

B Appendix

Using Column 6 of the Food Buying Guide Yield Tables

Column 6 of the Food Buying Guide (FBG) Yield Tables provide information to help you plan menus, make purchasing decisions, and ensure prepared meals meet Child Nutrition Programs meal pattern requirements. Below are practical ways the information in Column 6 can be utilized.

A. Determine the amount of food to purchase.

Column 6 provides the quantity of ready-to-cook or cooked food provided in the “As Purchased” (AP) form of the food. This information is used to calculate the amount of food the Child Nutrition Program operator needs to purchase and/or prepare based on specific yield information. See the examples below:

EXAMPLE: A recipe contains 2 pounds of fresh, diced watermelon. Use the information in Column 6 to determine the amount of fresh, whole watermelon to purchase, as follows:

Section 3 - 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
WATERMELON					
Watermelon, fresh ⁹ <i>Whole</i>	Pound	6.10	1/4 cup diced fruit without rind	16.40	1 lb AP = 0.61 lb (about 1-1/2 cups) ready-to-serve raw, 1/2-inch diced watermelon without rind

The information in Column 6 indicates 1 lb of whole, fresh watermelon as purchased yields 0.61 lb ready-to-serve, raw, 1/2 inch pieces, diced, without rind.

Divide 2 lb by 0.61 lb

$$2 \div 0.61 = 3.28 \text{ lb}$$

To ensure enough food is purchased, round up to 3.5 lb.

Therefore, you will purchase 3.5 lb of fresh, whole watermelon to yield the 2 lb of raw watermelon, 1/2 inch pieces, diced, without rind needed for the recipe.

EXAMPLE: A recipe contains 4.5 lb of raw, cored, peeled apples. To determine the amount of fresh, whole, 125-138 count apples to purchase, use the information in Column 6 as follows:

Section 3 - 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, <i>Includes USDA Foods</i>	Pound	11.40	1/4 cup raw, cored, peeled fruit	8.80	1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples

The information in Column 6 indicates that 1 lb of fresh, whole, 125-138 count apples yields 0.78 lb of raw, cored, peeled, ready-to-cook or -serve apples.

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Divide 4.5 lb by 0.78 lb

$$4.5 \div 0.78 = 5.76 \text{ lb}$$

To ensure enough food is purchased, round up to 6.0 lb.

Therefore, you will purchase 6 lb of fresh, whole, 125-138 count apples to yield the 4.5 lb of raw, cored, peeled, ready-to-serve apples needed for the recipe.

EXAMPLE: A recipe contains 5 lb 10 oz of fresh, ready-to-cook broccoli. To determine the amount of fresh whole broccoli to purchase, use the information in Column 6 as follows:

Section 2 - Vegetables					
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
BROCCOLI					
Broccoli, fresh <i>Untrimmed</i>	Pound	9.80	1/4 cup raw vegetable spears	10.30	1 lb AP = 0.81 lb ready-to-cook broccoli

The information provided in Column 6 indicates that 1 lb of fresh, untrimmed broccoli provides 0.81 lb ready-to-cook broccoli.

Change the 5 lb 10 oz to the decimal equivalent (5.62 lb).

Divide 5.62 lb by 0.81 lb

$$5.62 \div 0.81 = 6.93 \text{ lb}$$

To ensure enough food is purchased, round up to 7.0 lb.

Therefore, purchase 7 lb of fresh, untrimmed, broccoli to yield 5 lb 10 oz of ready-to-cook broccoli needed for the recipe.

EXAMPLE: To determine the amount of tuna provided in a 20 oz can, use the information in Column 6 as follows:

Section 1 - Meats/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, TUNA, canned					
Seafood, canned, Tuna <i>Grated or Flake</i>	60 oz Can	55.00	1 oz drained tuna	1.90	60 oz can = about 55.0 oz drained tuna

Column 6 only provides the yield of drained, grated or flaked tuna from a 60 oz can. Use this information to determine the yield of drained, grated or flaked tuna in a 20 oz can.

Divide 20 oz can by 60 oz can.

$$20 \div 60 = 0.33 \text{ oz}$$

Multiply by the yield of drained tuna from a 60 oz can.

$$0.33 \times 55 = 18.15 \text{ oz}$$

Therefore, there are 18.15 oz of drained, grated or flaked tuna in a 20 oz can.

B. Determine the weight of a serving in cups.

Column 6 provides the weight and/or number of cups in a can of vegetable or fruit that is drained (unheated and/or heated). Use this information to determine the weight of a serving in cups.

EXAMPLE: To determine the weight of a 1/2 cup of heated and drained black-eyed peas, use the information in Column 6 as follows:

Section 1 - Meats/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
BEANS, BLACK-EYED (or PEAS)					
Beans, Black-eyed (or Peas), dry, canned <i>Whole, Includes USDA Foods</i>	No. 10 Can (108 oz)	37.70	1/4 cup heated, drained beans	2.70	1 No. 10 can = about 65.0 oz (9-3/8 cups) heated, drained beans; 1 No. 10 can = about 78.5 oz (11-1/2 cups) drained, unheated beans

The information provided in Column 6 indicates that the drained, heated black-eyed peas from a No. 10 can (108 oz) provide about 65 oz (9-3/8 cups).

Change the cup measure (9-3/8 cups) into a decimal equivalent (9.375 cups).

Then divide the drained weight (65 oz) by 9.375 cups.

$$65 \div 9.375 = 6.93 \text{ oz}$$

The estimated weight of 1 cup is 6.93 oz. To determine the weight of 1/2 cup, divide by 2.

$$6.93 \text{ oz} \div 2 = 3.47 \text{ oz}$$

Therefore, 1/2 cup of heated and drained black-eyed peas weighs about 3.47 oz.

C. Determine the quantity of servings in can sizes NOT listed in FBG.

EXAMPLE: To determine the quantity of 1/4 cup servings in a 16 oz can of black-eyed peas, as purchased (AP), that are heated, drained, use the information in Column 6 as follows:

Section 1 - Meats/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
BEANS, BLACK-EYED (or PEAS)					
Beans, Black-eyed (or Peas), dry, canned <i>Whole, Includes USDA Foods</i>	No. 10 Can (108 oz)	37.70	1/4 cup heated, drained beans	2.70	1 No. 10 can = about 65.0 oz (9-3/8 cups) heated, drained beans; 1 No. 10 can = about 78.5 oz (11-1/2 cups) drained, unheated beans

The information provided in Column 6 indicates that the contents of a No. 10 can (108 oz) provides about 65 oz (9-3/8 cups) of heated and drained black-eyed peas. Change the cup measure (9-3/8 cups) into a decimal equivalent (9.375 cups).

Multiply the 9.375 cups by 16 oz.

$$16 \times 9.375 = 150$$

Then divide by the weight of the No. 10 can (108 oz) to determine the number of cups in a 16 oz can.

$$150 \div 108 = 1.38$$

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When the contents of a 16 oz can of black-eyed peas have been heated and drained, it provides 1.38 cups.

To determine a number of 1/4 cups, multiply 1.38 by 4.

$$1.38 \times 4 = 5.52 \text{ } 1/4 \text{ cups}$$

Therefore, a 16 oz can of black-eyed peas provides 5.52 1/4 cup servings of heated, drained black-eyed peas.

D. Determine the amount of raw meat or seafood to purchase to allow for loss (moisture and fat) that occurs during cooking.

EXAMPLE: To determine the amount of raw, ground beef, not more than 15% fat, required to provide 100 lb of cooked lean meat, use the information in Column 6 as follows:

Section 1 - Meats/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					
Beef, Ground, fresh or frozen ^{9,10} <i>no more than 15% fat, (Like IMPS #136)</i>	Pound	12.00	1 oz cooked lean meat	8.40	1 lb AP = 0.75 lb cooked, drained, lean meat

The information provided in Column 6 indicates 1 lb of fresh or frozen ground beef, no more than 15% fat as purchased, provides 0.75 lb of cooked, drained lean meat.

Divide the cooked meat by the yield from Column 6.

$$100 \div 0.75 = 133.33 \text{ lb}$$

To ensure enough food is purchased, round up to 134 lb.

Therefore, you will purchase 134 lb of ground beef (no more than 15% fat) to yield the 100 lb of cooked, lean meat for the recipe.

EXAMPLE: To determine the amount of raw flounder necessary to yield 6 lb 6 oz of cooked flounder, use the information in Column 6 as follows:

Section 1 - Meats/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 FILLETS and STEAKS, fresh or frozen					
Seafood, fresh or frozen, Fish Fillets	Pound	11.20	1 oz cooked fish	9.00	1 lb AP = 0.70 lb cooked fish
	Pound	7.46	1-1/2 oz cooked fish	13.50	1 lb AP = 0.70 lb cooked fish

The information provided in Column 6 indicates that 1 lb of fresh or frozen fish fillets as purchased, provides 0.70 lb of cooked fish.

Divide the cooked quantity by the yield from Column 6.

$$6.375 \div 0.70 = 9.1 \text{ lb}$$

To ensure enough food is purchased, round up to 10 lb.

Therefore, purchase 10 lb of fresh or frozen flounder fillets to yield the 6 lb 6 oz of cooked flounder needed for the recipe.

E. Determine the number of cups of dried grains required to yield a specific number of servings of cooked grains.

EXAMPLE: To determine the number of cups of dry, rolled, regular oats needed to provide 22 1/4 cup cooked servings, use the information in Column 6 as follows:

Section 4 - Grains					
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
CEREAL GRAINS (continued)					
Cereal Grains Oats (Group H) <i>Rolled, Regular, Dry, Includes USDA Foods</i>	Pound	45.40	1/4 cup cooked	2.20	1 lb dry = about 6 cups dry regular rolled oats

The information provided in Column 6 indicates that 1 lb dry = about 6 cups of dry, regular rolled oats. Multiply the number of cups from Column 6 by the desired number of cooked servings.

$$6 \text{ cups} \times 22 \frac{1}{4} \text{ cup cooked servings} = 132$$

Next, divide 132 by 45.4 (the number of 1/4 cup cooked servings per pound of oats, rolled, regular, dry as listed in Column 3).

Note: pound is the purchase unit for dry oats.

$$132 \div 45.4 = 2.9 \text{ cups}$$

To ensure enough food is available, round up to 3 cups.

Therefore, 3 cups of dry, rolled, regular oats yield 22 1/4 cup servings of cooked oats.

F. Determine the yield from cups of dried grains.

EXAMPLE: A recipe calls for 10 cups of dry brown rice. To determine the number of 1/2 cup cooked servings of brown, long grain, parboiled dry rice that the recipe will yield, use the information in Column 6 as follows:

Section 4 - Grains					
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
RICE (continued)					
Rice (Group H) <i>Brown, Long grain, Parboiled, Dry</i>	Pound	15.50	1/2 cup cooked	6.50	1 lb dry = about 2-1/8 cups dry brown rice; 1 lb dry = about 7-3/4 cups cooked; 1 cup dry = about 3-5/8 cups cooked

The information in Column 6 indicates that 1 lb dry = about 2-1/8 cups of brown, long grain, parboiled dry rice. Change the cup measure (2-1/8 cups) into a decimal equivalent (2.125 cups).

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Divide 10 cups by 2.125

$$10 \div 2.125 = 4.7 \text{ lb}$$

Multiply 4.7 lb by 15.5 (the number of 1/2 cup cooked servings per pound of brown, long grain, parboiled dry rice as listed in Column 3)

NOTE: pound is the purchase unit for dry brown rice.

$$4.7 \text{ lb} \times 15.5 = 72.85 \text{ 1/2 cup servings of cooked rice}$$

Therefore 10 cups of brown, long grain, parboiled dry rice yields 72.85 1/2 cup servings of cooked rice.

G. Points to Remember

Do not use Column 6 when the recipe ingredient is put into the recipe in the same form as the “As Purchased” unit in Column 2 of the FBG. See examples below:

1. A recipe calls for 1 lb of sliced frozen strawberries and 1 lb of either ready to use (RTU) or individually quick frozen (IQF) strawberries is purchased. There are no additional calculations needed to determine the quantity of frozen strawberries to purchase because the strawberries were purchased in the same form as used in the recipe.
2. A recipe calls for 1 lb of frozen broccoli florets and 1 lb of either RTU or IQF broccoli florets are purchased. There are no additional calculations needed to determine the quantity of frozen broccoli to purchase because the broccoli was purchased in the same form it is used in the recipe.
3. A recipe calls for 1 lb of cooked, diced chicken and 1 lb of cooked, diced chicken is purchased for this recipe. Because the chicken is purchased in the form it is used in the recipe (“As Purchased” form), there is no preparation yield (food loss) and thus the amount to purchase is based on the quantity of the ingredient as listed in the recipe.

For additional opportunities to practice using Column 6, please refer to the “Methods Used to Determine Quantity” section beginning on page I-37.