

## How to Determine If A Non-dairy Beverage Meets USDA Nutrient Requirements to Substitute for Milk

In deciding whether a non-dairy beverage meets USDA Nutrient requirements to be a milk substitute use the following tables and examples:

- Table 1 lists the nutrient requirements for a milk substitute as outlined in regulation 7 CFR 210.10(m)(3).
- Table 2 is a worksheet to compare the nutrients of a selected non-dairy beverage with the nutrients requirements for a milk substitute.

**Table 1: Nutrient Requirement for Milk Substitute:**

Nutrient	Per cup
Calcium	276 mg
Protein	8 g
Vitamin A	500 IU
Vitamin D	100 IU
Magnesium	24 mg
Phosphorus	222 mg
Potassium	349 mg
Riboflavin	0.44 mg
Vitamin B-12	1.1 mcg

To determine whether a non-dairy beverage meets the USDA nutrient requirements for milk substitute, use Table 2 below:

- Column 1 lists the required milk **nutrients**
- Column 2 lists the required **nutrient values** for each nutrient
- Column 3 is a blank column for listing the nutrient found for the proposed milk substitute
- Column 4 lists the **Daily Value (DV)** for each nutrient
- Column 5 is a blank column for listing the nutrient found for the proposed milk substitute
- Column 6 lists the **percent** of the Daily Value (DV) that a non-dairy beverage must contain for listing the nutrient found for the proposed milk substitute
- Column 7 is a blank column for listing the nutrient found for the proposed milk substitute

**Table 2: Comparison of Non-Dairy Beverage with Daily Values Worksheet**

Column 1 Nutrients	Column 2 Nutrient Values	Column 3 Meets or Exceeds	Column 4 Daily Values	Column 5 Meets or Exceeds	Column 6 %DV	Column 7 Meets or Exceeds
Calcium	276 mg		1000 mg		30% DV *	
Protein	8 g		50 g		8 g	
Vitamin A	500 IU		5000 IU		10% DV	
Vitamin D	100 IU		400 IU		25% DV	
Magnesium	24 mg		400 mg		6 % DV	
Phosphorus	222 mg		1000 mg		20% DV **	
Potassium	349 mg		3500 mg		350 mg or 10% DV	
Riboflavin	0.44 mg		1.7 mg		25 % DV	
Vitamin B-12	1.1 mcg		6 mcg		20% DV ****	

\*actually 27.6%, but labeling law requires manufacturer to express the value to the nearest 5%; \*\*actually 22.2%, but labeling law requires manufacturer to express the value to the nearest 5% \*\*\*actually 9.97%, but labeling law requires manufacturer to express the value to the nearest 5%; \*\*\*\*actually 18.3%, but labeling law requires manufacturer to express the value to the nearest 5%

**Nutrition Facts Label Exercise:**  
*Pacific Ultra Soy, Plain*

Use Pacific Ultra Soy, Plain as an example for using the worksheet in Table 2. The nutrients in *Pacific Ultra Soy, Plain* can be compared to the NSLP regulations for milk substitutes (see Table 3).

Notice there is no value for Magnesium on the label and the DV for Phosphorus is not met (See Table 3).

To show the beverage is creditable, the Institution would need to get the complete nutritional information from the manufacturer. This information may be posted on the manufacturer’s website; however, the Institution may need to call or write the manufacturer for the information.

An example of the manufacturer provided nutritional analysis may be found in Table 4 on the next page.

From this complete analysis, both Magnesium and Phosphorus do meet the regulations for a milk substitute (see the shaded values) and Table 5 below.

<b>Nutrition Facts</b>	
Serving Size 1 cup (8 fl. oz.) 240 mL	
Servings Per Container about 4	
Amount Per Serving	
<b>Calories 120</b>	<b>Calories from Fat 35</b>
% Daily Value*	
<b>Total Fat 4g</b>	<b>6%</b>
Saturated Fat 0.5g	3%
Trans Fat 0g	
<b>Cholesterol 0mg</b>	<b>0%</b>
<b>Sodium 150mg</b>	<b>6%</b>
<b>Potassium 380mg</b>	<b>11%</b>
<b>Total Carbohydrate 11g</b>	<b>4%</b>
Dietary Fiber 1g	4%
Sugars 8g	
<b>Protein 10g</b>	
Vitamin A 10%	• Vitamin C 0%
Calcium 50%	• Iron 10%
Vitamin D 25%	• Vitamin E 25%
Riboflavin 30%	• Vitamin B6 25%
Vitamin B12 25%	• Phosphorus 15%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
Total Fat	Less Than 65g 80g
Saturated Fat	Less Than 20g 25g
Cholesterol	Less Than 300mg 300 mg
Sodium	Less Than 2,400mg 2,400mg
Potassium	3,500 mg 3,500 mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Pacific Natural Foods website <http://www.pacificfoods.com/our-foods/soy-beverages/all-natural-ultra-soy-plain-non-dairy-beverage> )

**Table 3: Nutrition Information for *Pacific Ultra Soy, Plain*:**

Column 1 Nutrients	Column 2 Nutrient Values	Column 3 Meets or Exceeds	Column 4 Daily Values	Column 5 Meets or Exceeds	Column 6 %DV	Column 7 Meets or Exceeds
Calcium	276 mg		1000 mg		30% DV *	50% DV <b>(exceeded)</b>
Protein	8 g		50 g		8 g	10g <b>(exceeded)</b>
Vitamin A	500 IU		5000 IU		10% DV	10% DV <b>(met)</b>
Vitamin D	100 IU		400 IU		25% DV	25% DV <b>(met)</b>
Magnesium	24 mg		400 mg		6 % DV	No value <b>(not</b>
Phosphorus	222 mg		1000 mg		20% DV **	15% DV <b>(not met)</b>
Potassium	349 mg		3500 mg		350 mg or 10% DV ***	380 mg <b>(exceeded)</b>
Riboflavin	0.44 mg		1.7 mg		25 % DV	30% DV <b>(exceeded)</b>
Vitamin B-12	1.1 mcg		6 mcg		20% DV ****	25% DV <b>(exceeded)</b>

**Nutrition Facts Label Exercise Continued:**

**Table 4: Manufacturer Provided Nutritional Analysis for Pacific Soy Ultra, Plain:**

<b>Nutrient</b>	<b>Per 8 fl. Oz. serving</b>	<b>Per 8.25 fl. Oz. serving (prisma)</b>	<b>Per 100 g</b>
Calories (kcal)	122.15	125.14	49.86
Calories from fat (kcal)	34.66	35.51	14.15
Protein (g)	9.98	10.22	4.07
Carbohydrate (g)	11	11.27	4.49
Dietary Fiber (g)	1.12	1.15	0.46
Soluble Fiber (g)	0.63	0.65	0.26
Insoluble Fiber (g)	0.43	0.44	0.17
Total Sugar (g)	7.78	7.97	3.17
Other Carbs (g)		0	
Net Carbs (g)	11	11.27	4.49
Fat (g)	3.85	3.95	1.57
Saturated Fat (g)	0.55	0.56	0.22
Monounsaturated Fat (g)	0.81	0.83	0.33
Polyunsaturated Fat (g)	2.2	2.25	0.9
Trans Fatty Acids (g)	0	0	0
Cholesterol (mg)	0	0	0
Kilojoules (kj)	511.07	523.59	208.6
Vitamin A (IU)	500	512.24	204.08
Vitamin B2 - riboflavin (mg)	0.49	0.51	0.2
Vitamin B12 (mcg)	1.47	1.51	0.6
Vitamin C (mg)	0	0	0
Vitamin D (IU)	100	102.45	40.62
Calcium (mg)	284.22	291.18	116.01
Iron (mg)	1.69	1.73	0.69
Magnesium (mg)	52.47	53.75	21.42
Phosphorus (mg)	253.97	260.19	103.66
Potassium (mg)	380.75	390.08	155.41
Sodium (mg)	150	153.67	61.22

Pacific Natural Foods website <http://www.pacificfoods.com/our-foods/soy-beverages/all-natural-ultra-soy-plain-non-dairy-beverage>

Below is the table completed with the information from the product analysis sheet and you can see the two nutrients that were missing actually exceed the requirements.

**Table 5: Nutrition Information for *Pacific Ultra Soy, Plain*:**

<b>Column 1</b> Nutrients	<b>Column 2</b> Nutrient Values	<b>Column 3</b> Meets or Exceeds	<b>Column 4</b> Daily Values	Column 5 Meets or Exceeds	<b>Column 6</b> %DV	Column 7 Meets or Exceeds
Calcium	276 mg		1000 mg		30% DV *	50% DV <b>(exceeded)</b>
Protein	8 g		50 g		8 g	10g <b>(exceeded)</b>
Vitamin A	500 IU		5000 IU		10% DV	10% DV <b>(met)</b>
Vitamin D	100 IU		400 IU		25% DV	25% DV <b>(met)</b>
Magnesium	24 mg	52.47 <b>(exceeded)</b>	400 mg		6 % DV	
Phosphorus	222 mg	253.97 <b>(exceeded)</b>	1000 mg		20% DV **	
Potassium	349 mg		3500 mg		350 mg or 10% DV ***	380 mg <b>(exceeded)</b>
Riboflavin	0.44 mg		1.7 mg		25 % DV	30% DV <b>(exceeded)</b>
Vitamin B-12	1.1 mcg		6 mcg		20% DV ****	25% DV <b>(exceeded)</b>

**\*Important\***

Once all the information is found for the beverage to show it meets the requirements for a milk substitute, remember to keep all the documentation. You will need the nutrient label from the product, including the name of the product, the product analysis sheet, and a copy of the table completed with the information to show all the nutrients are present. Attach these items and save with your other CACFP paperwork, such as CN labels and other product specification sheets.

## **Nutrient Criteria for Milk Substitutes** *(Minimum Required Nutrients)*

Attach to documentation and keep.	<b>Per 1 Cup Serving Size</b>					
<b>Nutrients ▼</b>	Nutrient Values	Meets or exceeds	Daily Values	Meets or exceeds	% Daily Values	Meets or exceeds
Calcium	276 mg		1000 mg		30% DV	
Protein	8 g		50 g		8 g	
Vitamin A	500 IU		5000 IU		10% DV	
Vitamin D	100 IU		400 IU		25% DV	
Magnesium	24 mg		400 mg		6% DV	
Phosphorus	222 mg		1000 mg		20% DV	
Potassium	349 mg		3500 mg		350 mg or 10% DV	
Riboflavin	0.44 mg		1.7 mg		25% DV	
Vitamin B 12	1.1 mcg		6 mcg		20% DV	

## **Nutrient Criteria for Milk Substitutes** *(Minimum Required Nutrient)*

Attach to documentation and keep.	<b>Per 1 Cup Serving Size</b>					
<b>Nutrients ▼</b>	Nutrient Values	Meets or exceeds	Daily Values	Meets or exceeds	% Daily Values	Meets or exceeds
Calcium	276 mg		1000 mg		30% DV	
Protein	8 g		50 g		8 g	
Vitamin A	500 IU		5000 IU		10% DV	
Vitamin D	100 IU		400 IU		25% DV	
Magnesium	24 mg		400 mg		6% DV	
Phosphorus	222 mg		1000 mg		20% DV	
Potassium	349 mg		3500 mg		350 mg or 10% DV	
Riboflavin	0.44 mg		1.7 mg		25% DV	
Vitamin B 12	1.1 mcg		6 mcg		20% DV	