Using the online USDA, ARS National Nutrient Database for Standard Reference to Convert Nutrient Values per Portion Size of Breakfast Cereals

Steps for obtaining nutrient data for breakfast cereals using the online USDA, Agricultural Research Service (ARS) National Nutrient Database for Standard Reference:


2) Using the search function, type in the key word “cereals” to pull up all of the cereal selections or enter in a specific cereal you are looking for then click “submit.”

3) Choose one cereal by clicking on the button to the left of the product you wish to select (the button will be filled in to show that you have made a selection). Only one selection is permitted. If you want data for a ready-to-cook cereal, make sure you select the cereal option described as dry, e.g.: cereals, oats, dry. Click on “submit” which is located at the bottom of the product list.

4) Select the quantities and units you want data for and click submit (one or more selections are permitted):
   a. Ready-to-eat cereals
      
      You will need to select both 1 oz and 3/4 cup measures to determine which serving size weighs less. (If volume data is not available, use the manual conversion method shown in attachments B and C.)

      i. Review nutrient data for one ounce (28.35 grams) of cereal:
         Select 100 grams as the description, Change 1.00 (100 grams) to 0.2835 (100 grams), and

      ii. Review the nutrient data for 3/4 cup (0.75 cup) of cereal:
          Select the description measured in cups, The volume unit may be different depending on the cereal, If the unit is 1.00 (.75 cup), keep as 1.00 (.75 cup), If the unit is 1.00 (1 cup), change to 0.75 (1 cup), If the unit is 1.00 (.5 cup), change to 1.5 (.5 cup) If the unit is 1.00 (? cup), you will need to determine what number or fraction 3/4 cup is of the unit provided in parentheses and change 1.00 to the number or fraction required to obtain 3/4 cup

      iii. Click “submit”
b. Ready-to-cook cereals, dry

   i. Review the nutrient data for 25 grams of dry cereal:
      Select 100 grams as the description
      Change 1.00 (100 grams) to 0.25 (100 grams),
      Make sure this option is selected.

   ii. Click “submit”

5) Compare the nutrient profile provided for the cereal to the FNS Nutrient Criteria for Breakfast Cereals.

a. Ready-to-eat cereals:

   The nutrient profile will show the amounts for 28.35 grams (1 ounce) and for 3/4 cup. The gram weight for 3/4 cup will appear in the heading. Since cereals are credited 1 ounce or 3/4 cup whichever amount weighs less, choose the column having the lowest gram weight and use that column of nutrients to compare to the FNS Nutrient Criteria for Breakfast Cereals. To be creditable, the cereal must meet or exceed the minimum criteria for all five of the required nutrients.

b. Ready-to-Cook cereals, dry:

   Since the portion size for ready-to-cook cereals is 25 grams dry, all cooked cereals will be based on 25 grams dry, regardless of the amount of cooked cereal served in the meal or how much liquid is added to cook the cereal. Compare the nutrient values to the FNS Nutrient Criteria for Breakfast Cereals. To be creditable, the cereal must meet or exceed the minimum criteria for all five of the required nutrients.

6) Print the documentation and keep on file.
Manual Conversion for Nutrients per Portion of a Ready-to-Eat Breakfast Cereal

Ready-to-Eat Cereals: Cereal portion size from the FNS Nutrient Criteria for Breakfast Cereals = 1.0 ounce (28.35 grams) or the weight of 3/4 cup – whichever amount weighs less:

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Cereal Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The portion size of the ready-to-eat cereal on Nutrition Facts Label: _____ cup(s) _____ grams

2. Determine the weight of 3/4 cup of the cereal:
   0.75 cup divided by _____ cup(s) of cereal from Nutrition Facts Label = _____ factor
   _____ factor multiplied by _____ grams / portion from Nutrition Facts Label = _____ grams per 3/4 cup cereal

3. Which weighs less, One Ounce (28.35 grams) or _____ grams per 3/4 cup of cereal?
The amount that weighs less = _____ grams; the nutrients in this amount of cereal will be used to compare to the FNS Criteria for Breakfast Cereals.

4. Determine the conversion factor based on the amount of ready-to-eat cereal that weighs less (Do not round up):
   _____ grams (amount that weighs less) divided by _____ grams (from Nutrition Facts Label) = _____ conversion factor for nutrients

5. Calculate the nutrients from the Nutrition Facts Label to the nutrients in the amount that weighs less by multiplying by the conversion factor for nutrients:

<table>
<thead>
<tr>
<th>A. Nutrient</th>
<th>B. % DV from Nutrition Facts Label</th>
<th>C. Conversion Factor for Nutrients</th>
<th>D. Nutrients per Amount that Weighs less</th>
<th>E. FNS Nutrient Criteria For Breakfast Cereals</th>
<th>F. Is the Amount in Column D Equal to or Greater than the Amount in Column E? Yes or No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiamin (B1)</td>
<td>x</td>
<td>=</td>
<td>6.7 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riboflavin (B2)</td>
<td>x</td>
<td>=</td>
<td>3.5 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niacin (B3)</td>
<td>x</td>
<td>=</td>
<td>4.2 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Folic Acid (B9)</td>
<td>x</td>
<td>=</td>
<td>5.0 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>x</td>
<td>=</td>
<td>3.9 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. _____ All of the answers in Column F are “yes,” the cereal is creditable using this option
   _____ One or more of the answers in column F are “no,” the cereal is not creditable using this option

(Keep in mind that cereals meeting the requirements allowed in the Grains/Breads Instruction or FBG flowchart are creditable even if they do not meet the FNS Nutrient Criteria for Breakfast Cereals.)
Manual Conversion for Nutrients per Portion of a Ready-to-Eat Breakfast Cereal – EXAMPLE

**Ready-to-Eat Cereals:** Cereal portion size from the FNS Nutrient Criteria for Breakfast Cereals = 1.0 ounce (28.35 grams) or the weight of 3/4 cup – whichever amount weighs less.

**Brand Name:** General Mills Cereal Name: Wheaties

1. The portion size of the ready-to-eat cereal on Nutrition Facts Label: 1 cup(s) 30 grams

2. Determine the weight of 3/4 cup of the cereal:
   - 0.75 cup divided by 1 cup(s) of cereal from Nutrition Facts Label = 0.75 factor
   - 0.75 factor multiplied by 30 grams / portion from Nutrition Facts Label = 22.5 grams per 3/4 cup cereal

3. Which weighs less, One Ounce (28.35 grams) or 22.5 grams per 3/4 cup of cereal?
   - The amount that weighs less = 22.5 grams; the nutrients in this amount of cereal will be used to compare to the FNS Criteria for Breakfast Cereals.

4. Determine the conversion factor based on the amount of ready-to-eat cereal that weighs less (Do not round up):
   - 22.5 grams (amount that weighs less) divided by 30 grams (from Nutrition Facts Label) = 0.75 conversion factor for nutrients

5. Calculate the nutrients from the Nutrition Facts Label to the Nutrients in the amount that weighs less by multiplying by the conversion factor for nutrients:

<table>
<thead>
<tr>
<th>A. Nutrient</th>
<th>B. % DV from Nutrition Facts Label</th>
<th>x</th>
<th>C. Conversion Factor for Nutrients</th>
<th>=</th>
<th>D. Nutrients per Amount that Weighs less</th>
<th>E. FNS Nutrient Criteria For Breakfast Cereals</th>
<th>F. Is the Amount in Column D Equal to or Greater than the Amount in Column E?</th>
<th>Yes or No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiamin (B1)</td>
<td>50 %</td>
<td>x</td>
<td>0.75</td>
<td>=</td>
<td>37.5 %</td>
<td>6.7 %</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Riboflavin (B2)</td>
<td>50 %</td>
<td>x</td>
<td>0.75</td>
<td>=</td>
<td>37.5 %</td>
<td>3.5 %</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Niacin (B3)</td>
<td>50 %</td>
<td>x</td>
<td>0.75</td>
<td>=</td>
<td>37.5 %</td>
<td>4.2 %</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Folic Acid (B9)</td>
<td>50 %</td>
<td>x</td>
<td>0.75</td>
<td>=</td>
<td>37.5 %</td>
<td>5.0 %</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>45 %</td>
<td>x</td>
<td>0.75</td>
<td>=</td>
<td>33.7 %</td>
<td>3.9 %</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

6. **X** All of the answers in Column F are “yes,” therefore, the cereal is credible using this option
   - One or more of the answers in column F are “no,” therefore, the cereal is **not** credible using this option

*(Keep in mind that cereals meeting the requirements allowed in the Grains/Breads Instruction or FBG flowchart are credible even if they do not meet the FNS Nutrient Criteria for Breakfast Cereals.)*
Manual Conversion for Nutrients per Portion of a Ready-to-Cook Breakfast Cereal

**Ready-to-Cook Cereals:** Cereal portion size from the FNS Nutrient Criteria for Breakfast Cereals = 25.0 grams ready-to-cook dry cereal

**Brand Name __________________________ Cereal Name __________________________**

1. The portion size of the ready-to-cook dry cereal on Nutrition Facts Label: _____ cup(s) _____ grams

2. Determine the conversion factor for nutrients (Do not round up):
   25 grams divided by _____ grams (from Nutrition Facts Label) = _____ conversion factor for nutrients

3. Calculate the nutrients from the Nutrition Facts Label to the nutrients in 25 grams of ready-to-cook dry cereal by multiplying by the conversion factor for nutrients:

<table>
<thead>
<tr>
<th>A. Nutrient</th>
<th>B. % DV from Nutrition facts Label</th>
<th>x</th>
<th>C. Conversion Factor for Nutrients</th>
<th>=</th>
<th>D. Nutrients per 25 Grams Ready-to-Cook Dry Cereal</th>
<th>E. FNS Nutrient Criteria For Breakfast Cereals</th>
<th>F. Is the Amount in Column D Equal to or Greater than the Amount in Column E?</th>
<th>Yes or No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiamin (B1)</td>
<td></td>
<td>x</td>
<td></td>
<td>=</td>
<td></td>
<td>6.7 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riboflavin (B2)</td>
<td></td>
<td>x</td>
<td></td>
<td>=</td>
<td></td>
<td>3.5 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niacin (B3)</td>
<td></td>
<td>x</td>
<td></td>
<td>=</td>
<td></td>
<td>4.2 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Folic Acid (B9)</td>
<td></td>
<td>x</td>
<td></td>
<td>=</td>
<td></td>
<td>5.0 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td></td>
<td>x</td>
<td></td>
<td>=</td>
<td></td>
<td>3.9 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. _____ All of the answers in Column F are “yes,” the cereal is creditable using this option
       _____ One or more of the answers in column F are “no,” the cereal is **not** creditable using this option

(Keep in mind that cereals meeting the requirements allowed in the Grains/Breads Instruction or FBG flowchart are creditable even if they do not meet the FNS Nutrient Criteria for Breakfast Cereals.)
Manual Conversion for Nutrients per Portion of a Ready-to-Cook Breakfast Cereal – EXAMPLE

Ready-to-Cook Cereals: Cereal portion size from the FNS Nutrient Criteria for Breakfast Cereals = 25.0 grams ready-to-cook dry cereal

Brand Name Quaker Cereal Name Instant Grits, Real Cheddar Cheese Flavor

1. The portion size of the ready-to-cook dry cereal on Nutrition Facts Label: 1 packet cup(s) 28 grams

2. Determine the conversion factor for nutrients (Do not round up):
   25 grams divided by 28 grams (from Nutrition Facts Label) = 0.89 conversion factor for nutrients

3. Calculate the nutrients from the Nutrition Facts Label to the nutrients in 25 grams of ready-to-cook dry cereal by multiplying by the conversion factor for nutrients:

<table>
<thead>
<tr>
<th>A. Nutrient</th>
<th>B. % DV from Nutrition facts Label</th>
<th>x</th>
<th>C. Conversion Factor for Nutrients</th>
<th>=</th>
<th>D. Nutrients per 25 Grams Ready-to-Cook Dry Cereal</th>
<th>E. FNS Nutrient Criteria For Breakfast Cereals</th>
<th>F. Is the Amount in Column D Equal to or Greater than the Amount in Column E? Yes or No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiamin (B1)</td>
<td>10 %</td>
<td>x</td>
<td>0.89</td>
<td>=</td>
<td>8.9 %</td>
<td>6.7 %</td>
<td>Yes</td>
</tr>
<tr>
<td>Riboflavin (B2)</td>
<td>10 %</td>
<td>x</td>
<td>0.89</td>
<td>=</td>
<td>8.9 %</td>
<td>3.5 %</td>
<td>Yes</td>
</tr>
<tr>
<td>Niacin (B3)</td>
<td>10 %</td>
<td>x</td>
<td>0.89</td>
<td>=</td>
<td>8.9 %</td>
<td>4.2 %</td>
<td>Yes</td>
</tr>
<tr>
<td>Folic Acid (B9)</td>
<td>10 %</td>
<td>x</td>
<td>0.89</td>
<td>=</td>
<td>8.9 %</td>
<td>5.0 %</td>
<td>Yes</td>
</tr>
<tr>
<td>Iron</td>
<td>45 %</td>
<td>x</td>
<td>0.89</td>
<td>=</td>
<td>40.0 %</td>
<td>3.9 %</td>
<td>Yes</td>
</tr>
</tbody>
</table>

4. __X__ All of the answers in Column F are “yes,” the cereal is creditable using this option
   ______ One or more of the answers in column F are “no,” the cereal is not creditable using this option

(Keep in mind that cereals meeting the requirements allowed in the Grains/Breads Instruction or FBG flowchart are creditable even if they do not meet the FNS Nutrient Criteria for Breakfast Cereals.)