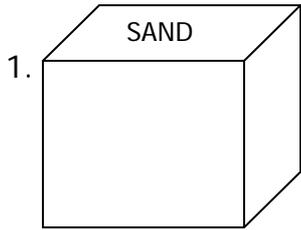


Brain Teasers



2. MAN
BOARD

3. STAND
|

4. |R|E|A|D|I|N|G|

5. WEAR
LONG



7. T
O
W
N

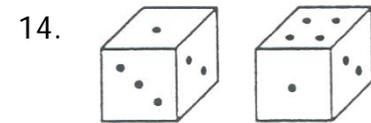
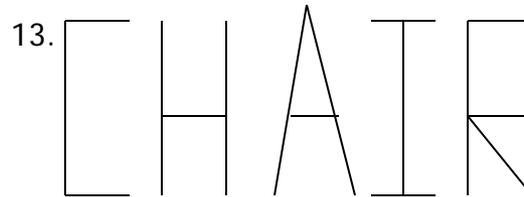
8. CYCLE
CYCLE
CYCLE

9. LE
VEL

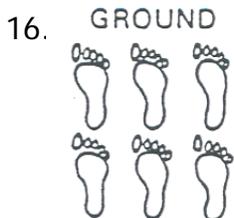
10. $\frac{0}{M.D.}$
B.A.
PH.D

11. $\frac{KNEE}{LIGHT}$

12. ii
00
00
00
00



15. 



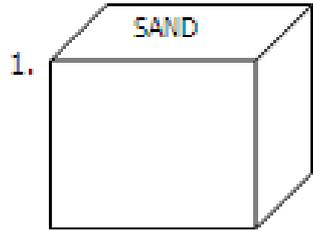
17. MIND
MATTER

18. HE'S / HIMSELF

19. ECNALG

20. DEATH LIFE

Brain Teasers



Sand Box

2. MAN
BOARD

Man
Overboard

3. STAND
|

I Understand

4. |R|E|A|D|I|N|G|

Read Between the Lines

5. WEAR
LONG

Long
Underwear

6. R
ROAD
A
D

Crossroads

7. T
O
W
N
↓

Downtown

8. CYCLE
CYCLE
CYCLE

Tricycle

9. LE
VEL

Bi-level

10. 0
M.D
B.A.
PH.D

3 Degrees Below Zero

11. KNEE
—
LIGHT

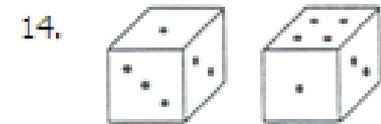
Neon Light

12. ii
00
00
00
00

Circles below
the Eyes

13. CHAIR

Highchair



Paradise

15. TOUCH
↓

Touchdown



Six Feet
Underground

17. MIND
MATTER

Mind Over
Matter

18. HE'S / HIMSELF

He's Beside
Himself

19. ECNALG

Backwards
Glance

20. DEATH LIFE

Life After
Death

Food Buying Guide for Child Nutrition Programs

Food Buying Guide

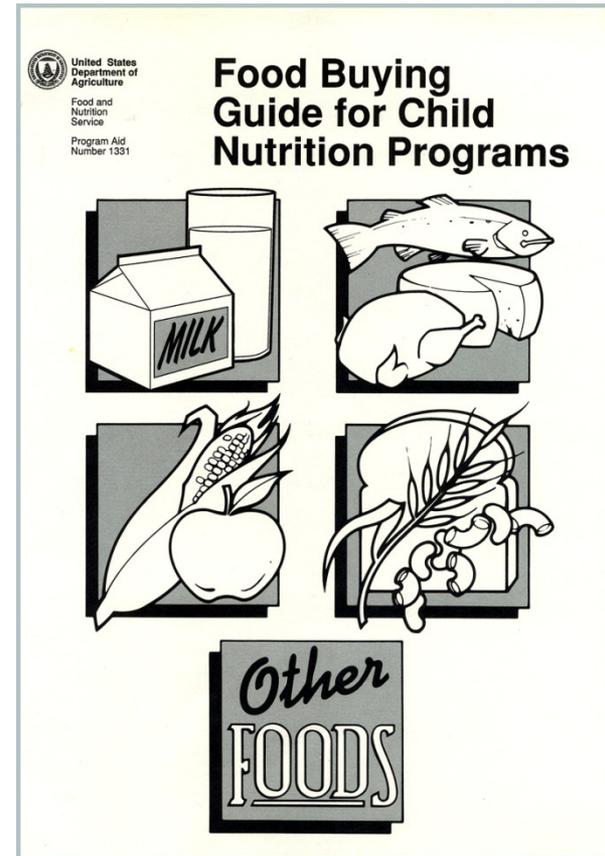
for Child Nutrition Programs

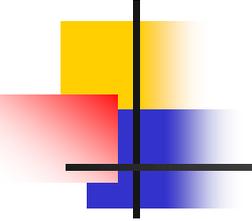


U.S. Department of Agriculture
Food and Nutrition Service

Food Buying Guide for Child Nutrition Programs

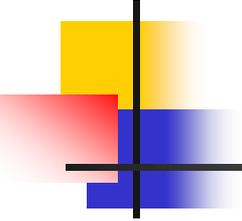
Updating the Food Buying Guide





Food Buying Guide for Child Nutrition Programs

- Developed a list of products to be evaluated
- Regional Office and State Agency input
- Some yields obtained were lower than expected



Moving Forward

- Kept the meat yields from the 1984 FBG
- Included some new meat items
- Included additional items
- Finally a new food buying guide
- Revised again in 2007/2008
- New pages available on CD “Tools for Schools or download whole book.

To Order Additional Copies of the Tools for Schools CD

www.fns.usda.gov/tnforms/fbgorder.html



Search FNS

 Search all USDA
 Search Tips

Browse by Audience

Information For ...

Browse by Subject

- ▶ Join the Team
- ▶ Healthy Schools
- ▶ School Success Stories
- ▶ Training Grants
- ▶ **Resource Library**
- ▶ MyPyramid for Kids

You are here: [Home](#) > [Resource Library](#) >

Resource Library

For Child Nutrition Programs: School Districts only

Food Buying Guide / Menu Planner

Please send copies of the Food Buying Guide / Menu Planner.

Contact Name

School Name

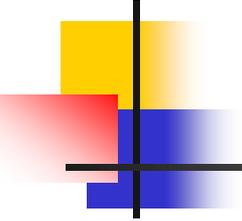
School Street Address
(No P.O. Box)

City

State Zip

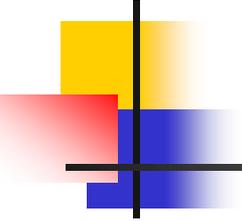
Telephone Fax

E-mail Address



FBG New Features

- New food items added/revised
- Food safety warnings
- Additional calculation examples
- New tables and charts
- Meal patterns
- Grains/breads instruction and flow chart
- Expanded index



New Features--Appendices

- A – Recipe Analysis
- B – Using Column 6 for Recipe Analysis
- C – CN Labeling Program
- D – Food Purchasing
- E – Resources

Food Buying Guide for Child Nutrition Programs

Let's take a
cruise
through the
book!



Food Buying Guide for Child Nutrition Programs

What's in it for me?

Let's check the Table of Contents



Food Buying Guide for Child Nutrition Programs

Introduction

Method 1 Example A: Carrot Slices, Cooked

You are planning to serve 1/4-cup servings of steamed carrot slices. You will be purchasing frozen, sliced carrots. How many pounds of frozen, sliced carrots will you need to buy?

- Estimate the number of servings of the prepared food you will need.**
You estimate that you will need 195 1/4-cup servings of cooked carrot slices.
- Locate the food in the *Food Buying Guide* in the form you intend to serve.**
For the listing *Carrots, frozen, sliced* (found in Column 1, page 2-31) you look for:
Cooked vegetable (found in Column 4)
- Check the serving size listed in Column 4. Compare this to your planned serving size.**
Column 4 reads: 1/4 cup cooked, drained vegetable
This is the same as your planned serving size to all students, so no conversion is needed. (Examples C through H show what to do when conversion is needed.)
- Refer to Column 2 to find the purchase unit. Refer to Column 3 for the number of servings you will get per purchase unit.**
Column 2 reads: Pound
Column 3 reads: 9.87
- Divide the number of servings needed by the number of servings you will get per purchase unit (Column 3.)**
Number of servings needed = 195
Servings per purchase unit = 9.87
 $195 \text{ divided by } 9.87 = 19.75$
- Round up to 20.0 lb to ensure enough food is available.**



ANSWER: You will need 20.0 pounds of frozen, sliced carrots for 195 1/4-cup servings of cooked, sliced carrots.

Chart 3 NATIONAL SCHOOL LUNCH PROGRAM MEAL PATTERN

AFTERSCHOOL SNACKS

SELECT TWO OF THE FOUR COMPONENTS FOR A REIMBURSABLE SNACK

FOOD COMPONENTS AND FOOD ITEMS ¹	CHILDREN AGES 1 and 2	CHILDREN AGES 3-5	CHILDREN AGES 6-12 ²
Milk			
Fluid milk	4 fl oz (1/2 cup)	4 fl oz (1/2 cup)	8 fl oz (1 cup)
Vegetable or Fruit²			
Juice ³ , fruit, and/or vegetable	1/2 cup	1/2 cup	3/4 cup
Grains/Breads^{4, 5}			
Bread or	1/2 slice	1/2 slice	1 slice
Combread or biscuit or roll or muffin or	1/2 serving	1/2 serving	1 serving
Cold dry cereal ⁶ or	1/4 cup or 1/3 oz ⁷	1/3 cup or 1/2 oz ⁷	3/4 cup or 1 oz ⁷
Cooked cereal grains or	1/4 cup	1/4 cup	1/2 cup
Cooked pasta or noodles	1/4 cup	1/4 cup	1/2 cup
Meat/Meat Alternate^{6, 7}			
Lean meat or poultry or fish ⁸ or	1/2 oz	1/2 oz	1 oz
Alternate protein products ⁹ or	1/2 oz	1/2 oz	1 oz
Cheese or	1/2 oz	1/2 oz	1 oz
Egg (large) or	1/2 large egg	1/2 large egg	1/2 large egg
Cooked dry beans or peas or	1/8 cup	1/8 cup	1/4 cup
Peanut or other nut or seed butters or	1 Tbsp	1 Tbsp	2 Tbsp
Nuts and/or seeds ¹⁰ or	1/2 oz ¹¹	1/2 oz ¹¹	1 oz
Yogurt ¹²	2 oz or 1/4 cup	2 oz or 1/4 cup	4 oz or 1/2 cup

¹Children age 12 and older may be served larger portions based on their greater food needs. They may not be served less than the minimum quantities listed in this column.

²Serve two or more kinds of vegetable(s) and/or fruit(s). Full-strength vegetable or fruit juice may be counted to meet not more than one-half of this requirement.

³Grains/Breads must be whole-grain or enriched, or made from whole-grain or enriched flour or meal that may include bran and/or germ. Cereal must be whole-grain, enriched, or fortified.

⁴Either volume (cup) or weight (oz), whichever is less.

⁵A serving consists of the edible portion of cooked lean meat or poultry or fish.

⁶Alternate protein products must meet requirements in Appendix A of 7 CFR Part 2.10.

⁷Nuts and seeds are generally not recommended to be served to children ages 1-3 since they present a choking hazard. If served, nuts and seeds should be finely minced.

⁸Yogurt may be plain or flavored, unswweetened, or sweetened - commercially prepared.

Food Buying Guide for Child Nutrition Programs

Introduction

Nutrient Standard Menu Planning (NSMP) Requirements

Menus planned under the NSMP approach must meet two requirements:

- 1) When averaged over the school week, school lunches and school breakfasts must meet the specific age- or grade-based nutrient standards as defined in 7 CFR Parts 210.10 and 220.8; and
- 2) At a minimum, planned menus must contain the menu items as summarized in Chart 6 below. Additional menu items may need to be added in order to meet nutrient standards and/or to increase variety.

Chart 6 MINIMUM REQUIRED MENU ITEMS FOR NUTRIENT STANDARD MENU PLANNING

Menu Items	MINIMUM AMOUNTS	
	Lunch	Breakfast
Entrée	1 serving	none
Other menu item(s) (side dishes)	1 serving	2 servings
Fluid milk	1 serving	1 serving

Introduction ■ I-27

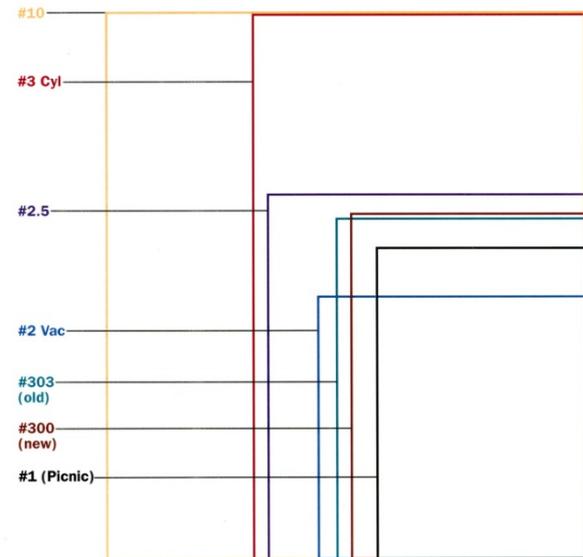
11/20/01, 11:32 AM

Figure 1
Can Size Template

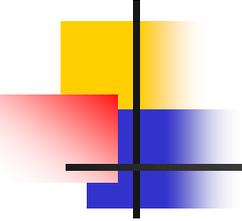
Lie a can on its side directly on this actual size template to help you determine what size can it is.

Dimensional Food Can Standards

Height



I-32 ■ Food Buying Guide for Child Nutrition Programs Revised November 2001



Column Headings Are the Same

- Food as purchased, AP
- Purchase unit
- Servings per purchase unit
- Serving size per meal contribution
- Purchase units for 100 servings
- Additional information

Column 1

Food As Purchased, AP

Section 1—Meat/Meat Alternates

1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
PORK, MILD CURED, Ready-to-cook, chilled or frozen³² (continued)					
Pork, Mild Cured, Ready-to-cook, chilled or frozen	Pound	6.72	1 oz cooked lean meat	14.9	1 lb AP = 0.42 lb cooked lean meat
Pork shoulder Picnic³² With bone	Pound	4.48	1-1/2 oz cooked lean meat	22.4	
Pork, Mild Cured, Ready-to-cook, chilled or frozen	Pound	8.48	1 oz cooked lean meat	11.8	1 lb AP = 0.53 lb cooked lean meat
Pork Shoulder Picnic³² Without bone	Pound	5.65	1-1/2 oz cooked lean meat	17.7	
PORK, MILD CURED, Fully Cooked, chilled or frozen^{32, 33}					
Pork, Mild Cured, Fully Cooked, chilled or frozen	Pound	14.2	1.12 oz ham with natural juices (provides 1 oz lean cooked meat)	7.0	1 lb AP = 0.90 lb cooked lean meat (Protein Fat Free value of 18.5)
Ham With natural juices³² Boiled Without bone (Like IMPS #508 Style B)	Pound	9.58	1.67 oz ham with natural juices (provides 1-1/2 oz cooked lean meat)	10.5	
Pork, Mild Cured, Fully Cooked, chilled or frozen	Pound	14.2	1.12 oz ham with natural juices (provides 1 oz lean cooked meat)	7.0	1 lb AP = 0.90 lb cooked lean meat (Protein Fat Free value of 18.5)
Ham With natural juices³² Smoked Without bone (Like IMPS #509 Style B)	Pound	9.58	1.67 oz ham with natural juices (provides 1-1/2 oz cooked lean meat)	10.5	

³²Purchasers of these products will need to ensure that the name of the food on the product labels exactly matches the "As Purchased" description in Column 1.

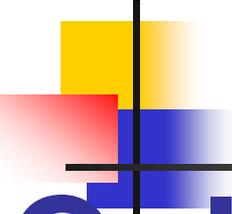
³³For products labeled "Ham and Water Products X% of weight is added ingredients" to be properly utilized in Child Nutrition Programs, you should either 1) purchase a CN labeled product or 2) take out the percent of added water/ingredients by multiplying the finished weight by the percent added ingredients and then subtracting that amount from the finished weight, divide by the manufacturer's cooking yield to obtain the raw weight of the product and then multiply by the *Food Buying Guide* yield for the specific cut of pork used to process the product.

Section 2—Vegetables/Fruits

1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
ASPARAGUS (continued)					
Asparagus, canned <i>Cuts and Tips</i>	No. 10 can (103 oz)	27.8	1/4 cup heated, drained vegetable	3.6	1 No. 10 can – about 57.3 oz (6-7/8 cups) heated, drained asparagus
	No. 10 can (103 oz)	32.4	1/4 cup drained vegetable	3.1	1 No. 10 can – about 57.1 oz (8 cups) drained, unheated asparagus
	No. 300 can (14-1/2 oz)	3.45	1/4 cup heated, drained vegetable	29.0	1 No. 300 can – about 6.8 oz (3/4 cup) heated, drained asparagus
	No. 300 can (14-1/2 oz)	4.83	1/4 cup drained vegetable	20.8	1 No. 300 can – about 8.7 oz (1-1/8 cups) drained, unheated asparagus
	Pound	4.31	1/4 cup heated, drained vegetable	23.3	
	Pound	5.03	1/4 cup drained vegetable	19.9	
Asparagus, canned <i>Spears</i>	No. 5 squat can (64 oz)	26.4	1/4 cup drained vegetable	3.8	1 No. 5 can – about 38.0 oz (6-2/3 cups) drained, unheated asparagus
	No. 300 can (15 oz)	3.87	1/4 cup heated, drained vegetable	25.9	1 No. 300 can – about 7.3 oz (7/8 cup) heated, drained asparagus
	No. 300 can (15 oz)	4.59	1/4 cup drained vegetable	21.8	1 No. 300 can – about 8.5 oz (1-1/8 cups) drained, unheated asparagus
	Pound	6.60	1/4 cup drained vegetable	15.2	
Asparagus, frozen <i>Cuts and Tips</i>	Pound	8.10	1/4 cup cooked vegetable	12.4	
Asparagus, frozen <i>Spears</i>	Pound	10.7	1/4 cup cooked vegetable	9.4	
AVOCADOS					
Avocados, fresh <i>All sizes Whole</i>	Pound	8.20	1/4 cup raw, diced vegetable	12.2	1 lb AP – 0.67 lb ready-to-serve raw avocado
	Pound	5.10	1/4 cup raw, mashed vegetable	19.7	

Column 2

Purchase Unit

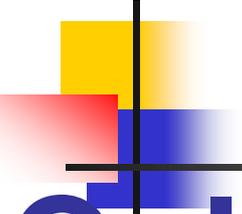


Column 3

Servings per Purchase Unit, EP

Section 2—Vegetables/Fruits

1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
CRANBERRIES					
Cranberries, fresh Whole	Pound	15.6	1/4 cup raw, chopped fruit	6.5	1 lb AP = 0.95 lb ready-to-cook or -serve raw berries
	Pound	11.1	1/4 cup cooked fruit, sugar added, whole berry	9.1	
	Pound	9.90	1/4 cup cooked fruit, sugar added, strained	10.2	
Cranberries, dehydrated Sweetened Whole Includes USDA Commodity	Pound	13.8	1/4 cup dehydrated fruit	7.3	1 lb AP = 1 lb (about 3-3/8 cups) ready-to-cook or -serve berries
	5 lb pkg	69.0	1/4 cup dehydrated fruit	1.5	
	30 lb pkg	414.0	1/4 cup dehydrated fruit	0.25	
CRANBERRY RELISH or SAUCE					
Cranberry Relish or Sauce, canned Whole Includes USDA Commodity	No. 10 can (117 oz)	48.0	1/4 cup fruit	2.1	
	No. 300 can (16 oz)	6.70	1/4 cup fruit	15.0	
Cranberry Relish or Sauce, canned Strained Includes USDA Commodity	No. 10 can (117 oz)	47.9	1/4 cup fruit	2.1	
	No. 300 can (16 oz)	6.50	1/4 cup fruit	15.4	



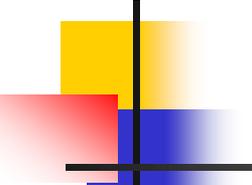
Column 4

Servings Size per Meal Contribution

Section 1—Meat/Meat Alternates

1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
CHICKEN PARTS, fresh or frozen¹⁷ (continued)					
Chicken Parts, fresh or frozen Breast¹⁷ <i>Halves with Backs With skin (about 7.5 oz each) from 8 piece cut</i>	Pound	2.13	1 breast half with back (about 4.1 oz cooked poultry with skin)	47.0	1 lb AP = 0.55 lb cooked, boned, chicken meat with skin
	Pound	2.13	1 breast half with back (about 3.5 oz cooked poultry without skin)	47.0	1 lb AP = 0.47 lb cooked, boned, chicken meat without skin
	Pound	8.80	1 oz cooked poultry with skin	11.4	
	Pound	7.52	1 oz cooked poultry without skin	13.3	
	Pound	5.86	1-1/2 oz cooked poultry with skin	17.1	
	Pound	5.01	1-1/2 oz cooked poultry without skin	20.0	
Chicken Parts, fresh or frozen Breast¹⁷ <i>Halves with Ribs With skin (about 6.1 oz each)</i>	Pound	2.62	1 breast half (about 4.0 oz cooked poultry with skin)	38.2	1 lb AP = 0.66 lb cooked, boned, chicken meat with skin
	Pound	2.62	1 breast half (about 3.4 oz cooked poultry without skin)	38.2	1 lb AP = 0.56 lb cooked, boned, chicken meat without skin
	Pound	10.5	1 oz cooked poultry with skin	9.6	
	Pound	8.96	1 oz cooked poultry without skin	11.2	
	Pound	7.04	1-1/2 oz cooked poultry with skin	14.3	
	Pound	5.97	1-1/2 oz cooked poultry without skin	16.8	

¹⁷ If the average raw weights of the chicken parts are different from those stated, use the yield information in Column 6 to determine cooked weight.



Column 5

Purchase Units for 100 Servings

Section 1—Meat/Meat Alternates

1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
Seafood, FISH STICKS, frozen^{34, 38}					
Seafood, frozen Fish Sticks³⁴ <i>Fried breaded (60 percent fish)³¹</i> <i>(Not from minced fish)</i> <i>1 oz stick</i>	Pound	16.0	1 stick (about 0.5 oz cooked fish)	6.3	1 lb AP = 0.49 lb cooked fish
	Pound	8.00	2 sticks (about 1.0 oz cooked fish)	12.5	
	Pound	5.33	3 sticks (about 1.5 oz cooked fish)	18.8	
	Pound	4.00	4 sticks (about 2.0 oz cooked fish)	25.0	
Seafood, frozen Fish Sticks³⁴ <i>Raw breaded (72 percent fish)</i> <i>(Not from minced fish)</i> <i>1 oz stick</i>	Pound	16.0	1 stick (about 0.6 oz cooked fish)	6.3	1 lb AP = 0.56 lb cooked fish
	Pound	8.00	2 sticks (about 1.1 oz cooked fish)	12.5	
	Pound	5.33	3 sticks (about 1.7 oz cooked fish)	18.8	
	Pound	4.00	4 sticks (about 2.2 oz cooked fish)	25.0	
Seafood, MACKEREL, chilled, frozen, or canned					
Seafood, chilled or frozen Mackerel <i>Smoked, Cooked Whole Split With bone With skin</i>	Pound	9.76	1 oz fish without bone or skin	10.3	1 lb AP = 0.61 lb deheaded, skinned, boned, mackerel
	Pound	6.50	1-1/2 oz fish without bone or skin	15.4	

³¹The fish portions and fish sticks provided in this guide are made using compressed fish fillet block (labeled as fish) which provides 0.78 lb cooked fish from 1 lb frozen fish block whereas compressed minced fish (labeled as minced fish) obtains 0.75 lb cooked fish from 1 lb frozen minced fish block.

³⁸Fish Sticks, Frozen, Fried, Breaded is based the National Oceanic and Atmospheric Administration's (NOAA) Fishery Products Inspection Manual 25 Part II Chapter 4, section 06 which specifies that the product must contain a minimum of 60 percent fish.

Section 2—Vegetables/Fruits

1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
APPLES					
Apples, fresh 125-138 count Whole	Pound	14.8	1/4 cup raw, unpeeled fruit (about 1/4 apple)	6.8	1 lb AP – 0.91 lb (3-2/3 cups) ready-to-cook or -serve raw, cored, unpeeled apple
	Pound	3.00	1 baked apple (about 1/2 cup cooked fruit)	33.4	
	Pound	11.4	1/4 cup raw, cored, peeled fruit	8.8	1 lb AP – 0.78 lb (about 2-3/4 cups) ready-to-cook or -serve raw, cored, peeled apple
	Pound	6.80	1/4 cup cored, peeled, cooked, unsweetened fruit	14.8	1 lb AP – 0.78 lb (about 1-3/4 cups) cored, peeled, cooked apple
	Pound	5.80	1/4 cup cooked, sieved unsweetened fruit	17.3	
Apples, fresh 100 count Whole	Pound	15.6	1/4 cup raw, unpeeled fruit (about 1/5 apple)	6.5	1 lb AP – 0.93 lb (about 3-7/8 cups) ready-to-cook or -serve raw, cored, unpeeled apple
Apples, canned Slices Solid pack Includes USDA Commodity	No. 10 can (100 oz)	50.4	1/4 cup fruit and juice	2.0	1 No. 10 can – about 89.0 oz (11-7/8 cups) drained apple
	Pound	8.06	1/4 cup fruit and juice	12.5	
Apples, frozen Sliced, IQF Includes USDA Commodity	Pound	12.7	1/4 cup tempered fruit	7.9	1 lb AP – 0.99 lb (about 3-1/8 cups) tempered ready-to-cook or serve apples
	Pound	8.80	1/4 cup heated fruit	11.4	
Apples, dehydrated Slices or Rings Regular moisture	Pound	21.1	1/4 cup dehydrated fruit	4.8	1 lb AP – about 5-1/4 cups dehydrated apple
	Pound	28.7	1/4 cup cooked fruit	3.5	

Column 6

Additional Information

Food Buying Guide for Child Nutrition Programs

Meat/Meat Alternates

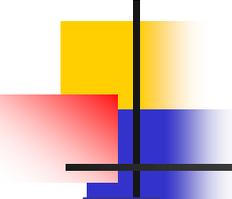
- New Yield Data
 - Ground Buffalo
 - Ostrich Medallions
 - Ham – water added
- Institutional Meat Purchase Specification
- Retains meat/poultry yield data

Section 1 Food Buying Guide for Child Nutrition Programs

1 Meat/Meat Alternates



1-1 Meat and Meat Alternates for the Child Nutrition Programs
1-2 Definitions
1-3 Yields
1-4 Explanation of the Columns
1-5 Yield Data Table for Meat/Meat Alternates



Example 1

Ground Beef

Section 1—Meat/Meat Alternates

1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
BEEF GROUND fresh or frozen^{7, 8} (continued)					
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 26% fat (Like IMPS #136)</i>	Pound	11.5	1 oz cooked lean meat	8.7	1 lb AP = .72 lb cooked, drained lean meat
	Pound	7.68	1-1/2 oz cooked lean meat	13.1	
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 24% fat (Like IMPS #136)</i>	Pound	11.6	1 oz cooked lean meat	8.7	1 lb AP = 0.73 lb cooked, drained lean meat
	Pound	7.78	1-1/2 oz cooked lean meat	12.9	
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 20% fat Includes USDA Commodity (Like IMPS #136)</i>	Pound	11.8	1 oz cooked lean meat	8.5	1 lb AP = 0.74 lb cooked, drained lean meat
	Pound	7.89	1-1/2 oz cooked lean meat	12.7	
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 15% fat (Like IMPS #136)</i>	Pound	12.0	1 oz cooked lean meat	8.4	1 lb AP = 0.75 lb cooked, drained lean meat
	Pound	8.00	1-1/2 oz cooked lean meat	12.5	
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 10% fat (Like IMPS #136)</i>	Pound	12.1	1 oz cooked lean meat	8.3	1 lb AP = 0.76 lb cooked, drained lean meat
	Pound	8.10	1-1/2 oz cooked lean meat	12.4	
BEEF HEART, fresh or frozen					
Beef Heart, fresh or frozen <i>Trimmed</i>	Pound	8.96	1 oz cooked lean meat	11.2	1 lb AP = 0.56 lb cooked, trimmed, lean heart
	Pound	5.97	1-1/2 oz cooked lean meat	16.8	
BEEF KIDNEY, fresh or frozen					
Beef Kidney, fresh or frozen <i>Trimmed</i>	Pound	8.64	1 oz cooked lean meat	11.6	1 lb AP = 0.54 lb cooked kidney
	Pound	5.76	1-1/2 oz cooked lean meat	17.4	

⁷Ground Beef is based on USDA, FSIS standard as published in the Code of Federal Regulations, Title 9, Part 319.15(a) chopped beef, ground beef, but with maximum fat content as listed here.

⁸USDA recommends that the very young, the very old, and those with weakened immune systems not eat undercooked ground beef. To be sure all bacteria are destroyed, cook meat loaf, meat balls, casseroles, hamburgers, and other dishes containing ground beef to the temperature set by your local and State standards and check by using a thermometer.

Section 1—Meat/Meat Alternates

1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
BEEF GROUND fresh or frozen^{7, 8} (continued)					
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 26% fat (Like IMPS #136)</i>	Pound	11.5	1 oz cooked lean meat	8.7	1 lb AP = .72 lb cooked, drained lean meat
	Pound	7.68	1-1/2 oz cooked lean meat	13.1	
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 24% fat (Like IMPS #136)</i>	Pound	11.6	1 oz cooked lean meat	8.7	1 lb AP = 0.73 lb cooked, drained lean meat
	Pound	7.78	1-1/2 oz cooked lean meat	12.9	
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 20% fat Includes USDA Commodity (Like IMPS #136)</i>	Pound	11.8	1 oz cooked lean meat	8.5	1 lb AP = 0.74 lb cooked, drained lean meat
	Pound	7.89	1-1/2 oz cooked lean meat	12.7	
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 15% fat (Like IMPS #136)</i>	Pound	12.0	1 oz cooked lean meat	8.4	1 lb AP = 0.75 lb cooked, drained lean meat
	Pound	8.00	1-1/2 oz cooked lean meat	12.5	
Beef, Ground, fresh or frozen^{7, 8} <i>no more than 10% fat (Like IMPS #136)</i>	Pound	12.1	1 oz cooked lean meat	8.3	1 lb AP = 0.76 lb cooked, drained lean meat
	Pound	8.10	1-1/2 oz cooked lean meat	12.4	
BEEF HEART, fresh or frozen					
Beef Heart, fresh or frozen <i>Trimmed</i>	Pound	8.96	1 oz cooked lean meat	11.2	1 lb AP = 0.56 lb cooked, trimmed, lean heart
	Pound	5.97	1-1/2 oz cooked lean meat	16.8	
BEEF KIDNEY, fresh or frozen					
Beef Kidney, fresh or frozen <i>Trimmed</i>	Pound	8.64	1 oz cooked lean meat	11.6	1 lb AP = 0.54 lb cooked kidney
	Pound	5.76	1-1/2 oz cooked lean meat	17.4	

⁷Ground Beef is based on USDA, FSIS standard as published in the Code of Federal Regulations, Title 9, Part 319.15(a) chopped beef, ground beef, but with maximum fat content as listed here.

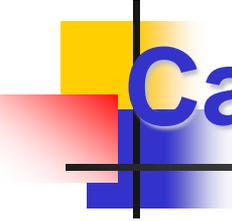
⁸USDA recommends that the very young, the very old, and those with weakened immune systems not eat undercooked ground beef. To be sure all bacteria are destroyed, cook meat loaf, meat balls, casseroles, hamburgers, and other dishes containing ground beef to the temperature set by your local and State standards and check by using a thermometer.

Example 1

Ground Beef

— Need 60 1½ oz servings

- Column 1 reads “ground beef, not more than 20% fat, includes USDA commodity”
- Column 2 reads “pound”
- Column 3 reads “7.89” (servings)
- Column 4 reads “cooked lean meat”

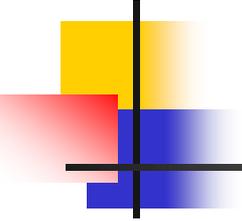


Calculate Amount of Beef for 60

1. Number of servings needed: 60
2. Servings per purchase unit: 7.89
3. $60 \text{ divided by } 7.89 = 7.6$

You will need 7.75 pounds of USDA commodity ground beef, not more than 20% fat to serve 60 1.5 ounce servings of cooked ground beef

Food Buying Guide for Child Nutrition Program

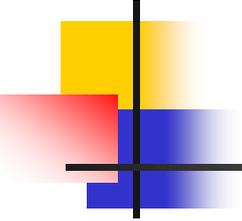


Using Column 5—Purchase Units for 100 Servings

General Rule:

Divide the number of servings needed by 100 and take the answer times the purchase units for 100 for the size serving needed..

e.g. 500 servings divided by 100 equals 5 times 8.5 (servings per 100 for 1 oz.) equals 42.5 pounds.



Food Buying Guide for Child Nutrition Programs

Step by step procedure For Meat Loaf

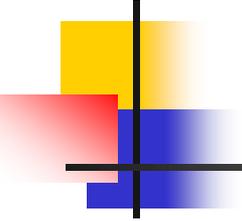
1. Estimate the total number of people in each grade group expected to eat the food item.
2. Multiply the total number of servings expected to be taken by each group by the serving size to determine the amount you need for each group.

Food Buying Guide for Child Nutrition Programs

3. Add the three amounts together to determine the total quantity.

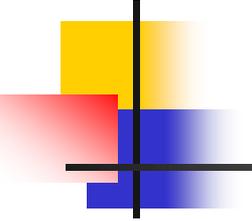
Group	Number	Serving Size	Total
K-3	153	1 ½ oz	= 229.5 oz
4-12	157	2 oz	= 314.0 oz
7-12	15	3 oz	= <u>45.0 oz</u>
Total Quantity			<u>588.5 oz</u>

Food Buying Guide for Child Nutrition Programs



- **4. Determine the purchase unit for 100 servings of the food item according to how it will be served.**

You will need 8.5 pounds of ground beef not more than 20% fat for 100 1-ounce servings of cooked lean meat (see page 1-16)

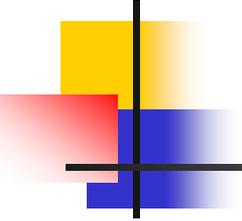


Food Buying Guide for Child Nutrition Programs

- 5. Multiply the total quantity by the purchase unit for 100 servings indicated in column 5 and then divide the answer by 100.

$$588.5 \times 8.5 \text{ Divided by } 100 = 50.02$$

- 6. Round up to at least 50.1 lb. To ensure enough food is purchased.



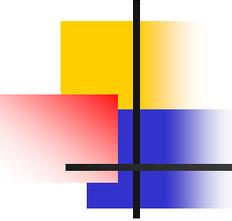
Food buying Guide for Child Nutrition Programs

**You can use the same procedure for
Fruits and Vegetables or Grains
/Breads but remember:**

Meat/Meat Alternate is listed in ounces

Fruits and Vegetables are in 1/4 cup
servings

Grains/Breads is in servings or
equivalents



SUPER SLEUTH



- On what page is Ham with Water Added?
- Where will you find wieners?
- On what page will you find chicken tenders?

Food Buying Guide for Child Nutrition Programs

Vegetables/Fruits

- New Items and Yield Data
 - Baby Carrots
 - Celery Sticks
 - Kiwi
 - Star Fruit
 - Taro
 - Yucca

Section Food Buying Guide for Child Nutrition Programs
2 **Vegetables/
Fruits**



2-1 Requirements
2-2 Crediting of Fruits and Vegetables
2-3 Crediting of Vegetable and Fruit Concentrates
2-4 Factors Affecting Yields
2-4 Definitions
2-4 Products That Do Not Meet Requirements
2-5 Information Included in this Section

Example 2

Using Column 6

Section 2—Vegetables/Fruits

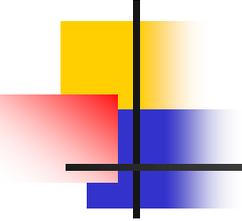
1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
BLUEBERRIES (continued)					
Blueberries, frozen Whole	Pound	7.80	1/4 cup cooked fruit, sugar added	12.9	
Blueberries, frozen Whole Individually-quick-frozen	Pound	11.9	1/4 cup thawed fruit unsweetened	8.5	1 lb AP – 0.91 lb (about 2-7/8 cups) ready-to-serve berries
Blueberries, dehydrated Whole	Pound	12.4	1/4 cup dehydrated fruit	8.1	1 lb AP – 1 lb (about 3 cups) ready-to-serve dried berries
BOKCHYO					
Bokchyo, fresh Whole	Pound	14.4	1/4 cup raw, shredded vegetable	7.0	1 lb AP – 0.77 lb (about 3-1/2 cups) ready-to-serve bokchyo
BOYSENBERRIES (see BLACKBERRIES)					
BREADFRUIT					
Breadfruit, fresh Guatemalan	Pound	5.69	1/4 cup baked, mashed fruit	17.6	1 lb AP – 0.60 lb (about 1-3/8 cup) cooked mashed fruit, 1 breadfruit – about 2.6 lb
BROCCOLI					
Broccoli, fresh Untrimmed	Pound	9.80	1/4 cup raw vegetable spears	10.3	1 lb AP – 0.81 lb ready-to-cook broccoli
	Pound	9.40	1/4 cup cooked, drained vegetable spears	10.7	1 medium spear – about 1/4 cup
	Pound	10.2	1/4 cup cut, cooked, drained vegetable	9.9	
Broccoli, fresh Florets Trimmed Ready-to-use	Pound	28.8	1/4 cup cut, raw vegetable	3.5	1 lb AP – 1 lb (about 7-1/8 cups) ready-to-cook broccoli

Example 2

Using Column 6

Section 2—Vegetables/Fruits					
1 Food As Purchased, AP	2 Purchase Unit	3 Servings per Purchase Unit, EP	4 Serving Size per Meal Contribution	5 Purchase Units for 100 Servings	6 Additional Information
BLUEBERRIES (continued)					
Blueberries, frozen Whole	Pound	7.80	1/4 cup cooked fruit, sugar added	12.9	
Blueberries, frozen Whole Individually-quick-frozen	Pound	11.9	1/4 cup thawed fruit unsweetened	8.5	1 lb AP – 0.91 lb (about 2-7/8 cups) ready-to-serve berries
Blueberries, dehydrated Whole	Pound	12.4	1/4 cup dehydrated fruit	8.1	1 lb AP – 1 lb (about 3 cups) ready-to-serve dried berries
BOKCHYOY					
Bokchoy, fresh Whole	Pound	14.4	1/4 cup raw, shredded vegetable	7.0	1 lb AP – 0.77 lb (about 3-1/2 cups) ready-to-serve bokchoy
BOYSENBERRIES (see BLACKBERRIES)					
BREADFRUIT					
Breadfruit, fresh Guatemalan	Pound	5.69	1/4 cup baked, mashed fruit	17.6	1 lb AP – 0.60 lb (about 1-3/8 cup) cooked mashed fruit, 1 breadfruit – about 2.6 lb
BROCCOLI					
Broccoli, fresh Untrimmed	Pound	9.80	1/4 cup raw vegetable spears	10.3	1 lb AP – 0.81 lb ready-to-cook broccoli
	Pound	9.40	1/4 cup cooked, drained vegetable spears	10.7	1 medium spear – about 1/4 cup
	Pound	10.2	1/4 cup cut, cooked, drained vegetable	9.9	
Broccoli, fresh Florets Trimmed Ready-to-use	Pound	28.8	1/4 cup cut, raw vegetable	3.5	1 lb AP – 1 lb (about 7-1/8 cups) ready-to-cook broccoli

- Step 1: column 6 yield information = 0.81 lb ready-to-cook broccoli (from 1 lb untrimmed broccoli)
- Step 2: 5.62 lb trimmed broccoli needed divided by the yield of 0.81 = 6.93 lb
- Round up to 7 lb



Stir-fry Recipe Calling for 5# 10 oz Broccoli

- 5 # 10 oz broccoli needed
- Use table reference to convert 10 oz to .62 decimal equivalent
- 1 lb AP = 0.81 lb ready to cook (I-36)
- 5.62 divided by 0.81 = 6.93 lb
- Round up to 7 pounds

Food Buying Guide for Child Nutrition Programs

Grains/Breads

- Worksheet to calculate grams of creditable grains pg. 3-13
- Current grains/breads instruction has been incorporated
- Contains product classifications based on the grains/breads instruction (Exhibit A)

Section

3

Food Buying Guide for Child Nutrition Programs

Grains/Breads



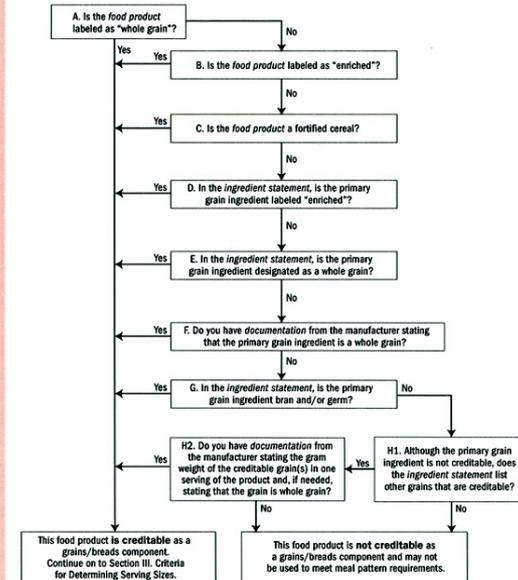
- 3-1 Grains/Breads Component for the Child Nutrition Programs
- 3-1 Definitions
- 3-2 Examples of Foods That Qualify as Grains/Breads
- 3-3 I. Criteria for Determining Acceptable Grains/Breads
- 3-3 II. Steps in Determining Grains/Breads Creditability
- 3-7 Flow Chart for Determining Grains/Breads Creditability
- 3-8 III. Criteria for Determining Serving Sizes
- 3-13 Worksheet for Calculating Grains/Breads Contribution
- 3-15 EXHIBIT A
- 3-17 Factors Affecting Yields

Food Buying Guide for Child Nutrition Programs

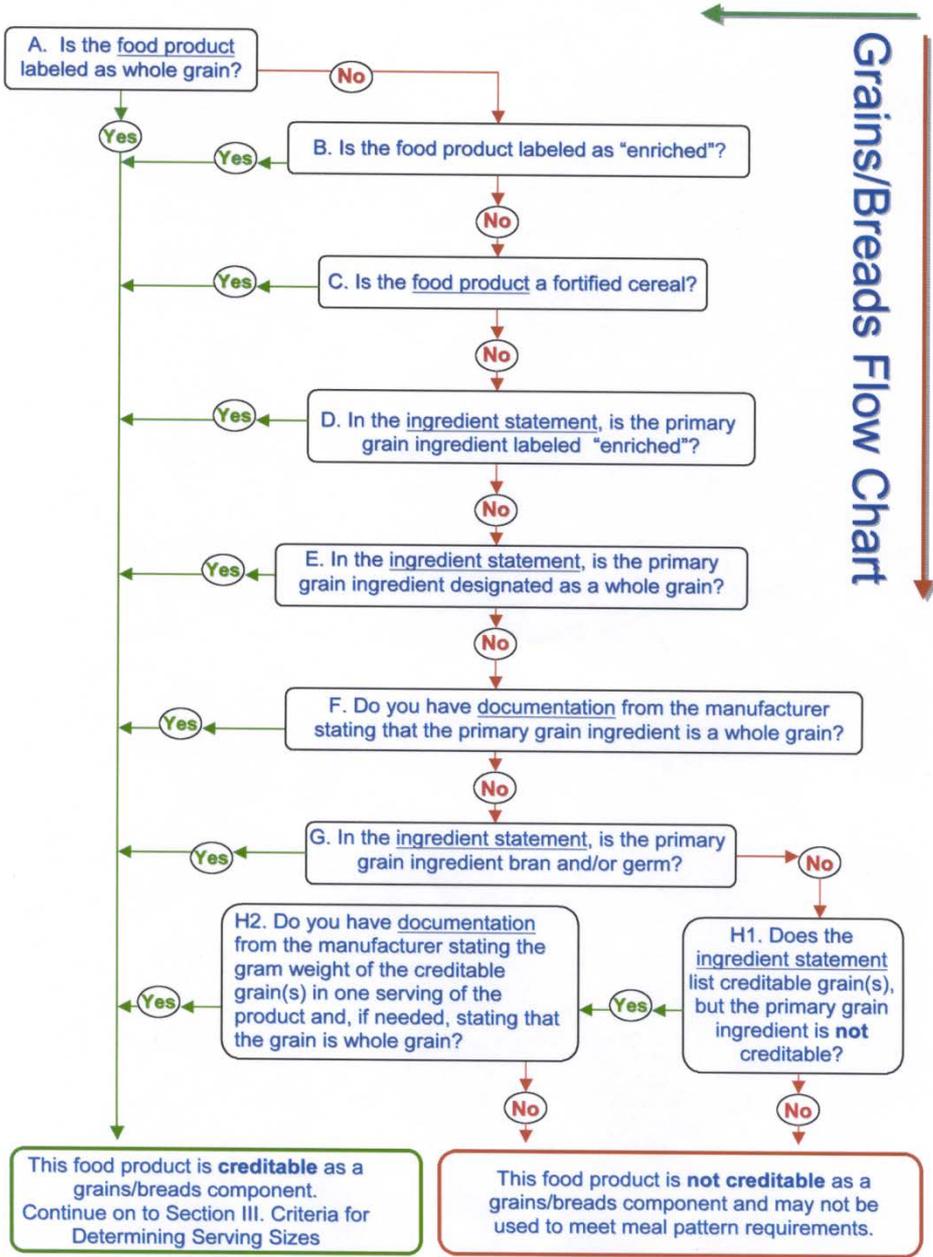
Grains/Breads

- Contains information and a flow chart to assist in determining if a product is creditable pg. 3-7

Flow Chart for Determining Grains/Breads Creditability



Grains/Breads Flow Chart

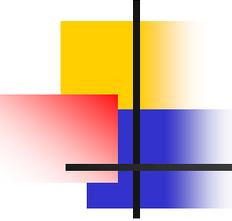


Joe's 7 Grain Bread

Nutrition Facts	
Serving Size 2 oz. (56g)	
Servings Per Container 10	
Amount Per Serving	
Calories 110	Calories from Fat 5
% Daily Value*	
Total Fat 0.5 g	1%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 200mg	8%
Total Carbohydrate 25g	8%
Dietary Fiber 4g	16%
Sugars 2g	
Protein 4g	
Vitamin A 0%	Vitamin C 0%
Calcium 2%	Iron 8%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Ingredients: wheat, oats, rye buckwheat, brown rice, corn, millet, water, wheat bran, sea salt.



Two Methods to Determine Serving Size to Meet Requirements.

1. Use exhibit A of the grains/breads instruction
2. Determine the actual amount of creditable grains contained in the product

Food Buying Guide for Child Nutrition Programs

Milk

- Contains a more complete list of fluid milk available and their updated product names

Section Food Buying Guide for Child Nutrition Programs
4 Milk



4-1 Fluid Milk for the Child Nutrition Programs
4-2 Yield Data Table for Milk

Food Buying Guide for Child Nutrition Programs

Other Foods

- Contains additional food items

Section

Food Buying Guide for Child Nutrition Programs

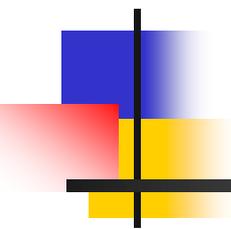
5

Other Foods



5-1 Description of Other Foods

5-2 Yield Data Table for Other Foods



Now-----

Some Real World Activities
using the Food Buying
Guide

Question 1

See page 1-23

16 1 oz. Serving 1#

$380 \div 16 \text{ Students} = 23.75\# \text{ for 1 oz.}$

$x 2 \text{ for 2 oz.}$

$47.50\# \text{ for 2 oz.}$

Each loaf is 5#

$47.50\# \div 5 = 9.5 \text{ loaves (round up to 10 loaves)}$

Remember 160 slices / 5#

$80 \text{ oz.} \div 160 = .5 \text{ (16 oz.} \times 5\# = 80\text{oz.)}$

Each slice is $\frac{1}{2}$ oz.

Question 2

See page 1-61

10.5 servings/1# - 1 oz. each

$$400 \div 10.5 = \underline{38.095} \# - 1 \text{ oz. servings}$$

x 2

76.190 # to make 2oz. servings

$$77\# \div 40\# \text{ cases} = 1.925 \text{ cases}$$

Round up to 2 cases

Consider how accurate are my servers?
How stable is the number served daily?

Question 3

See section 1 page 49
Pork, Mild Cured

13.1 – 1oz. Servings/1#

350 students ÷ 13.1oz. = 26.717 # to serve 1oz.

 x2

53.434# to serve 2oz.

(Round up to 54#)

1oz. Serving weighs 1.22oz.

2oz. Serving weighs 2.44 oz.

PFF (Protein Fat Free) see page 1-3

Question 4

Page 1- 63, Section 1

1oz. Weighs 1.7oz.

$1.7\text{oz} \times 2 = 3.4\text{oz.}$ for 2oz. serving.

Less servings / #

13.1 – 1oz. servings/ # - pork, mild Cured

9.41 – 1oz. Turkey ham, cooked, chilled or frozen

1# AP (As Purchased) = .59# cooked turkey ham

Question 5

Page 1-16

500 students \div 11.8 = 43.37 1oz servings

x2

84.74# (round up to 85#)

85# \div 40# cases = 2.125 cases

(round up to 3 cases)

85# = 8.5 10# rolls

5# ground beef

 x.74

3.7# weight after cooking

Question 6

See page 2-15

45.3 ¼ cup servings / #10 can

$250 \div 45.3 = 5.518$ cans - #10 – serve ¼ cup

 x2

11.036 #10 cans to serve ½ cup

(Round up to 12 cans)

Remember, serving for vegetables consider that the liquid is drained.

Question 7

See pages 2-36

#10 cans = 39.6 $\frac{1}{4}$ c. servings

$150 \div 39.6 = 3.7878$ #10 cans for $\frac{1}{4}$ cup

x3

11.363 #10 cans

(Round up to 12 #10 cans)

1# frozen corn = 11 $\frac{1}{4}$ c. servings

$150 \div 11 = 13.63$ # for $\frac{1}{4}$ cup serving

$13.63 \times 3 = 40.89$ # for $\frac{3}{4}$ cup---round up to 41#

Question 8

See pages 2-46

Cleaned and cored

29.2 ¼ cups/ # lettuce

$125 \div 29.2 = 4.28\# \text{ } \frac{1}{4} \text{ cup}$

$\frac{x2}{8.56\# \text{ } \frac{1}{2} \text{ cup (round up to 9\#)}}$

Fresh untrimmed

22.2 ¼ cups/ #

$125 \div 22.2 = 5.63\# \text{ } \frac{1}{4} \text{ cup}$

$\frac{x2}{11.26\# \text{ } \frac{1}{2} \text{ cup (round up to 12\#)}}$

Consider price and labor costs when comparing products to buy.

Question 9

Pages 2-55

50 ¼ cups fruit and juice in # 10 can

$150 \div 50 = 3$ #10 cans – to serve ¼ cup

 x2

6 #10 cans to serve ½ cup

36.1 ¼ cups drained fruit in #10 can

$150 \div 36.1 = 4.155$ #10 cans ¼ cup

 x2

8.31 #10 cans serve ½ cup

(round up to 9 #10 cans)

Consider when draining fruit you reduce the number of servings per container and all that nutrition is lost also.

Question 10

33.8 ¼ cup servings / # of pasta page 3-28

$275 \div 33.8 = 8.136\# - \frac{1}{4}$ cup serving

 x3
24.408# $\frac{3}{4}$ cup serving

(round up to 25#)

20#/case

$25 \div 20\# = 1.25$ cases should be on hand

1 case plus 5#

$20\# \times .25 = 5\#$

00237 – SWEET ROLL, HOMEMADE: R-7

LOCAL

PORTION: 1 EACH

QUANTITY: 500

INGREDIENTS	
FLOUR, ALL PURPOSE WHITE, ENRICHED, BLEACHED	50 LBS
MILK, DRY, NON FAT POWDER, W/O VITAMIN A ADDED	2 QUARTS + 2 ½ CUPS
SALT, TABLE	9 TBSP
YEAST, SAF-INSTANT, DRY	2 ½ CUPS
SUGAR, GRANULATED	6 ¾ CUPS
OIL, SALAD, TYPE B	3 QUARTS + 1 ½ CUPS
WATER, WARM	9 QUARTS
MARGARINE, LIQUID, SOYBEAN (HYDR®) AND CTTNSD	5 LBS
CINNAMON, GROUND	6 CUPS
SUGAR, GRANULATED	45 LBS
MARGARINE, LIQUID, SOYBEAN (HYDR®) AND CTTNSD	2 ¼ LBS
MILK 2% LOWFAT	6-1/2 PINT CARTONS
VANILLA EXTRACT	12 TBSP
SUGAR, POWDERED	12 LBS

INSTRUCTIONS

MIX FIRST LIST OF INGREDIENTS.

BRUSH MARGARINE FROM SECOND LIST ON TO DOUGH.

SPRINKLE CINNAMON AND SUGAR FROM SECOND LIST ON DOUGH.

THIRD LIST IS FOR THE ICING.

NUTRIENTS: PER 1 EACH

Calories	493	Iron	2.68 Mg	Protein	6.27 g	Percent of Calories from	→Protein	5.08%
Cholesterol	0 Mg	Calcium	63 Mg	Carbohydrate	91.77 g		→Carbohydrates	74.46%
Sodium	194 Mg	Vitamin A	67 RE	Total Fat	11.79 g		→Total Fat	21.53%
Fiber	3.15 g	Vitamin C	3.9Mg	Saturated Fat	1.81 g		→Saturated Fat	3.32%

Questions to ask

1. What is the creditable grain?
2. How many grams?
3. Divide grams by number of servings.
4. Round down to nearest $\frac{1}{4}$ serving.

CALCULATING THE GRAINS CONTRIBUTION IN GRAINS/BREADS CREDITING

Recipe Number	Recipe Name	Ingredients per 500 Servings	Quantity of Grains given in pounds	x grams (454 per lb)
		Flour, all purpose white	50 lbs.	22,700 g.
		Calculations	Flour: 22,700 g. ÷ 14.75 g = Servings of flour per 500 1538.9 ÷ 500 servings = 3.077 servings of Grains/Breads per roll. Round down to the nearest servings:	

Expected contribution of flour per servings: 14.75 g

1 roll provides 3 serving(s) of grains/breads



PLEASE !

Leave the books for the next class. You may order extra cd's for your school.