



**United States
Department of
Agriculture**

**Food and
Nutrition
Service**

Child Nutrition Labeling for Seafood Products

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Prepared by
Child Nutrition Division
Food and Nutrition Service

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April 1984
Revised December 2003

Introduction

This publication has been prepared for seafood product manufacturers. It contains instructions on how to apply for and obtain approval of a label with a Child Nutrition (CN) label statement. It also gives directions for calculating the contribution that seafood products make toward meeting meal pattern requirements for the Child Nutrition Programs. These procedures supersede all other instructions, written or oral, that the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) may have given prior to publication of this revision.

Inspection Requirement

The U.S. Department of Commerce (USDC), Seafood Inspection Program operates voluntary inspection services. All CN labeled seafood products must be produced under the USDC Type I Inspection options. The Type I inspection options include: Continuous inspection, the Integrated Quality Assurance (IQA) program and the Hazard Analysis Critical Control Point (HACCP) program. The website for the Seafood Inspection Program can be found at:
<http://seafood.nmfs.noaa.gov/publications.htm>

CN Label Application Materials

What to Submit

- NOAA Form 89-819 with specifications
- Product label – five copies
- Alternate Protein Products (e.g., soy flour) documentation
- Samples (upon request by FNS)

NOAA Form 89-819

Complete all portions of the 89-819 form. If submitting a new specification, submit the form with five copies of the specification. Only two copies of the specification need to be submitted if using a USDC approved specification. (See page 6 for where to submit label applications.) Give the following information for each product in the product specification:

- Qualitative and quantitative formulation(s)
- Fill Specifications: including Raw weights of ingredients and portion components (fish, cheese, breading, etc.), and cooked weight of the portion
- Processing procedures (all steps for processing including temperature and time)
- Listing of ingredients on labels in order of predominance by weight
- A description of the seafood so that it matches a food item in the Food Buying Guide for Child Nutrition Programs (FBG), PA-1331, Revised November 2001 (Pen & Ink updates to the revised FBG issued by FNS dated May 2003); for example “block fish, frozen”. An electronic version of the FBG can be found at <http://schoolmeals.usda.gov/FBG/buyingguide.html>

- When claiming bread alternate credit for battered and/or breaded products, submit the following information:
 - a) Percentage of the whole-grain, enriched flour, meal, bran, or germ in the batter/breader
 - b) Percentage of water or other liquid used in the batter/breader

Product Label

For sketch approval, submit a legible draft of the label as it will appear on the package. Submit five copies.

For final approval, submit the label exactly as it will appear on the package. Submit five copies.

The following information must be printed on the product label:

- Federal inspection legend and establishment number
- Net weight
- Name and address of manufacturer or distributor
- Ingredient statement
- CN label statement which must be an integral part of the product label and must include:
 - Logo
 - Child Nutrition identification number (assigned by FNS)
 - Statement of credit
 - Authorization statement
 - Approval date (the month and year the label is approved in final)

The statement of credit identifies the contribution a specific portion of a seafood product makes toward the meat/meat alternate, bread/bread alternate, and/or vegetable/fruit component of the meal pattern requirements. The following criteria apply:

- All seafood products must provide a minimum of 0.50 ounce equivalent meat/meat alternate per serving. Ounce equivalents should be expressed as a decimal in increments of 0.25 ounce, such as, 0.50, 0.75, 1.00, etc., ounce equivalent meat/meat alternate.
- To receive bread/bread alternate credit, a product serving must provide a minimum of 1/4 serving. Larger servings must be expressed in increments of 1/4 serving of bread/bread alternate.

- To receive vegetable/fruit credit, a product must provide a minimum of 1/8 cup serving. Larger servings must be expressed as a fraction in increments of 1/8 cup serving. Since only a very limited number of seafood products provide vegetable/fruit credit, the calculations and yield data for the vegetable/fruit component are not given in this publication but are available upon request from FNS.

The CN statement must accurately reflect the product. For example:

- A product with only seafood would state “provides ___ oz equivalent meat.”
- A product with seafood and a meat alternate would state “provides ___ oz equivalent meat/meat alternate.”

Alternate Protein Products

Alternate Protein Products (APP) may be used to meet part or all of the meat alternate component of the meal pattern requirements, provided that the APP meets requirements of USDA regulations as indicated below.

For each APP that will be credited toward the meal pattern requirements, attach a copy of the APP label to each of the specifications. Write the manufacturer’s name, product name, and identification number, and “no substitutions” on all copies of the specifications.

For each APP used, attach a letter from the APP manufacturer verifying ALL of the following criteria:

- a) A statement that the APP meets the requirements found in Appendix A of 7 CFR Parts 210, 220, 225, and 226
- b) Show that the product has been processed so that some portion of the non-protein constituents has been removed
- c) Provide the Protein Digestibility Corrected Amino Acid Score (PDCAAS). The PDCAAS is required to be greater than 80% of casein. Be prepared to show how the PDCAAS was determined
- d) Show that the protein level is at least 18% by weight when fully hydrated or formulated
- 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 FNS requires

Additional information about APP is available from FNS.

Enriched
Macaroni
With
Fortified
Protein

Enriched macaroni with fortified protein, when made and used according to USDA regulations, may be used to meet part of the meat/meat alternate component.

Attach one copy of the label of each enriched macaroni with fortified protein product that will be credited toward the meal pattern requirements. Write the manufacturer's name, product name, and identification number, and "no substitutions" on all five copies of the specifications.

Attach a copy of the approval letter from FNS for that product.

Additional information about enriched macaroni with fortified protein is available from FNS.

Samples

FNS may request a product sample as part of the review process. If a sample is requested, FNS may delay final label approval until it receives and reviews the sample. Label applications must pertain to products that have been made and tested in a pilot plant or on an assembly line.

Submit all label applications to:

Where to
Submit

Approving Officer
U. S. Dept of Commerce
Seafood Inspection Program
Documentation Approval and Supply Service Section
P.O. Drawer 1207
Pascagoula, Mississippi 39567-1207
Or call (228) 762-1892

Procedures for Reviewing CN Labels

Queuing
System

The USDC Approving Officer reviews the label application and then forwards it to FNS. When FNS receives the application, FNS dates it and places it in a queuing system. FNS reviews each label in turn based on the date received. FNS will not grant exceptions to the queuing system except in extreme emergencies. The review time in FNS will be approximately 3 weeks, however, this will vary depending on the volume of labels. In addition, label approval for products that are complex may take longer. After FNS approves a label, FNS returns it to the USDC Approving Officer who in turn notifies the company.

Identification
Numbering
System

An automated data system will be used to assign a six-digit identification number to all labels. Using this system, FNS keeps track of label approvals and provides this information to regional, State, and local Child Nutrition Program staff. FNS will also use this data to notify manufacturers when a new regulation requires them to resubmit labels. When a label is submitted in sketch, FNS assigns the identification number when it is received. When a label is submitted in final without prior sketch approval, manufacturers must call FNS for an identification number before printing the label. If a sketch approved for printing is not submitted as a final label for approval within one year, each final label application must be assigned a new identification number.

Label
Applications
Returned

Label applications that are incorrect, illegible, or lacking appropriate information will be returned to the Approving Officer, with notations of the errors. FNS will keep one copy of every label application submitted for review.

Label
Applications
Resubmitted

Labels that are resubmitted for review will be placed in the queuing system based on the date of resubmittal. Labels should be resubmitted and receive a new six digit CN identification number when there is a/an:

- change in establishment number
- change in the listing of ingredients
- addition of quality or nutritional claim
- change in the product formula
- change in the product name
- change in portion size
- change in the CN statement
- change in policies, regulations, or crediting standards

Where to Direct
Questions On
CN Labeling

If you need further information or answers to questions please write to:

U.S. Department of Agriculture
Child Nutrition Division
Food and Nutrition Service
3101 Park Center Drive, Room 632
Alexandria, Virginia 22302
Or call (703) 305-2609

How to Determine Ounce Equivalent Meat/Meat Alternate

The unit of measure for the meat/meat alternate component is “ounce equivalent.” To be CN labeled, a serving of a product must provide a minimum of 0.50 ounce equivalent meat/meat alternate and credit must be expressed in 0.25 ounce increments. Any of the following can contribute to the meat/meat alternate component of the Child Nutrition meal pattern requirements: lean meat, poultry, fish, seafood, cheese, eggs, cooked dry beans and peas, peanut butter, alternate protein product, cheese substitute, or any of these combinations. Enriched macaroni with fortified protein may also be used to meet part of the meat/meat alternate component.

The four steps for determining the total ounces of equivalent meat/meat alternate in a serving of a product are:

- Step 1. Determine which allowable meat/meat alternate(s) is/are used in the product being labeled.
- Step 2. Calculate the ounce equivalent meat/meat alternate contributed by each category. Procedures are on the following pages. Never round up for any of the following calculations.
- Step 3. If more than one allowable meat/meat alternate is used, total the ounce equivalent meat/meat alternate calculated under each category.
- Step 4. Round down to the nearest 0.25 ounce equivalent meat/meat alternate.

SEAFOOD CALCULATIONS

1. Multiply the raw portion size by the percent raw seafood:
$$\text{oz raw portion} \times \% \text{ raw seafood} = \text{oz raw seafood/portion}$$
2. Multiply the ounces of raw seafood per portion by the cooking yield in the FBG:
$$\text{oz raw seafood/portion} \times \text{FBG cooking yield} = \text{oz equivalent meat/portion}$$

ALTERNATE PROTEIN PRODUCT CALCULATIONS

1. Multiply the raw portion size by the percent dry APP:
$$\text{oz raw portion} \times \% \text{ dry APP} = \text{oz dry APP/portion}$$
2. Determine the hydration factor of the APP by dividing the percent protein on an as-is-basis by 18:

REMINDER: The percent protein on an as-is basis must be presented in the documentation from the manufacturer, see page 5 for documentation requirements.

APP must be credited based on hydrating the product to an 18 percent protein level according to USDA regulations.

$$\frac{\text{Percent protein of APP (as-is-basis)}}{18} = \text{hydration factor}$$

3. Multiply the ounces dry APP per portion by the hydration factor for the APP used:

$$\text{oz dry APP} \times \text{hydration factor} = \text{oz equivalent meat alternate/portion}$$

CHEESE/CHEESE SUBSTITUTE CALCULATIONS

Multiply the raw portion size by the percent cheese and/or cheese substitute to determine the ounces of cheese and/or cheese substitute per portion.

$$\text{oz raw portion} \times \% \text{ cheese/cheese substitute} = \text{oz cheese/portion or equivalent meat alternate/portion}$$

NOTE: Items labeled as cheese product or imitation cheese are not creditable towards the meat alternate component for CN programs. Natural hard cheeses credit 1:1, ricotta and cottage cheese credit at 50%.

**Selected Yield Information for Seafood
from the Revised 2001
Food Buying Guide for Child Nutrition Program***

FOOD	YIELD
Crab meat (fresh or frozen)	97%
Crawfish (cooked, peeled)	90%
Fish Fillets (fresh or frozen)	70%
Fish Portions, frozen unbreaded (block)	78%
Minced Clams (raw, shelled)	66%
Minced Clams (canned, drained)	87%
Minced Fish (raw, frozen, block)	75%
Minced Shrimp (raw, peeled)	58%
Octopus (frozen)	67%
Oysters (fresh or frozen, shucked, drained)	50%
Scallops (frozen)	53%
Shrimp, minced (raw, frozen)	58%
Shrimp, whole	
Cooked, peeled, and cleaned	
Thawed, ready-to-eat	100%
Frozen (all sizes except salad size)	83%
Frozen, salad size (150-200 count)	80%
Raw, peeled and cleaned	
Frozen	62%
Squid (frozen, block)	73%
Squid, rings (frozen)	67%

* The complete Food Buying Guide for Child Nutrition Programs can be viewed on the Healthy School Meal Resource System website at:
<http://schoolmeals.nal.usda.gov/FBG/buyingguide.html>

How to Determine Servings of Bread/Bread Alternates

The unit of measure for the bread/bread alternate component is “serving.” The product must provide a minimum of 1/4 serving, and credit must be expressed in 1/4 serving increments to state bread credit on the CN label.

A product must meet the following criteria to be counted as a bread/bread alternate in the Child Nutrition Programs:

- 1) The product must be served as an accompaniment to or an integral part of the main dish of the meal.
- 2) The product must contain a creditable grain - Whole-grain, enriched flour or meal, bran, and/or germ.

Bread items are categorized into different groups according to the amount of creditable grains typically used in each type of product. The FCS Grains/Breads Instruction 783-1; Rev 2; Exhibit A (see pages 13 and 14 of this manual) show how the bread items are grouped.

Based on the grains/breads instruction,

- Breeding is in Group A (1 serving = 20g/0.7 oz)
- Batter (cooked or dry weight) is in Group B (1 serving = 25g/0.9 oz)
- 1 serving of bread/bread alternate is the amount of product to provide 14.75 grams of enriched flour/whole grain, meal, bran, or germ.

There are several acceptable ways to calculate the bread/bread alternate component using the Grains/Breads Instruction information. Please note the components required for each different method.

METHOD 1. Monitor the total batter/breader weight. (For CN labeled products only)

Use this calculation when the total batter/breading weight is monitored. Note: the percent of enriched flour/whole grain/bran/germ must be greater than the total liquid (which is generally, but not always, water) in the batter/breading composite.

1. Check to make sure that the breader and batter are each made from enriched flour/whole grain and that the combined enriched flour/whole grain/bran/germ components are greater than the water (total liquid). This can be confirmed by a composite listing or a calculation if the amount of creditable grain(s) and water is known.
2. Calculations for Grains/Breads contribution:

$$\frac{(\text{oz of breading/ serving} + \text{oz of wet/raw batter/ serving})}{0.9 \text{ ounces per serving}} = \begin{array}{l} \text{unrounded} \\ \text{serving of} \\ \text{bread alt.} \end{array}$$

3. Round down to the nearest 1/4 serving of bread alternate.

METHOD 2. Monitor the batter and breading weights separately.

1. Use this calculation if the batter and breading weights are monitored separately and each are made from enriched flour/whole grain.

$$\frac{(\text{oz of dry batter/ serving})}{0.9 \text{ ounces per serving}} + \frac{(\text{oz of breading/ serving})}{0.7 \text{ ounces per serving}} = \text{unrounded servings of bread alternate per portion}$$

2. Round down to the nearest 1/4 serving of bread alternate.

METHOD 3. Grams of Enriched Flour/Whole Grain per serving.

You may calculate the contribution of bread alternate by using the grams of creditable grains – whole grain, enriched flour or meal, bran, and/or germ - contained in the batter/breading.

One bread alternate serving = 14.75 grams of creditable grains.

1. Calculate the grams of creditable grains per portion for each bread component such as breading and/or dry batter. Multiply the ounces per portion of each component by the percent creditable grains in that product and then multiply by 28.35 to convert ounces to grams

Breading

$$\text{oz breading per portion} \times \% \text{ creditable grains in breading} \times 28.35 = \text{grams of creditable grains/portion from breading}$$

Batter (dry)

$$\text{oz dry batter per portion} \times \% \text{ creditable grains in dry batter} \times 28.35 = \text{grams of creditable grains/portion from dry batter}$$

2. To get the total grams of creditable grains per portion, add the grams of creditable grains from each component (breading and dry batter).

$$\text{grams of creditable grains/portion from breading} + \text{grams of creditable grains/portion from dry batter} = \text{total grams of creditable grains/portion}$$

3. Divide the total grams of creditable grains per portion by 14.75 grams:

$$\frac{\text{total grams creditable grains/portion}}{14.75 \text{ grams}} = \text{unrounded servings bread alternate/portion}$$

4. Round down to the nearest 1/4 serving of bread alternate.

Bread items can be categorized according to the following instruction:

FCS* INSTRUCTION 783-1; REV. 2; EXHIBIT A

**GRAINS/BREADS FOR THE FOOD-BASED MENU PLANNING ALTERNATIVES
IN THE CHILD NUTRITION PROGRAMS ¹**

GROUP A	MINIMUM SERVING SIZE FOR GROUP A
Bread type coating Bread sticks (hard) Chow mein noodles Crackers (saltines and snack crackers) Croutons Pretzels (hard) Stuffing (dry) Note: weights apply to bread in stuffing.	1 serving = 20 gm or 0.7 oz
GROUP B	MINIMUM SERVING SIZE FOR GROUP B
Bagels Batter type coating Biscuits Breads (white, wheat, whole wheat, French, Italian) Buns (hamburger and hotdog) Crackers (graham crackers - all shapes, animal crackers) Egg roll skins English muffins Pita bread (white, wheat, whole wheat) Pizza crust Pretzels (soft) Rolls (white, wheat, whole wheat, potato) Tortillas (wheat or corn) Tortilla chips (wheat or corn) Taco shells	1 serving = 25 gm or 0.9 oz
GROUP C	MINIMUM SERVING SIZE FOR GROUP C
Cookies ² (plain) Cornbread Corn muffins Croissants Pancakes Pie crust (dessert pies ² , fruit turnovers ³ , and meat/meat alternate pies) Waffles	1 serving = 31 gm or 1.1 oz

¹ Some of the following foods, or their accompaniments may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to serve them.

² Allowed only for desserts under the enhanced food-based menu planning alternative specified in §210.10 and supplements (snacks) served under the National School Lunch Program (NSLP), Summer Food Service Program (SFSP), and Child and Adult Care Food Program (CACFP).

* Food and Nutrition Service (FNS) was named Food and Consumer Service (FCS) at the time this instruction was issued.

GROUP D	MINIMUM SERVING SIZE FOR GROUP D
Doughnuts ³ (cake and yeast raised, unfrosted) Granola bars ³ (plain) Muffins (all, except corn) Sweet roll ³ (unfrosted) Toaster pastry ³ (unfrosted)	1 serving = 50 gm or 1.8 oz
GROUP E	MINIMUM SERVING SIZE FOR GROUP E
Cookies ² (with nuts, raisins, chocolate pieces and/or fruit purees) Doughnuts ³ (cake and yeast raised, frosted or glazed) French toast Grain fruit bars ³ Granola bars ³ (with nuts, raisins, chocolate pieces and/or fruit) Sweet rolls ³ (frosted) Toaster pastry ³ (frosted)	1 serving = 63 gm or 2.2 oz
GROUP F	MINIMUM SERVING SIZE FOR GROUP F
Cake ² (plain, unfrosted) Coffee cake ³	1 serving = 75 gm or 2.7 oz
GROUP G	MINIMUM SERVING SIZE FOR GROUP G
Brownies ² (plain) Cake ² (all varieties, frosted)	1 serving = 115 gm or 4 oz
GROUP H	MINIMUM SERVING SIZE FOR GROUP H
Barley Breakfast cereals (cooked) ⁴ Bulgur or cracked wheat Macaroni (all shapes) Noodles (all varieties) Pasta (all shapes) Ravioli (noodle only) Rice (enriched white or brown)	1 serving = ½ cup cooked (or 25 gm dry)
GROUP I	MINIMUM SERVING SIZE FOR GROUP I
Ready to eat breakfast cereal (cold dry) ⁴	1 serving = ¾ cup or 1 oz, whichever is less

³ Allowed for desserts under the enhanced food-based menu planning alternative specified in §210.10 and supplements (snacks) served under the NSLP, SFSP, and CACFP, and for breakfasts served under the School Breakfast Program (SBP), SFSP and CACFP.

⁴ Refer to program regulations for the appropriate serving size for supplements served to children aged 1 through 5 in the NSLP; breakfasts served under 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.

Sample CN Label Statements

Precooked Breaded Fish Portions

CN _____ CN _____
000000*
One 3.00 oz Precooked Breaded Fish Portion provides 1.50 oz
CN equivalent meat and 1/2 serving bread alternate for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA 10-01**). CN
_____ CN _____

Seafood Patties (Textured Soy Flour is used as an ingredient)

CN _____ CN _____
000000*
One 4.00 oz Seafood Patty provides 2.00 oz equivalent meat/
CN meat alternate for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA 12-02**). CN
_____ CN _____

Precooked Fish Sticks

CN _____ CN _____
000000*
Two 1.00 oz Precooked Fish Sticks provide 1.00 oz equivalent
CN meat for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA 09-99**). CN
_____ CN _____

Breaded Fish and Cheese Portions

CN _____ CN _____
000000*
One 3.60 oz Breaded Fish and Cheese Portion provides 1.50 oz
CN equivalent meat/meat alternate and 1.00 serving bread alternate for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA 01-03**). CN
_____ CN _____

* CN identification numbers are assigned by FNS.

** Month/Year must reflect the date of final approval from FNS.

Example 1

Sample CN Label Submittals

Submit completed form 89-819 and specification: Include the following information (on the form and/or in the specification) for labels carrying Child Nutrition (CN) Label statements.

1. Product Name: Combination Seafood Patty – 3.00 oz portion
2. This label is (a) New (b) Supercedes* (c) Extends/Revises*

Label with Prior Approval, Date _____

*If (b) or (c), give date of approval.

3. Action Requested by USDC/USDA (FNS):
 Final Approval Sketch Approval
4. Name and Address of Firm and/or Distributor(s)

5. Fill Specification: List all major components to two decimal places. Do not use fractions.

Listed By: Weight: Percent:

SEAFOOD: (raw, - minced, whiting, minced clams, and crab meat)	2.01 oz
Non-Seafood Components	0.48 oz
Batter (with water)	0.30 oz
Breading	0.21 oz
TOTAL	3.00 oz
(if percent is used, total must equal 100%)	

6. Complete Formula: List by order of predominance. List all ingredients to three decimal places. Do not use fractions.

Listed By: Weight: Percent:

SEAFOOD: Minced Whiting (frozen, block)	62.000
Minced Clams (canned, drained)	3.800
Crab Meat (cooked)	1.200
Non-Seafood Component – (potatoes, onions, chicken broth, modified corn starch, salt, pepper, sugar, sodium tripolyphosphate)	16.000
Batter (water, wheat flour, modified corn starch)	10.000
Breading (wheat flour, dextrose, salt)	7.000
TOTAL	100.000

COMBINATION SEAFOOD PATTY

Meat/Meat Alternate Component

Step 1.

Determine which category(ies) of meat/meat alternate(s) is used in the product:
This product contains 62% minced Whiting, 3.8% canned, drained, minced Clams, and 1.2% Crab Meat.

Step 2.

Calculate the ounce equivalent meat/meat alternate contributed by each category.

Minced Whiting

1. Determine the ounces minced whiting per portion by multiplying the ounces raw portion by the percent of minced whiting:

$$\text{oz raw portion} \times \% \text{ minced whiting} = \text{oz minced whiting/portion}$$

$$3.00 \text{ oz} \times 0.62 = 1.86 \text{ oz minced whiting/portion}$$

2. Multiply the ounces minced whiting/portion by the cooking yield in the FBG: [frozen, minced, block – 75 percent yield]

$$\text{oz minced whiting/portion} \times \text{FBG cooking yield} = \text{oz equivalent meat}$$

$$1.86 \text{ oz} \times 0.75 = 1.395 \text{ oz equivalent meat}$$

Minced Clams (canned, drained)

1. Determine the ounces canned, drained, minced clams per portion by multiplying the ounces raw portion by the percent of canned, drained, minced clams:

$$\text{oz raw portion} \times \% \text{ canned, drained, minced clams} = \text{oz canned drained minced clams/portion}$$

$$3.00 \text{ oz} \times 0.038 = 0.114 \text{ oz canned, drained, minced clams/portion}$$

2. Multiply the ounces canned, drained, minced clams/portion by the cooking yield in the FBG: [minced clams (canned, drained) – 87 percent yield]

$$\text{oz canned drained minced clams/portion} \times \text{FBG cooking yield} = \text{oz equivalent meat}$$

$$0.114 \text{ oz} \times 0.87 = 0.09918 \text{ oz equivalent meat}$$

Crab Meat

1. Determine the ounces crab meat per portion by multiplying the ounces raw portion by the percent of crab meat:

$$\text{oz raw portion} \times \% \text{ crab meat} = \text{oz crab meat/portion}$$

$$3.00 \text{ oz} \times 0.012 = 0.036 \text{ oz crab meat/portion}$$

2. Multiply the ounces of crab meat/portion by the cooking yield in the FBG: [crab meat, cooked – 97 percent yield]

$$\text{oz crab meat} \times \text{FBG cooking yield} = \text{oz equivalent meat}$$

$$0.036 \text{ oz} \times 0.97 = 0.03492 \text{ oz equivalent meat}$$

Step 3.

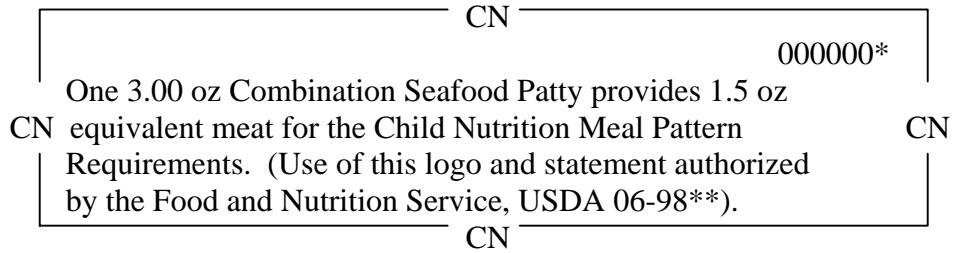
Total the ounces equivalent meat calculated under each category:

Minced Whiting	1.39500 oz
Minced Clams	0.09918 oz
Crab Meat	<u>0.03492 oz</u>
	1.5291 oz equivalent meat

Step 4.

Round down to the nearest 0.25 ounce equivalent meat. This product provides 1.50 ounce equivalent meat.

Sample CN statement



* CN identification numbers are assigned by FNS.

** Month/Year must reflect the date of final approval from FNS.

Example 2

Submit completed form 89-819 and specification: Include the following information (on the form and/or in the specification) for labels carrying Child Nutrition (CN) Label statements.

1. Product Name: Breaded Fish and Cheese Portion – 4.00 oz

2. This label is (a) New X
 (b) Supercedes*
 (c) Extends/Revises*

Label with Prior Approval, Date _____

*If (b) or (c), give date of approval.

3. Action Requested by USDC/USDA (FNS):
 X Final Approval _____ Sketch Approval

4. Name and Address of Firm and/or Distributor(s)

5. Fill Specification: List all major components to two decimal places. Do not use fractions.

Listed By: Weight: X Percent: _____

Cod (raw)	2.02 oz
Batter (with water)	0.95 oz
Breading	0.53 oz
Cheese	0.50 oz
TOTAL	
(if percent is used, total must equal 100%)	
	4.00 oz

6. Complete Formula: List by order of predominance. List all ingredients to three decimal places. Do not use fractions.

Listed By: Weight: _____ Percent: X

Cod (frozen, unbreaded portion)	50.500
Breading – enriched bleached wheat flour (niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), yellow corn flour sugar, whey, dextrose. (Enriched bleached wheat flour and yellow corn flour – 91%)	13.250
Cheese – Pasteurized Process American Cheese	12.500
Water (used in batter)	12.200
Batter – enriched bleached wheat flour (niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), yellow corn flour, modified food starch, whey, non-fat dry milk, salt, leavening, eggs. (Enriched bleached wheat flour and yellow corn flour –84%)	11.550
TOTAL	
	100.000

BREADED FISH AND CHEESE PORTION

Meat/Meat Alternate Component

Step 1. Determine which category(ies) of meat/meat alternate(s) is used in the product. This product is made with 50.5% cod and 12.5% cheese.

Step 2. Calculate the ounces equivalent meat/meat alternate contributed by each category.

Fish

1. Determine the ounces of cod per portion by multiplying the ounces raw portion by the percent cod:

$$\text{oz raw portion} \times \% \text{ raw cod} = \text{oz raw cod/portion}$$

$$4.00 \text{ oz} \times 0.505 = 2.02 \text{ oz raw cod/portion}$$

2. Determine the ounces equivalent meat by multiplying ounces of raw cod/portion by the cooking yield in the FBG: [fish portions, frozen unbreaded – 78 percent yield]

$$\text{oz raw cod/portion} \times \text{FBG cooking yield} = \text{oz equivalent meat/portion}$$

$$2.02 \text{ oz} \times 0.78 = 1.5756 \text{ oz equivalent meat/portion}$$

Cheese

Determine the ounces of cheese per portion by multiplying the ounces raw portion by the percent cheese:

$$\text{oz raw portion} \times \% \text{ cheese} = \text{oz cheese/portion or equivalent meat alternate/portion}$$

$$4.00 \text{ oz} \times 0.125 = 0.50 \text{ oz cheese/portion or equivalent meat alternate/portion}$$

NOTE: Process American Cheese has a 100 percent yield.

Step 3. Total the ounces equivalent meat/meat alternate calculated under each category:

Fish	1.5756 oz
Cheese	<u>0.5000 oz</u>
	2.0756 oz unrounded equivalent meat/meat alternate

Step 4. Round down to the nearest 0.25 ounce equivalent meat/meat alternate. This product provides 2.00 ounce equivalent meat/meat alternate.

Bread/Bread Alternate Component (Batter and Breeding)

Method 1: Monitor the total batter/breader weight. (See page 11)

Step 1.

Check to make sure that the percent of creditable grains – whole grain, enriched flour or meal, bran, and/or germ – is the predominant ingredient in the combined batter/breader:

Component	% of formula		% creditable Grains (of purchased mix)	=	% creditable Grains (of product)
Breading	13.25 %	X	0.91	=	12.0575 %
Batter (dry)	11.55 %	X	0.84	=	<u>9.702%</u>
					21.7595 %
Liquid ingredients	12.2%				

21.7595 % creditable grains of product > 12.2 % liquid ingredients

Step 2.

Calculate the bread alternate credit by dividing the sum of breading and wet batter per portion by 0.9 ounce:

$$\frac{(\text{oz breading/portion} + \text{oz wet batter/portion})}{0.9 \text{ oz}} = \text{servings of bread alternate/portion}$$

$$\frac{(0.53 \text{ oz} + 0.95 \text{ oz})}{0.9 \text{ oz}} = 1.64 \text{ unrounded servings of bread alternate/portion}$$

Step 3.

Round down to the nearest 1/4 serving. This product provides 1-1/2 servings of bread alternate.

Sample CN statement

	CN	
	000000*	
CN	Each 4.00 oz Fish and Cheese portion provides 2.00 oz equivalent meat/ meat alternate and 1-1/2 servings of bread alternate for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA 08-02**).	CN
	CN	

* CN identification numbers are assigned by FNS.

** Month/Year must reflect the date of final approval from FNS.

Example 3

Submit completed form 89-819 and specification: Include the following information (on the form and/or in the specification) for labels carrying Child Nutrition (CN) Label statements.

1. Product Name: Breaded Shrimp Nuggets (six 0.50 oz nuggets)
2. This label is (a) New X
 (b) Supercedes*
 (c) Extends/Revises*

Label with Prior Approval, Date _____

*If (b) or (c), give date of approval.

3. Action Requested by USDC/USDA (FNS):
 X Final Approval _____ Sketch Approval

4. Name and Address of Firm and/or Distributor(s)

5. Fill Specification: List all major components to two decimal places. Do not use fractions.

Listed By: Weight: X Percent: _____

Shrimp, minced (raw, frozen)	0.26 oz
Textured Soy Flour (50% protein as-is-basis)	0.04 oz
Salt	0.01 oz
Breading - enriched bleached wheat flour (niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), yellow corn flour sugar, whey, dextrose. (Enriched bleached wheat flour and yellow corn flour – 91%)	0.09 oz
Batter (dry) - enriched bleached wheat flour (niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), yellow corn flour, modified food starch, whey, non-fat dry milk, salt, leavening, eggs. (Enriched bleached wheat flour and yellow corn flour –84%)	0.04 oz
Water (for batter)	0.06 oz
TOTAL (if percent is used, total must equal 100%)	0.50 oz

6. Complete Formula: List by order of predominance. List all ingredients to three decimal places. Do not use fractions.

Listed By: Weight: _____ Percent: X

Shrimp, minced (raw, frozen)	52.000
Breading	18.000
Water (for batter)	12.000
Textured Soy Flour (documentation attached)	8.000
Batter (dry)	8.000
Salt	2.000
TOTAL	100.000

BREADED SHRIMP NUGGETS

Meat/Meat Alternate Component:

Step 1.

Determine which category(ies) of meat/meat alternate(s) is used in the product. This product is made with 52% minced Shrimp and 8% Textured Soy Flour.

Step 2.

Calculate the ounces equivalent meat/meat alternate contributed by each category.

Minced Shrimp

1. Determine the ounces of minced shrimp per portion by multiplying the ounces raw portion by the percent minced shrimp:

$$\text{oz raw portion} \times \% \text{ minced shrimp} = \text{oz raw minced shrimp/portion}$$

$$(6 \times 0.50) \text{ oz} \times 0.52 = 1.56 \text{ oz raw minced shrimp/portion}$$

2. Determine the ounces equivalent meat by multiplying ounces of raw minced shrimp/portion by the cooking yield in the FBG: [minced shrimp, frozen, raw – 58 percent yield]

$$\text{oz raw minced shrimp/portion} \times \text{FBG cooking yield} = \text{oz equivalent meat/portion}$$

$$1.56 \text{ oz} \times 0.58 = 0.9048 \text{ oz equivalent meat/portion}$$

Alternate Protein Product – for this example the APP used is textured soy flour

1. Determine the ounces of dry APP per portion by multiplying the raw portion size by the percent dry APP:

$$\text{oz raw portion} \times \% \text{ dry APP} = \text{oz dry APP/portion}$$

$$(6 \times 0.50) \text{ oz} \times .08 = 0.24 \text{ oz dry APP/portion}$$

2. Determine the hydration factor of the APP. Divide the percent protein as-is-basis of the APP by 18:

$$\frac{\text{Percent protein of APP (as-is-basis)}}{18} = \text{hydration factor}$$

$$\frac{50.0}{18} = 2.77 = \text{hydration factor}$$

NOTE: The percent protein on an as-is-basis is part of the required documentation from the APP manufacturer(s). See page 5 for APP documentation criteria. The USDA regulations require APP to be credited based on a level of 18 percent protein; this is why the percent protein as-is-basis is divided by 18.

3. Multiply the ounces dry APP per portion by the hydration factor for the APP used:

$$\text{oz dry APP} \times \text{hydration factor} = \text{oz equivalent meat alternate/portion}$$

$$0.24 \text{ oz} \times 2.77 = 0.6648$$

Step 3.

Total the ounce equivalent meat/meat alternate calculated under each category.

Minced Shrimp	0.9048
Textured Soy Flour	<u>0.6648</u>
	1.5696 oz unrounded equivalent meat/meat alternate

Step 4.

Round down to the nearest 0.25 ounce equivalent meat/meat alternate. This product provides 1.50 oz equivalent meat/meat alternate.

Bread/Bread Alternate Component (Batter/Breading)

Method 3, which uses grams of creditable grains – whole grain, enriched flour or meal, bran, and/or germ – will be used to calculate the servings of bread alternate per portion.

1. Calculate the grams of creditable grains per portion for each bread component such as breading and/or dry batter. Multiply the ounces per portion of each component by the percent creditable grains in that product and then multiply by 28.35 to convert ounces to grams.

Breading

$$\text{oz breading per portion} \times \frac{\% \text{ creditable grains in breading}}{100} \times 28.35 = \text{grams of creditable grains/portion from breading}$$

$$(6 \times 0.09 \text{ oz breading}) \times 0.91 \times 28.35 = 13.93119 \text{ grams}$$

Batter (dry)

$$\text{oz dry batter per portion} \times \frac{\% \text{ creditable grains in dry batter}}{100} \times 28.35 = \text{grams of creditable grains/portion from dry batter}$$

$$(6 \times 0.04 \text{ oz dry batter}) \times 0.84 \times 28.35 = 5.71536 \text{ grams}$$

2. Add the grams of creditable grains from each component (breading and dry batter) to get the total grams of creditable grains per portion.

$$13.93119 \text{ grams} + 5.71536 \text{ grams} = 19.64655 \text{ grams/portion}$$

3. Divide the total grams of creditable grains per portion by 14.75 grams:

$$\frac{\text{total grams creditable grains/portion}}{14.75 \text{ grams}} = \text{servings bread alternate}$$

$$\frac{19.64655 \text{ grams}}{14.75 \text{ grams}} = 1.3319 \text{ unrounded servings of bread alternate}$$

4. Round down to the nearest 1/4 serving of bread alternate. This product provides 1-1/4 servings of bread alternate.

Sample CN statement

CN		000000*
CN	Six Breaded Shrimp Nuggets (0.50 oz each) provide 1.50 oz equivalent meat/meat alternate and 1-1/4 servings of bread alternate for the Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA 06-01**).	CN
CN		

* CN identification numbers are assigned by FNS.

** Month/Year must reflect the date of final approval from FNS.

Sample CN Label

FISHWORLD

Quick Frozen Precooked

BREADED SHRIMP NUGGETS

(see note below)

Est. NO. 000

CN		
	000000*	
CN	Six Breaded Shrimp Nuggets (0.50 oz each) provide 1.50 oz equivalent meat/meat alternate and 1-1/4 servings of bread alternate for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement Authorized by the Food and Nutrition Service, USDA 06-01**).	CN
CN		

INGREDIENTS:

MINCED SHRIMP: 52.0%, BATTER: 20.0% water, enriched bleached wheat flour (niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), yellow corn flour, modified food starch, whey, non-fat dry milk, salt, leavening, eggs. BREADING: 18.0% Enriched bleached wheat flour (niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), yellow corn flour, sugar, whey, dextrose. TEXTURED SOY FLOUR: 8.00%, SALT 2.00%.

32 PORTIONS
NET WEIGHT
6 LBS

Distributed by Fishworld's Incorporated, Jones, Massachusetts 00000

* CN identification numbers are assigned by FNS.

** Month/Year must reflect the date of final approval from FNS.

Note: Seafood products must bear the "Processed Under Federal Inspection" mark or the "USDC Grade A" mark, if applicable. Examples of these marks can be found in CFR title 50, Regulations Governing Processed Fishery Products, 260.86 or electronically at:

[PDF download](http://seafood.nmfs.noaa.gov/50CFR260.PDF) <http://seafood.nmfs.noaa.gov/50CFR260.PDF>

or

[Text](http://seafood.nmfs.noaa.gov/260Part.htm) <http://seafood.nmfs.noaa.gov/260Part.htm>