

Crediting Local Beef for the Child Nutrition Programs

Using local beef from nearby farms has many benefits to students, school meals, and the local economy. However, it can be difficult to include local beef in the USDA Child Nutrition Programs because it may not have crediting information. When you cook raw beef, it loses some weight. Only the weight of the beef after cooking counts towards the USDA meal pattern requirements.

Use this step-by-step guide to determine the creditable amount of raw beef after cooking. This information also can be used to find how much raw product to purchase for a desired number of creditable, cooked servings.

Step 1: Access the USDA Food Buying Guide Interactive Web-based Tool.

Navigate to: <https://www.fns.usda.gov/tn/food-buying-guide-interactive-web-based-tool>. Create a free user profile or continue as a guest user.

Step 2: On the USDA Food Buying Guide homepage, select “Food Items Search.”

WELCOME TO THE FOOD BUYING GUIDE

The Interactive Food Buying Guide allows for easy display, search, and navigation of food yield information. In addition, users can compare yield information, create a favorite foods list, and access tools, such as the Recipe Analysis Workbook (RAW) and the Product Formulation Statement Workbook.



 Food Items Search	Food Item Favorites	Download Food Buying Guide
Exhibit A Grains Tool	FBG Calculator	Recipe Analysis Workbook (RAW)


MEATS/MEAT ALTERNATES FRUITS MILK

Step 3: Search for the food item under “Search Food Items.”

On the lefthand side of the page, in the box, “Keywords,” type the name of the food item. The other fields under “Search Food Items” may be left blank. Click “Search.” If the food item does not appear after searching, try different ways of entering the name of the food item.


Search Food Items

Program - Meal:

Keywords: 

Meal Component:

Category:



Step 4: Under “Search Results,” choose the entry that best matches the food item that will be served.

Pay special attention to the “**Food As Purchased, AP**” column. Using ground beef as an example, notice there are different fat contents for the beef (i.e., no more than 30% fat, no more than 26% fat, etc.). The higher the fat content, the lower the overall yield of creditable product. Narrow down the search by finding the fat content of your product.

Secondly, use the “**Serving Size per Meal Contribution**” column which is the creditable serving size you plan/want to serve to students. Notice that the only two options are 1.0 oz and 1-1/2 oz. If you plan to serve students 2.0 oz cooked, creditable meat then select the 1.0 oz option.

Search Results

Meal Component	Category / Subcategory	 Food As Purchased, AP	Purchase Unit	Servings per Purchase Unit, EP	 Serving Size per Meal Contribution
Meats/Meat Alternates	Beef and Beef Products BEEF, GROUND, fresh or frozen	Beef, Ground, fresh or frozen <i>Market Style[®], no more than 30% fat, (Like IMPS #136)</i> <i>Footnote</i>	Pound	11.20	1 oz cooked lean meat
Meats/Meat Alternates	Beef and Beef Products BEEF, GROUND, fresh or frozen	Beef, Ground, fresh or frozen <i>Market Style[®], no more than 30% fat, (Like IMPS #136)</i> <i>Footnote</i>	Pound	7.46	1-1/2 oz cooked lean meat
Meats/Meat Alternates	Beef and Beef Products BEEF, GROUND, fresh or frozen	Beef, Ground, fresh or frozen[®] <i>no more than 26% fat, (Like IMPS #136)</i> <i>Footnote</i>	Pound	11.50	1 oz cooked lean meat

Step 5: Expand product details from the blue hyperlink.

Click the blue hyperlinked words in the “**Food As Purchased, AP**” column that best match the food item’s description. When you click the blue hyperlink, an expanded “**Food Item Details**” screen will open. The “**Servings per Purchase Unit, EP**” (EP= Edible Portion) row shows how many ounces of creditable product come from 1 lb. of unprocessed product. In the ground beef example, 1 lb., or 16 ounces, of an 80/20 ground beef product will yield 11.8 ounces of cooked ground beef. The “**Additional Information**” row provides the same information in a different way. The “Additional



Information” row shows that 1 lb. of raw ground beef, As Purchased will yield 0.74 lb. of cooked, drained, lean meat. To convert to ounces, multiply 0.74 lb. by 16 ounces per lb. which is 11.8 ounces.

$$1 \text{ lb raw ground beef} \times 0.74 \text{ lb yield} = 0.74 \text{ lb cooked, lean meat}$$

$$0.74 \text{ lb cooked lean meat} \times 16 \text{ oz per lb} = 11.8 \text{ oz cooked lean meat}$$

*Please note that Servings per Purchase Unit or yield is different depending on the original fat content of the meat. For instance, a 70/30 ground beef will yield LESS than the 80/20 example while a 90/10 ground beef will yield MORE than the 80/20 example. The higher the fat content the less creditable cooked meat.

Food Item Details

Meal Component	Meats/Meat Alternates
Category	Beef and Beef Products
Subcategory	BEEF, GROUND, fresh or frozen
Food As Purchased, AP	Beef, Ground, fresh or frozen^{9,10} <i>no more than 20% fat, Includes USDA Foods, (Like IMPS #136)</i>
Purchase Unit	Pound
Servings per Purchase Unit, EP	11.80 
Serving Size per Meal Contribution	1 oz cooked lean meat
Purchase Units for 100 Servings	8.50
Additional Information	1 lb AP = 0.74 lb cooked, drained, lean meat 

Step 6: Set-up a cross-multiplication equation using the desired serving size.

Using the Food Buying Guide (FBG) entry for 80/20 ground beef, we know that from 1 lb. or 16 oz. of raw beef we will yield 11.8 oz. after cooking. Set-up a cross multiplication problem, including the known information on the left and what you want to know on the right. Make sure the cooked weight amounts are directly across from each other, as well as the raw weights. The top and bottom of each equation will have the same units.

If our desired cooked weight is 2.0 oz. per portion (same as 2.0 oz eq. meat/meat alternate), the equation will look like this:

$$\frac{11.8 \text{ oz (cooked weight)}}{16.0 \text{ oz (raw weight)}} = \frac{2.0 \text{ ounces (desired cooked weight)}}{x \text{ (unknown raw weight)}}$$

11.8 oz is the EP (edible portion) per purchase unit which is 1 lb. or 16 oz. (from the Food Item Details)

Step 7: Solve by cross-multiplying and dividing by “x”.

First multiply 16 by 2. This is 32.

$$\frac{11.8 \text{ oz (cooked weight)}}{16.0 \text{ oz (raw weight)}} = \frac{2.0 \text{ ounces (desired cooked weight)}}{x \text{ (unknown raw weight)}}$$

Next, divide by the remaining number, 11.8 oz.

32 divided by 11.8 oz = 2.7 oz raw weight.

2.7 oz of 80/20 ground beef will yield a 2.0 oz eq. cooked portion.

Determining Raw to Cooked Weight

Now, let's use an example of a recipe with a raw meat amount. How do we determine how many oz. eq. of cooked meat is in one serving? For example, a school makes a ground beef lasagna for 100 students. The recipe calls for 18 lbs. of 80/20 raw, ground beef. How many ounces of cooked beef are in one serving of lasagna?

Step 1: Determine the yield of cooked meat from 1 lb. of raw, ground beef.

Using the previous FBG entry information for 80/20 ground beef, we know that 1 lb. of raw 80/20 ground beef yields 11.8 oz cooked beef. In other words, 1 lb. yields 0.74 lb. cooked meat.

Step 2: Set-up a cross multiplication problem.

Set-up a cross multiplication problem, including the known information on the left and what you want to know on the right. Make sure the units match in the equation (i.e., all in lbs. or all in ounces). Cooked weight amounts should be directly across from each other, as well as the raw weight amounts.

$$\frac{0.74 \text{ lb. (cooked weight)}}{1 \text{ lb. (raw weight)}} = \frac{x \text{ (unknown cooked weight)}}{18 \text{ lb. (total raw weight)}}$$

0.74 lb. is the EP (edible portion) per purchase unit which is 1 lb. (from the FBG)

Step 3: Solve by cross-multiplying and dividing by “x.”

Solve the equation by cross-multiplying and dividing to get "x" by itself.

$$\frac{0.74 \text{ lb. (cooked weight)}}{1 \text{ lb. (raw weight)}} = \frac{x \text{ (unknown cooked weight)}}{18 \text{ lb. (total raw weight)}}$$

$$13.32 \text{ lbs.} = 1x$$

13.32 lb. is the cooked weight from 18 lbs. raw, ground 80/20 beef.

Step 4: Convert the total creditable amount in the recipe to a single serving.

First, convert 13.32 lbs. of cooked beef from lbs. to ounces. Multiply 13.32 lbs. by 16 ounces in 1 lb. to get 213.12 oz.

With the total weight in ounces, divide the total weight by the number of servings (100) in the recipe. $213.12 \text{ oz}/100 \text{ servings} = 2.13 \text{ oz eq./serving}$, which should be rounded down to **2.0 oz eq. per serving**.

Questions?

Contact DPIF2S@dpi.wi.gov