the total product including meat, spices, water, etc. Calculate as follows: lbs of cooked mixture ÷ lbs of raw mixture = % maximum cooking yield (in decimal form).



## Calculating the Contribution for Purchased Child Nutrition (CN) Labeled Source Products<sup>5</sup> (For Use by a Second Manufacturer)

1. Check to make sure the purchased source product is Child Nutrition (CN) labeled and has final approval from U.S. Department of Agriculture's Agricultural Marketing Service (AMS) and, if applicable, approval from U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS).
2. For the purchased source product, determine the percent oz. equivalent meat/meat alternate (M/MA) provided by dividing the oz. equivalent M/MA (as stated on the CN label of the purchased source product) by the oz. portion size (as stated on the CN label of the purchased product). For bulk products, this will generally be 16 ounces.

$$\frac{\text{oz. equivalent M/MA from purchased source product}}{16 \text{ oz. (or oz. serving size)}} = \% \text{ oz. equivalent M/MA provided by the source product}$$

3. Determine the ounces per serving of purchased source product in the end (final) product. Multiply the ounce serving size of end product by the percent of purchased source product used in the formula for the end product:

$$\text{oz. per serving of end product} \times \% \text{ purchased source product in the formula of the end product} = \text{oz. purchased source product per serving of end product}$$

4. Multiply the percent oz. equivalent M/MA provided from the purchased source product (step 2) by the ounce of purchased source product per serving of the end product (step 3):

$$\% \text{ oz. equivalent M/MA provided by purchased source product} \times \text{oz. purchased product per serving of end product} = \text{oz. equivalent M/MA per serving of end product}$$

<sup>5</sup> When processed source products are purchased from a manufacturer and are incorporated into the end (final) product as a creditable source of oz. equivalent meat/meat alternate, a copy of the CN approved label for the purchased processed source product (source product label) must accompany the application form when submitted for approval.





## Calculate the Contribution of Alternate Protein Products (APP)

Before starting the calculation, ensure the APP documentation attached with the application demonstrates that the APP meets ALL of the following criteria:

- a.** Provide a statement verifying the APP meets the requirements found in Appendix A of 7 CFR Parts 210, 220, 225, and 226.
- b.** Demonstrate the product has been processed so that some portion of the nonprotein constituents has been removed.
- c.** Provide the Protein Digestibility Corrected Amino Acid Score (PDCAAS). The PDCAAS is required to be greater than 80 percent of casein. It may be required to show how the PDCAAS was determined.
- d.** Demonstrate the protein level of the APP is at least 18 percent by weight when fully hydrated or formulated. (Provide the ratio of dry APP to water to provide a product hydrated to 18 percent protein).
- e.** Provide the protein level of the APP on an “as-is” basis for the as-purchased product. Protein is often provided on a moisture free basis (MFB) which is not the information AMS requires.



## Calculate the Contribution of APP (continued)

### Multiply



the raw serving size (in ounces) by the percent of dry APP to obtain the ounces of dry APP per portion:

$$\text{oz. raw serving} \times \% \text{ dry APP} = \text{oz. dry APP per serving}$$

### Divide



the percent protein on an as-is basis (from documentation) by 18 percent to determine the hydration factor to fully hydrate the APP to 18 percent protein:

$$\% \text{ protein}^6 \text{ of dry APP} \div 18\% \text{ minimum protein}^7 = \text{hydration factor}$$

### Multiply



the ounces of dry APP per serving by the hydration factor to obtain the unrounded oz. equivalent meat alternate per serving:

$$\text{oz. dry APP per serving} \times \text{hydration factor} = \text{unrounded oz. equivalent meat alternate per serving}$$

### Round



down to the nearest 0.25 oz. equivalent meat alternate per serving.

= rounded oz. equivalent meat alternate per serving

<sup>6</sup> As-is; including added flavors, colors, or other added substances.

<sup>7</sup> The regulations provided for appropriate hydration of APP by setting quantity requirements for a product when hydrated at 18 percent by weight.



## Calculate the Contribution of APP (continued)

**NOTE:** Determine the ratio of dry APP to liquid (allowed for full hydration) by using the following formula:

a. 
$$\frac{\% \text{ protein in dry APP}}{18\% \text{ minimum protein}} = \text{hydration factor}$$

b. 
$$\text{hydration factor} - 1 \text{ part APP} = \text{parts liquid allowed for full hydration}$$

- c. The ratio allowed for full hydration is:  
"1 part dry APP": "hydration factor – 1"

To obtain the percent of water allowed for full hydration, multiply the percent of dry APP in the formula by the parts liquid for full hydration:

$$\% \text{ APP} \times \text{parts liquid for full hydration} = \text{x (total percentage of liquid allowed for full hydration)}^8$$

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<sup>8</sup> The percentage of liquid in the formula in excess of "x" will not contribute toward the meal pattern requirement.



## Calculate the Contribution of APP (continued)

### Example:

A product has a 4.5 oz. serving size and contains 3 percent APP. Calculate the contribution of APP as follows:

#### Multiply



the raw serving size (in ounces) by the percent of dry APP to obtain the ounces of dry APP per portion:

$$4.5 \text{ oz. raw serving} \times 3\% \text{ dry APP} = 0.135 \text{ oz. dry APP per serving}$$

#### Divide



the percent protein on an as-is basis (from documentation) by 18 percent to determine the hydration factor to fully hydrate the APP to 18 percent protein:

$$70\% \text{ protein}^9 \text{ of dry APP} \div 18\% \text{ minimum protein}^{10} = 3.88 \text{ hydration factor}$$

#### Multiply



the ounces of dry APP per serving by the hydration factor to obtain the unrounded oz. equivalent meat alternate per serving:

$$0.135 \text{ oz. dry APP per serving} \times 3.88 = 0.52 \text{ unrounded oz. equivalent meat alternate per serving}$$

#### Round



down to 0.50 oz. equivalent meat alternate per serving.

<sup>9</sup> As-is/as-purchased; including added flavors, colors, or other added substances.

<sup>10</sup> The regulations provided for appropriate hydration of APP by setting quantity requirements for a product when hydrated at 18 percent by weight.



# Procedures for Determining the Grains Contribution

Manufacturers producing qualifying products (entrees containing meats/meat alternates and grains) may apply for a Child Nutrition (CN) label to indicate the number of ounce equivalent (oz. equivalent) grains that contribute to the meal component. The unit measure for the grains component is oz. equivalent.

Use the term “oz. equivalent grains” on the CN label to indicate that the product meets the U.S. Department of Agriculture’s Food and Nutrition Service (FNS) whole grain-rich criteria. Use the terminology “oz. equivalent grains (enriched)” to indicate the product meets program requirements for enriched grain products. Please note that all crediting information must be declared on the CN contribution statement prior to sending to AMS for review.

Guidance and policy on determining grains contributions for Child Nutrition Programs (CNP) may be found at 7 CFR 210, 220, 225, and 226 and the Food Buying Guide for Child Nutrition Programs (FBG) (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>).

**In order for a product to declare a grains contribution in the CN Labeling Program, the following criteria must be met:**

- 1— The grains portion of the product must be an integral part of the item being CN labeled.
- 2— To state the grains contribution on a CN label, the product must provide a minimum of one-quarter oz. equivalent (0.25 oz. equivalent) grains per serving and the contribution must be expressed in 0.25 oz. equivalent increments.
- 3— The product must meet the FNS whole grain-rich criteria (see below for definition) or be an enriched item that is identified on the statement.

## Grains in School Meals and Child and Adult Care Food Program

“Whole grain-rich” is the term designated by FNS for use in CNP to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched. This term only refers to FNS criteria for meeting the grains requirements for the National School Lunch Program (NSLP), School Breakfast Program (SBP), and Child and Adult Care Food Program (CACFP). The term is not found on product labels and should not be confused with the Food and Drug Administration (FDA) whole grain health claim.



## Calculating the Grains Contribution Using Exhibit A: Grain Requirements for Child Nutrition Programs (CNP)

The “Exhibit A: Grain Requirements for Child Nutrition Programs” chart (Exhibit A) provides a general guideline for crediting prepared grains items. Exhibit A (see next page) can be found in the Grains section of the Food Buying Guide for Child Nutrition Programs (FBG):

Exhibit A: Grain Requirements for Child Nutrition Programs  
(<https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/ExhibitA.pdf>).

Exhibit A provides the minimum serving sizes of grain products that are required to meet meal patterns requirements. Grain products are grouped together based on their average grains content. There are nine groups (A through I) in Exhibit A.

1. Determine the group that applies to the grain product by locating the name of the product in the left column of Exhibit A: Grain Requirements for Child Nutrition Programs.
2. Determine the weight required to provide 1.00 oz. equivalent of the selected grain product group.
3. Divide the weight of grain product being used by the weight required to provide 1.00 oz. equivalent grains.

$$\begin{array}{ccccc} \text{Weight} & & \text{Weight needed to} & & \\ \text{finished grain} & \div & \text{provide 1.00 oz.} & = & \text{unrounded oz.} \\ \text{product} & & \text{equivalent from} & & \text{equivalent grains} \\ & & \text{Exhibit A} & & \end{array}$$

4. Round **down** to the nearest one-quarter oz. equivalent (0.25 oz. equivalent).

For example, determine the grains contribution of a tortilla which weighs 49 grams using Exhibit A. Tortillas are in Group B of Exhibit A, and for Group B items, 1 oz. equivalent is equal to 28 grams. Divide the weight of the tortilla by the weight per oz. equivalent for Group B to calculate the oz. equivalent grains contribution.

$$\begin{array}{ccccc} 49 \text{ grams} & \div & 28 \text{ grams/1 oz.} & = & 1.75 \text{ oz.} \\ & & \text{equivalent} & & \text{equivalent grains} \end{array}$$



## Exhibit A: Grain Requirements for Child Nutrition Programs<sup>1, 2</sup>

Color Key: Footnote 5 = Blue, Footnote 3 or 4 = Red

Food Products per Group	Ounce Equivalent (oz eq)	Minimum Serving Size
Group A	Ounce Equivalent (oz eq) for Group A	Minimum Serving Size for Group A
<ul style="list-style-type: none"> <li>Bread type coating</li> <li>Bread sticks (hard)</li> <li>Chow Mein noodles</li> <li>Savory Crackers (saltines and snack crackers)</li> <li>Croutons</li> <li>Pretzels (hard)</li> <li>Stuffing (dry) <i>Note: weights apply to bread in stuffing</i></li> </ul>	1 oz eq = 22 gm or 0.8 oz ¾ oz eq = 17 gm or 0.6 oz ½ oz eq = 11 gm or 0.4 oz ¼ oz eq = 6 gm or 0.2 oz	1 serving = 20 gm or 0.7 oz ¾ serving = 15 gm or 0.5 oz ½ serving = 10 gm or 0.4 oz ¼ serving = 5 gm or 0.2 oz
Group B	Ounce Equivalent (oz eq) for Group B	Minimum Serving Size for Group B
<ul style="list-style-type: none"> <li>Bagels</li> <li>Batter type coating</li> <li>Biscuits</li> <li>Breads—all (for example sliced, French, Italian)</li> <li>Buns (hamburger and hot dog)</li> <li>Sweet Crackers<sup>5</sup> (graham crackers—all shapes, animal crackers)</li> <li>Egg roll skins</li> <li>English muffins</li> <li>Pita bread</li> <li>Pizza crust</li> <li>Pretzels (soft)</li> <li>Rolls</li> <li>Tortillas</li> <li>Tortilla chips</li> <li>Taco shells</li> </ul>	1 oz eq = 28 gm or 1.0 oz ¾ oz eq = 21 gm or 0.75 oz ½ oz eq = 14 gm or 0.5 oz ¼ oz eq = 7 gm or 0.25 oz	1 serving = 25 gm or 0.9 oz ¾ serving = 19 gm or 0.7 oz ½ serving = 13 gm or 0.5 oz ¼ serving = 6 gm or 0.2 oz

<sup>1</sup> In the NSLP and SBP (grades K–12), at least 80 percent of the weekly grains offered must meet the whole grain-rich criteria and the remaining grain items offered must be made from whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or be an enriched product, such as enriched bread, or a fortified cereal. Please note: State agencies have the discretion to set stricter requirements than the minimum nutrition standards for school meals. For additional guidance, please contact your State agency. For all other Child Nutrition Programs, grains must be made from whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or be an enriched product, such as enriched bread, or a fortified cereal. Under the CACFP child and adult meal patterns, and in the NSLP/SBP preschool meals, at least one grains serving per day must meet whole grain-rich criteria.

<sup>2</sup> For the NSLP and SBP (grades K–12), grain quantities are determined using ounce equivalents (oz. equivalent). All other Child Nutrition Programs determine grain quantities using grains/breads servings. Beginning Oct. 1, 2021, grain quantities in the CACFP and NSLP/SBP infant and preschool meals will be determined using oz. equivalent. Some of the following grains may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to serve them.

<sup>5</sup> Allowed in NSLP (up to 2.0 oz. equivalent grain-based dessert per week in grades K–12) as specified in §210.10. May count toward the grains component in the SBP (grades K–12), CACFP, NSLP/SBP infant and preschool meals, and SFSP.



Group C	Ounce Equivalent (oz eq) for Group C	Minimum Serving Size for Group C
<ul style="list-style-type: none"> <li>• Cookies<sup>3</sup> (plain—includes vanilla wafers)</li> <li>• Cornbread</li> <li>• Corn muffins</li> <li>• Croissants</li> <li>• Pancakes</li> <li>• Pie crust (dessert pies<sup>3</sup>, cobbler<sup>3</sup>, fruit turnovers<sup>4</sup>, and meats/meat alternate pies)</li> <li>• Waffles</li> </ul>	1 oz eq = 34 gm or 1.2 oz ¾ oz eq = 26 gm or 0.9 oz ½ oz eq = 17 gm or 0.6 oz ¼ oz eq = 9 gm or 0.3 oz	1 serving = 31 gm or 1.1 oz ¾ serving = 23 gm or 0.8 oz ½ serving = 16 gm or 0.6 oz ¼ serving = 8 gm or 0.3 oz
Group D	Ounce Equivalent (oz eq) for Group D	Minimum Serving Size for Group D
<ul style="list-style-type: none"> <li>• Doughnuts<sup>4</sup> (cake and yeast raised, unfrosted)</li> <li>• Cereal bars, breakfast bars, granola bars<sup>4</sup> (plain)</li> <li>• Muffins (all, except corn)</li> <li>• Sweet roll<sup>4</sup> (unfrosted)</li> <li>• Toaster pastry<sup>4</sup> (unfrosted)</li> </ul>	1 oz eq = 55 gm or 2.0 oz ¾ oz eq = 42 gm or 1.5 oz ½ oz eq = 28 gm or 1.0 oz ¼ oz eq = 14 gm or 0.5 oz	1 serving = 50 gm or 1.8 oz ¾ serving = 38 gm or 1.3 oz ½ serving = 25 gm or 0.9 oz ¼ serving = 13 gm or 0.5 oz
Group E	Ounce Equivalent (oz eq) for Group E	Minimum Serving Size for Group E
<ul style="list-style-type: none"> <li>• Cereal bars, breakfast bars, granola bars<sup>4</sup> (with nuts, dried fruit, and/or chocolate pieces)</li> <li>• Cookies<sup>3</sup> (with nuts, raisins, chocolate pieces, and/or fruit purees)</li> <li>• Doughnuts<sup>4</sup> (cake and yeast raised, frosted or glazed)</li> <li>• French toast</li> <li>• Sweet rolls<sup>4</sup> (frosted)</li> <li>• Toaster pastry<sup>4</sup> (frosted)</li> </ul>	1 oz eq = 69 gm or 2.4 oz ¾ oz eq = 52 gm or 1.8 oz ½ oz eq = 35 gm or 1.2 oz ¼ oz eq = 18 gm or 0.6 oz	1 serving = 63 gm or 2.2 oz ¾ serving = 47 gm or 1.7 oz ½ serving = 31 gm or 1.1 oz ¼ serving = 16 gm or 0.6 oz
Group F	Ounce Equivalent (oz eq) for Group F	Minimum Serving Size for Group F
<ul style="list-style-type: none"> <li>• Cake<sup>3</sup> (plain, unfrosted)</li> <li>• Coffee cake<sup>4</sup></li> </ul>	1 oz eq = 82 gm or 2.9 oz ¾ oz eq = 62 gm or 2.2 oz ½ oz eq = 41 gm or 1.5 oz ¼ oz eq = 21 gm or 0.7 oz	1 serving = 75 gm or 2.7 oz ¾ serving = 56 gm or 2 oz ½ serving = 38 gm or 1.3 oz ¼ serving = 19 gm or 0.7 oz

<sup>3</sup> Allowed in NSLP (up to 2.0 oz. equivalent grain-based dessert per week in grades K–12) as specified in §210.10 and at snack service in SFSP. Considered a grain-based dessert and cannot count toward the grains component in CACFP or NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

<sup>4</sup> Allowable in NSLP (up to 2.0 oz. equivalent grain-based dessert per week for grades K–12) as specified in §210.10. May count toward the grains component in SBP (grades K–12) and at snack and breakfast meals in SFSP. Considered a grain-based dessert and cannot count toward the grains component in the CACFP and NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.



Group G	Ounce Equivalent (oz eq) for Group G	Minimum Serving Size for Group G
<ul style="list-style-type: none"> <li>Brownies<sup>3</sup> (plain)</li> <li>Cake<sup>3</sup> (all varieties, frosted)</li> </ul>	1 oz eq = 125 gm or 4.4 oz ¾ oz eq = 94 gm or 3.3 oz ½ oz eq = 63 gm or 2.2 oz ¼ oz eq = 32 gm or 1.1 oz	1 serving = 115 gm or 4 oz ¾ serving = 86 gm or 3 oz ½ serving = 58 gm or 2 oz ¼ serving = 29 gm or 1 oz
Group H	Ounce Equivalent (oz eq) for Group H	Minimum Serving Size for Group H
<ul style="list-style-type: none"> <li>Cereal Grains (barley, quinoa, etc.)</li> <li>Breakfast cereals (cooked)<sup>6,7</sup></li> <li>Bulgur or cracked wheat</li> <li>Macaroni (all shapes)</li> <li>Noodles (all varieties)</li> <li>Pasta (all shapes)</li> <li>Ravioli (noodle only)</li> <li>Rice</li> </ul>	1 oz eq = ½ cup cooked or 1 ounce (28 gm) dry	1 serving = ½ cup cooked or 25 gm dry
Group I	Ounce Equivalent (oz eq) for Group I	Minimum Serving Size for Group I
<ul style="list-style-type: none"> <li>Ready-to-eat breakfast cereal (cold, dry)<sup>6,7</sup></li> </ul>	1 oz eq = 1 cup or 1 ounce for flakes and rounds 1 oz eq = 1.25 cups or 1 ounce for puffed cereal 1 oz eq = ¼ cup or 1 ounce for granola	1 serving = ¾ cup or 1 oz, whichever is less

<sup>3</sup> Allowed in NSLP (up to 2.0 oz. equivalent grain-based dessert per week in grades K–12) as specified in §210.10 and at snack service in SFSP. Considered a grain-based dessert and cannot count toward the grains component in CACFP or NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

<sup>6</sup> Refer to program regulations for the appropriate serving size for supplements served to children aged 1 through 5 in the NSLP; breakfast served in the SBP, and meals served to children ages 1 through 5 and adult participants in the CACFP. Breakfast cereals are traditionally served as a breakfast menu item but may be served in meals other than breakfast.

<sup>7</sup> In the NSLP and SBP, cereals that list a whole grain as the first ingredient must be fortified, or if the cereal is 100 percent whole grain, fortification is not required. For all Child Nutrition Programs, cereals must be whole-grain, enriched, or fortified; cereals served in CACFP and NSLP/SBP infant and preschool meals must contain no more than 6 grams of sugar per dry ounce.



## Calculating the Grains Contribution Using Amount of Creditable Grains

Grains contributions using the amount of creditable grains can be calculated. A worksheet for calculating grains contributions is also available in the Food Buying Guide for Child Nutrition Programs (FBG) (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>).

There are three steps to determine how many oz. equivalent grains a product yields when calculating based on the grams of creditable grains:

### Divide



the total grams of creditable grains in the product by the number of portions the product yields. (Note: 1 lb = 453.6 grams). One “portion” is the amount of the food product planned to be served to contribute toward the grains requirements. One “portion” is not necessarily equivalent to 1.0 oz. equivalent grains.

$$\text{Total grams of creditable grains} \div \text{number of portions the product yields} = \text{total grams of creditable grains contained in one portion of the product}$$

### Divide



the total grams of creditable grains in one portion (the answer from the calculation in step 1) by the amount (in grams) of creditable grains per oz. equivalent.

If the product belongs to Groups A–G of Exhibit A, divide by 16.0 grams. If the product belongs to Groups H or I of Exhibit A, divide by 28.0 grams.

$$\text{Total grams of creditable grains in one portion} \div \text{16.0 or 28.0 grams of creditable grains} = \text{the number of oz. equivalent grains per portion}$$

### Round



down to the nearest 0.25 oz. equivalent



## Calculating Grains for Products With Batter/Breading

Using Exhibit A: Grain Requirements for Child Nutrition Programs:

- Breading is in Group A (1 oz. equivalent = 22 grams or 0.8 oz.)
- Batter (prepared or dry weight) is in Group B (1 oz. equivalent = 28 grams or 1.0 oz.)  
or
- 16 grams of creditable grains provide 1.0 oz. equivalent contribution for grain items in Exhibit A, Groups A–G.

There are three acceptable methods to calculate the grains component using oz. equivalents.

**Please take note of the product components required for each different calculation method.**

### Method

Monitor the total batter/breading weight.

1

Use this calculation if only the total batter/breading weight is monitored in the Child Nutrition (CN) quality control (QC) program. Note: the percent of creditable grains **must** be greater than the total liquid used in the combined batter/breading composite.

Additionally, the creditable grains level must be at least 85 percent for the breading and at least 65 percent for the batter to use method one.

- a. Check to make sure that the breading and batter are each made from creditable grains and that the combined creditable grains components are greater than the total liquid (example: water and oil). This can be confirmed by a composite listing or a calculation.

	% Ingredient		% Creditable Grains	=	Total Creditable Grains
Breading	50%	×	0.85*	=	42.5%
Batter (dry basis)	17%	×	0.65*	=	11.05%
Water	33%				
	100%				53.55%

**53.55% creditable grains > 33% water**

b. Calculations for oz. equivalent grains contribution:

$$\frac{\text{ounces of breeding} + \text{ounces of wet/raw batter}}{1.00 \text{ oz. equivalent}} = \text{oz. equivalent grains (unrounded)}$$

Example:

$$\frac{0.60 \text{ oz. breeding} + 0.60 \text{ oz. wet batter}}{1.00 \text{ oz. equivalent}} = 1.20 \text{ oz. equivalent grains}$$

Round down to the nearest 0.25 oz. equivalent. This method provides **1.00 oz. equivalent grains**.

## Method

Monitor the batter and breeding weights separately.

2

Use this calculation if the batter and breeding weights are monitored separately and each are made from creditable grains.

$$\left[ \frac{\text{oz. of dry batter}}{1.00 \text{ oz. (Group B) per oz. equivalent}} \right] + \left[ \frac{\text{oz. of breeding}}{0.80 \text{ oz. (Group A) per oz. equivalent}} \right] = \text{oz. equivalent grains (unrounded)}$$

Example:

$$\left[ \frac{(0.60 \times 34\% = \text{oz. dry batter})}{1.00 \text{ oz.}} \right] + \left[ \frac{0.60 \text{ oz. breeding}}{0.80 \text{ oz.}} \right] = 0.204 + 0.75$$

= 0.954 oz. equivalent grains

Round down to the nearest 0.25 oz. equivalent. This method provides **0.75 oz. equivalent grains**.

*\*34 percent is the percent of dry batter in the wet batter weight; used to determine dry batter weight.*



## Method

3

Grams of Creditable Grains per serving.

You may also calculate the oz. equivalent grains by directly using the grams of creditable grains contained in the batter/breading. 1 oz. equivalent = 16.0 grams of creditable grains

$$\left[ \text{ounces of dry batter}^* \times \text{percent of creditable grains} \times \frac{28.35 \text{ grams}}{\text{ounce}} \right] + \left[ \text{ounces of breading} \times \text{percent of creditable grains} \times \frac{28.35 \text{ grams}}{\text{ounce}} \right]$$

16.0 grams creditable grain per oz. equivalent

Example:

$$0.6 \text{ oz. wet batter} \times 34\% \text{ dry batter mix} = 0.204 \text{ oz. dry batter}$$

$$\frac{(0.204 \text{ oz.} \times 65\% \times 28.35 \text{ g/oz.}) + (0.6 \text{ oz.} \times 85\% \times 28.35 \text{ g/oz.})}{16.0 \text{ grams of creditable grains}} = \frac{3.7592 + 14.4585}{16.0} = 1.138 \text{ oz. equivalent grains}$$

Round down to the nearest 0.25 oz. equivalent. This method provides **1.00 oz. equivalent grains**.

*\*34 percent is the percent of dry batter in the wet batter weight; used to determine dry batter weight.*

Calculations for Corn dogs (and other products in which batter is monitored only in the cooked state).

Corn dogs are prepared using cooked links or franks dipped into batter and then cooked. The finished (cooked/prepared) batter weights are monitored rather than the raw weights. Exhibit A lists batter in Group B at 1.0 oz. per oz. equivalent. This batter weight is the finished weight not the raw weight. (Since the link was cooked before the batter was applied it is not likely to lose weight during the batter cooking process. This allows the cooked/prepared weight of the batter to be used for calculating the grains component.)

$$\frac{(\text{ounces of cooked/prepared batter per serving})}{1.0 \text{ ounce per oz. equivalent (Group B)}} = \text{oz. equivalent grains}$$

$$\text{Fill specs: } 2.0 \text{ oz. frankfurter} + 2.0 \text{ oz. cooked batter} = 4.0 \text{ oz. corn dog (finished weight)}$$

$$\text{Calculation: } 2.0 \text{ oz. cooked batter} \div 1.0 \text{ oz. per oz. equivalent} = 2.00 \text{ oz. equivalent grains}$$

Round down to the nearest 0.25 oz. equivalent. This method provides **2.00 oz. equivalent grains**.

# Procedures for Determining the Vegetables Contribution

The vegetables component is credited on a volume measure. The unit of measure used is “cup.” In order to declare a vegetables contribution on a Child Nutrition (CN) label, the product must provide a minimum of  $\frac{1}{8}$  cup vegetables per serving and the contribution must be expressed in  $\frac{1}{8}$ -cup increments.



## Please note the following:

- ✓ Vegetables credit when at least  $\frac{1}{8}$  cup per serving is present as identified on the product’s CN label.
- ✓ Vegetable noodles and pasta made of vegetable flour(s) may contribute toward the vegetables component, and may be served without serving additional recognizable vegetables. Example:  $\frac{1}{2}$  cup of cooked pasta made of 100% vegetable flour(s) may credit as  $\frac{1}{2}$  cup of vegetables.
- ✓ Pasta products made from bean flours may contribute toward the vegetables or meats/meat alternates (M/MA) meal components, but not simultaneously. The finished product must also contain a creditable amount of recognizable M/MA if crediting toward that component.

For example, bean pasta may credit toward the M/MA component if the program operator tops the bean pasta dish with at least 0.25 oz. equivalent of M/MA (e.g., meat or cheese sauce).

- ✓ See the Vegetables section in the Food Buying Guide for Child Nutrition Programs (FBG) for additional guidance on crediting vegetables in Child Nutrition Programs (CNP).



**Use these steps  
to determine the  
vegetables contribution:**

- 1** — Identify the creditable vegetables and their subgroups in the product formulation. Find a matching food item (e.g., cabbage, fresh, shredded) in the FBG.
- 2** — Calculate the contribution for each creditable vegetable item (see next page).
- 3** — Add the vegetable contribution by subgroup and add all subgroups to calculate the total vegetable contribution.
- 4** — Use Table 16: Quarter Cup to Cup Conversions in the FBG to round down to the nearest  $\frac{1}{8}$  cup.
- 5** — If more than one subgroup is present, the difference between the rounded  $\frac{1}{8}$  cup and the total vegetable contribution can be added together to declare additional vegetables.







## Shown below are the calculations for Step 2:

### Multiply



the serving size (in ounces) by the percent of the product for each creditable vegetable item:

$$\text{oz. per serving} \times \% \text{ of creditable vegetable} = \text{oz. creditable vegetable per serving}$$

### Divide



the amount of creditable vegetable per serving by 16 to convert ounces to pounds. (16 oz. per lb):

$$\text{oz. creditable vegetable per serving} \div 16 \text{ oz. per lb} = \text{lbs creditable vegetable per serving}$$

### Multiply



the lbs of creditable vegetable per serving by the number of ¼ cup servings per pound from the FBG:

$$\text{lbs creditable vegetable per serving} \times \frac{\text{number of } \frac{1}{4} \text{ cup servings}}{\text{per lb}} = \text{vegetable contribution in } \frac{1}{4} \text{ cups}$$

The vegetables contribution is stated in ⅛-cup increments according to subgroup on the CN label (e.g., ⅜ cup red/orange vegetable).



## Procedures for Determining the Fruits Contribution

The fruits component is credited on a volume measure.

The unit of measure used is “cup.” In order to declare a fruits contribution on a Child Nutrition (CN) label, the product must provide a minimum of  $\frac{1}{8}$  cup fruit per serving and the contribution must be expressed in  $\frac{1}{8}$ -cup increments. Whole dried fruits and whole dried fruit pieces credit at twice the volume served in School Meal Programs and the Child and Adult Care Food Program (CACFP). For example,  $\frac{1}{8}$  cup of dried cranberries credits as  $\frac{1}{4}$  cup fruit. The minimum serving size for dried fruit is  $\frac{1}{8}$  cup.



See the Fruits section in the Food Buying Guide for Child Nutrition Programs (FBG) (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>) for additional guidance on crediting fruits in Child Nutrition Programs (CNP).

### Use these steps to determine the fruits contribution:

- 1 Identify the creditable fruits in the product formulation. Find a matching food item (e.g., apples, canned, slices, solid pack) in the FBG.
- 2 Calculate the contribution for each creditable fruit item (see next page).
- 3 Add the fruit contribution from all creditable fruits to calculate the total fruits contribution.
- 4 Use Table 16: Quarter Cup to Cup Conversions in the FBG to round down to the nearest  $\frac{1}{8}$  cup.



## Shown below are the calculations for Step 2:

### Multiply



the serving size (in ounces) by the percent of the product for each creditable fruit item:

$$\text{oz. per serving} \times \% \text{ of creditable fruit} = \text{oz. creditable fruit per serving}$$

### Divide



the amount of creditable fruit per serving by 16 to convert ounces to pounds (16 oz. per lb):

$$\text{oz. creditable fruit per serving} \div 16 \text{ oz. per lb} = \text{lbs creditable fruit per serving}$$

### Multiply



the pounds of creditable fruit per serving by the number of ¼ cup servings per pound from the FBG:

$$\text{lbs creditable fruit per serving} \times \text{number of } \frac{1}{4} \text{ cup servings per lb} = \text{fruit contribution in } \frac{1}{4} \text{ cups}$$

The fruit contribution is stated in ⅛-cup increments on the CN label (e.g., ⅛ cup fruit)

# APPENDIX A: Sample Inspection Stamps and Child Nutrition FBG

## Sample Inspection Stamps

**Note:** Different inspection stamps are used for the different food products

### Meat products



### Poultry products



### Seafood products



### Nonmeat products

INSPECTED BY THE  
U.S. DEPT. OF AGRICULTURE  
IN ACCORDANCE WITH  
FNS REQUIREMENTS

## Sample Child Nutrition (CN) Labels

Sample CN label  
for product with  
meat (beef)  
and vegetables.

### Chili con Carne

Ingredient Statement: Ground beef (not more than 20% fat),  
onions, tomato paste, textured vegetable protein, spices.

**CN** XXXXXX\*

Each 5.50 oz. serving of Chili con Carne provides 2.00 oz.  
equivalent meat/meat alternate and 1/8 cup red/orange  
vegetable for Child Nutrition Meal Pattern Requirements.  
(Use of this logo and statement authorized by the Food and  
Nutrition Service, USDA mm/yy\*\*).

**CN**

**Net Wt.:** 28.0 pounds



ABC Foods, Inc  
1234 Orange Street Appleton, PA 12345

\* The 6-digit CN identification number is assigned by the CN Labeling office.

\*\* Date is written using numbers to represent the month/year of final label approval.



Sample CN label for product with meat alternate (cheese), grains (whole grain-rich), and vegetables.

## Whole-Grain Cheese Pizza

Ingredient Statement: White whole-wheat flour, part skim mozzarella cheese, tomatoes, tomato paste, water, salt.

XXXXXX\*

**CN**

Each 5.00 oz. slice Whole-Grain Cheese Pizza provides 2.00 oz. equivalent meat alternate, 2.00 oz. equivalent grains, and 1/8 cup red/orange vegetable for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA mm/yy\*\*).

**CN**

Net Wt.: 20.0 pounds

INSPECTED BY THE  
U.S. DEPT. OF AGRICULTURE  
IN ACCORDANCE WITH  
FNS REQUIREMENTS

**STV Foods, Inc**  
1234 Indigo Street    Birchtree, WA 12345

Sample CN label for product with meat (seafood) and grains (whole grain-rich).

## Whole-Grain Breaded Cod Square

Ingredient Statement: Cod fish breaded with whole-wheat flour, whole-grain corn, canola oil, paprika, salt, pepper.

XXXXXX\*

**CN**

Each 4.00 oz. Whole-Grain Breaded Cod Square provides 1.50 oz. equivalent meat and 2.00 oz. equivalent grains for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA mm/yy\*\*).

**CN**

Net Wt.: 22.2 pounds

U.S. DEPARTMENT OF COMMERCE  
PROCESSED UNDER FEDERAL INSPECTION  
UNITED STATES OF AMERICA

**Seafood Company**  
1234 Sunglow Street    Hilltop, VA 12345

Sample CN label for product with beans (legumes) that may credit as either meat alternate or vegetables. Note: dual declaration statement.

## Whole-Grain Bean and Cheese Burrito

Ingredient Statement: Whole wheat flour tortilla, pinto beans, American cheese, green chili, onion, chili powder, salt.

XXXXXX\*

**CN**

Each 4.50 oz. Whole Grain Bean and Cheese Burrito provides 2.00 oz. equivalent meat alternate and 2.00 oz. equivalent grains **OR** 1.00 oz. equivalent meat alternate, 2.00 oz. equivalent grains, and 1/4 cup legume vegetable for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA mm/yy\*\*).

**CN**

Net Wt.: 27.0 pounds

INSPECTED BY THE  
U.S. DEPT. OF AGRICULTURE  
IN ACCORDANCE WITH  
FNS REQUIREMENTS

**HJK Foods, Inc.**  
1234 Green Street    Leafville, MA 12345

\* The 6-digit CN identification number is assigned by the CN Labeling office.

\*\* Date is written using numbers to represent the month/year of final label approval.



Sample CN label for product with grains that are not creditable in Child Nutrition Programs (CNP).  
Note: disclaimer at the bottom.

## Chicken Dumpling With Cabbage

Ingredient Statement: Wheat flour, chicken, cabbage, water, canola oil, mushroom, onion, chicken flavoring, soy sauce, spices.

<b>CN</b>		XXXXXX*
<b>CN</b>	Each 4.80 oz. serving of Chicken Dumpling with Cabbage (four 1.20 oz pieces) provides 2.00 oz. equivalent meat and 1/8 cup other vegetable for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA mm/yy**).	<b>CN</b>
	<b>CN</b>	

DISCLAIMER: This product contains grains that are not creditable in school meal programs. Additional grains must be served to meet meal pattern requirements.

Net Wt.: 10.5 pounds

LMN Foods, Inc  
1234 Blue Ave Pineneedle, CA 12345



Sample CN label for product with meat (poultry) and grains (whole grain-rich).

## Chicken Breast Nugget

Ingredient Statement: Chicken breaded with whole-wheat flour, canola oil, dried onion flakes, garlic powder, paprika.

<b>CN</b>		XXXXXX*
<b>CN</b>	Each 3.00 oz. serving of Chicken Breast Nuggets (twelve 0.25 oz. pieces) provides 2.00 oz. equivalent meat and 1.00 oz. equivalent grains for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA mm/yy**).	<b>CN</b>
	<b>CN</b>	

Net Wt.: 33.3 pounds

PQR Food Company  
1234 Violet Street Meadow, MT 12345



Sample CN label for product with meat alternate (eggs and cheese) and enriched grains.  
Note: "(enriched)" is included in the contribution statement.

## Egg and Cheese Breakfast Wrap

Ingredient Statement: Enriched flour tortilla, eggs, Monterey jack cheese, American cheese, chipotle chili pepper, spices.

<b>CN</b>		XXXXXX*
<b>CN</b>	Each 3.50 oz. Egg and Cheese Breakfast Wrap provides 2.00 oz. equivalent meat alternate and 1.00 oz. equivalent grains (enriched) for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA mm/yy**).	<b>CN</b>
	<b>CN</b>	

Net Wt.: 19.0 pounds

WXW Company  
1234 Maroon Street Cypress, FL 12345



\* The 6-digit CN identification number is assigned by the CN Labeling office.

\*\* Date is written using numbers to represent the month/year of final label approval.

Sample CN label for product with meat (beef) and grains (whole grain-rich).  
**Note:** the contribution statement includes the weight and serving size (6 pieces).

## Whole-Grain Mini Corn Dogs

Ingredient Statement: Ground beef (not more than 20% fat), whole-wheat flour, whole-grain corn meal, oil, spices.

CN


XXXXXX\*

Each 2.10 oz. serving of Whole Grain Mini Corn Dogs (Six 0.35 oz. pieces) provides 1.50 oz. equivalent meat and 1.00 oz. equivalent grains for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA mm/yy\*\*).

CN

CN

**Net Wt.:** 11.0 pounds



**XYZ Foods, Inc**  
1234 Sepia Street Forest, MI 12345

Sample CN label for product with meat (seafood) and grains (whole grain-rich).

## Whole-Grain Breaded Fish Sticks

Ingredient Statement: Cod fish breaded with whole-wheat flour, whole grain corn, canola oil, pepper flakes, spices.

CN


XXXXXX\*

Each 4.00 oz. Whole Grain Breaded Fish Sticks (4 pieces) provide 2.00 oz. equivalent meat and 1.50 oz. equivalent grains for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA mm/yy\*\*).

CN

CN

**Net Wt.:** 20.0 pounds



**Fish Foods, Inc**  
1234 Magenta Street Valley, NM 12345

\* The 6-digit CN identification number is assigned by the CN Labeling office.  
\*\* Date is written using numbers to represent the month/year of final label approval.



## APPENDIX B: Food Buying Guide for Child Nutrition Programs (FBG)

The *Food Buying Guide for Child Nutrition Programs* (FBG) (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>) is the essential resource for food yield information for all Child Nutrition Programs (CNP). The FBG assists CNP operators, food manufacturers, and other stakeholders with:

- Buying the right amount of food and the appropriate type of food for meals served in CNP; and
- Determining the specific contribution each food makes toward the meal pattern requirements.

### Accessing the FBG

The FBG is available as an Interactive Web-based Tool, Mobile App, and as a downloadable PDF.

Access all these different formats of the FBG at the Team Nutrition website:

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

### FBG Technical Assistance and Training

User guides, training videos and modules, and recorded webinars are available to assist users with the FBG Interactive Web-based Tool and Mobile App. These resources can be accessed at <https://www.fns.usda.gov/tn/food-buying-guide-training-resources>.





# APPENDIX C



## Questions and Answers on Alternate Protein Products (APP)

### A. General

#### 1. What is an APP? Please provide some examples of APPs.

APP is the acronym for “Alternate Protein Product.” The term “Alternate Protein Product” is the name used by the U.S. Department of Agriculture’s Food and Nutrition Service (FNS) to identify products meeting requirements set forth in Section II, in 7 CFR Appendix A to Part 210, 220, 225, and 226 within the section titled, *Alternate Protein Products*. An APP is required to: (1) be processed so that some portion of the nonprotein constituents of the food is removed, (2) have a biological quality at least 80 percent that of casein using the Protein Digestibility Corrected Amino Acid Score (PDCAAS) method, and (3) contain at least 18 percent protein by weight when fully hydrated or formulated. These requirements are found in Appendix A to 7 CFR 210, 220, 225, and 226. See section II under Appendix A, Alternate Foods for Meals titled, Alternate Protein Products found online at (<https://www.ecfr.gov/current/title-7/subtitle-B/chapter-II/subchapter-A/part-210#Appendix-A-to-Part-210>). Some examples of APPs include soy flours, soy concentrates, soy isolates, whey protein concentrate, whey protein isolate, and casein. Processed food items, such as a vegetarian burger or patty, may contain APPs but the entire item cannot be considered an APP, as the food item contains other ingredients, such as seasonings or breading.

#### 2. Can school food authorities (SFAs) and institutions continue to use vegetable protein products (VPP) developed under the previous Appendix A?

Yes. Please keep in mind that the VPP used in the Child Nutrition Programs (CNP) prior to year 2000 was specially fortified with iron and zinc. Due to concerns about excess fortification, we recommend that this specially fortified VPP continue to be limited to no more than 30 percent of a meat/meat alternate (M/MA) item, if it is still in use by manufacturers producing food for CNP.



## Questions and Answers on Alternate Protein Products (APP) (continued)

### 3. Does the Food Buying Guide for Child Nutrition Programs (FBG) include APP?

The FBG does not contain yield information for APP because it only provides yield information for whole foods, not derivative ingredients. Furthermore, yield information varies by protein values provided by the APP manufacturer.

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## B. Specific Products

### 1. Do tofu and soy yogurt meet the criteria for APP in Appendix A?

Tofu and soy yogurt are included in the FBG and can be credited toward the M/MA component for certain CNP. Please visit <https://www.fns.usda.gov/cn/crediting-tofu-and-soy-yogurt-products-school-meal-programs-and-cacfp> to learn more about how tofu and soy yogurt can be used.

### 2. Is soy milk an APP?

No. Soy milk does not meet the requirements of an APP. Soy milk and other nondairy beverages that meet Program requirements for fortification found in regulations (e.g., 7 CFR 210.10(d)(3)) can be used in CNP with limitations. Please visit SP 07-2010, CACFP 04-2010, SFSP 05-2010 titled, Q&As: Milk Substitution for Children with Medical or Special Dietary Needs (Non-Disability) to learn about fluid milk substitutions. In addition, a beverage is not considered a M/MA. The only M/MA that can be used in a beverage as a smoothie is standardized yogurt that meets the Federal standard of identity to be labeled “yogurt.” Please visit <https://www.fns.usda.gov/cn/smoothies-offered-child-nutrition-programs> to learn more about smoothies offered in the CNP.



## Questions and Answers on Alternate Protein Products (APP) (continued)

### 3. Can a food, such as dried beans, be considered an APP?

No. Dried beans cannot be considered an APP; they are a whole food listed in the FBG and are creditable in CNP using the information found in the FBG.

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## C. Crediting

### 1. How will APP (specifically soy) be credited when no meat, poultry, or fish is used in combination in a processed product?

Fully hydrated APP meeting the requirements in Appendix A is credited at a 1-to-1 ratio, although the total M/MA contribution cannot exceed the portion weight of the food item as served.

### 2. How is APP credited when blended or combined with meat, etc.?

If a blended product is used, the amount of APP and the amount of meat, poultry, or fish are credited separately. For the meat, poultry, or fish, crediting is based on the yields in the FBG while fully hydrated APP is credited at a 1-to-1 ratio. The credit of each of the components is then added together. The contribution may not exceed the portion weight of the product, meaning, the total M/MA credit may not exceed the portion weight of the product as served.

### 3. Can a food be fortified to meet the APP requirements?

No, fortification cannot be used to meet the requirements for APP in Appendix A.



## Questions and Answers on Alternate Protein Products (APP) (continued)

### **4. Can a processed product, such as a vegetarian patty, be evaluated as an APP or is each APP contained in the product evaluated separately?**

A processed food item is not considered as an APP; the ingredients in that food item that meet the Appendix A requirements are credited as APPs. These ingredients may include combinations of proteins that, when combined, meet the requirements of Appendix A.

### **5. Can an APP in a food item that contributes toward a meal component other than M/MA, such as soy protein in a grain item, be credited as part of the meat alternate?**

Yes, but only if the APP is part of the entree; for example, soy protein in ravioli dough or pizza crust. The school or program site must identify the APP and show through documentation from the manufacturer (1) that the APP meets the requirements in Appendix A and (2) the amount of APP that is credited toward meeting the CNP's meal pattern requirements.

### **6. If a product (for example a pizza crust) contains both enriched flour and APP, how is its contribution to the M/MA component and the grain component determined?**

If a crust contains APP that contributes toward the M/MA component, the entire weight of the crust cannot be counted toward the grains component. The exact amount of the APP must be documented by the manufacturer in order to determine the credit for the M/MA component.

In order to contribute toward the grains component, the manufacturer must document the amount (weight in grams) of creditable grains in the crust of one serving of the product.



## Questions and Answers on Alternate Protein Products (APP) (continued)

### D. Identification of Blended Products

#### 1. Can a manufacturer request a Child Nutrition (CN) label for processed products containing APP?

Yes.

#### 2. How can SFAs and institutions identify APPs that are ingredients in processed products?

While the CN label is the only documentation a program operator will need for documentation purposes, it is important to note that manufacturers who wish to have the APP in their product credit as a meat alternate must provide documentation that the APP meets the criteria (see the answer to question A.(1). SFAs and institutions also need documentation from manufacturers regarding crediting; i.e., the amount of M/MA contributed by one serving of the product towards the meal pattern requirements of the CNP. Further, regulations issued by the Food Safety and Inspection Service (FSIS) of USDA and by the Food and Drug Administration (FDA) of the Department of Health and Human Services (HHS) require food manufacturers to list, by common name, the ingredients used in the formulation of processed food products on the label for that product.

Information about the source or type of protein should be clearly indicated in the ingredient statement, such as whey protein concentrate or soy protein.

#### 3. Should a manufacturer list an ingredient as “APP” on a product label?

The regulations for the CNP do not require that the product label read “Alternate Protein Product” or “APP.” Product labels must follow Federal rules and regulations for food labeling developed by FDA and USDA, FSIS for the products under those jurisdictions.



## Questions and Answers on Alternate Protein Products (APP) (continued)

### 4. What documentation is required for a CN labeled product containing APP?

A CN label should have APP documentation attached with the application that shows how the APP meets the regulation. This includes:

- a. Providing a statement that the APP meets the requirements found in Appendix A of 7 CFR 210, 220, 225, and 226.
- b. Showing that the product has been processed so that some portion of the nonprotein constituents has been removed.
- c. Providing the Protein Digestibility Corrected Amino Acid Score (PDCAAS). The PDCAAS is required to be greater than 80 percent of casein and indicating how the PDCAAS was determined.
- d. Showing that the protein level is at least 18 percent by weight when fully hydrated or formulated.
- e. Providing the protein level of an APP on an “as-is” basis for the as-purchased product. Protein is often provided on a moisture free basis (MFB), which is not the information USDA, FNS requires.

After December 31, 2001, all the above information required for APP must be presented for approval by the U.S. Department of Agriculture’s Agricultural Marketing Service (AMS) CN Labeling Program Operations Office.

Please see the sample APP documentation on the following page.



## Sample Soy Company X

### Sample Soy Protein Concentrate Product Y

Documentation for Company X Products Used as Alternate Protein Products (APP) for Child Nutrition Programs

- a. Company X certifies that Product Y meets all requirements for APP intended for use in foods manufactured for Child Nutrition Programs as described in Appendix A of 7 CFR 210, 220, 225, and 226.
- b. Company X certifies that Product Y has been processed so that some portion of the nonprotein constituents have been removed by fractionating. This product is produced from soybeans by removing the majority of the soybean oil and some of the other nonprotein constituents.
- c. The Protein Digestibility Corrected Amino Acid Score (PDCAAS) for Product Y is 0.99. It was calculated by multiplying the lowest uncorrected amino acid score by true protein digestibility as described in the Protein Quality Evaluation Report from the Joint Expert Consultation of the Food and Agriculture Organization/World Health Organization of the United Nations, presented December 4–8, 1989, in Rome, Italy. The PDCAAS is required to be greater than 80 percent of casein.
- d. The protein level of Product Y is at least 18 percent by weight when fully hydrated at a ratio of 2.43 parts water to one part product.
- e. The protein level of Product Y is certified to be at least 61.8 percent on an “as-is” basis (not the moisture-free basis) for the as-purchased product. Protein is often provided on a moisture free basis (MFB) which is not the information USDA, FNS requires.

All the above information is required for APP and must be presented for approval.

**Note:** It is also helpful to have the ingredient statement for Product Y. For example, if the product is uncolored and unflavored, the ingredients statement might be “soy protein concentrate” or if the product is colored and textured the ingredients statement might be “textured vegetable protein (soy flour, caramel color).”



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