

Nutrient Comparison

Milk contains 15 essential nutrients:

<i>Protein</i>	<i>Niacin</i>	
<i>Vitamin A</i>	<i>Thiamine</i>	<i>Magnesium</i>
<i>Vitamin B12</i>	<i>Pantothenic acid</i>	<i>Phosphorus</i>
<i>Vitamin B6</i>	<i>Vitamin D</i>	<i>Potassium</i>
<i>Riboflavin</i>	<i>Calcium</i>	<i>Zinc</i>
		<i>Selenium</i>

There are over 20 different plant-based beverages to choose from. They are made from water blended with a plant base, such as almonds, cashews, coconut, oats, soy or rice.¹ The nutrient content of these plant-based beverages varies. Some are fortified with 7-8 vitamins and minerals, but some are not.²

MILK is a whole food with 15 vitamins and minerals, and it contains more protein compared to plant-based beverages. Fortified plant-based beverages usually contain only 7 different vitamins and minerals.

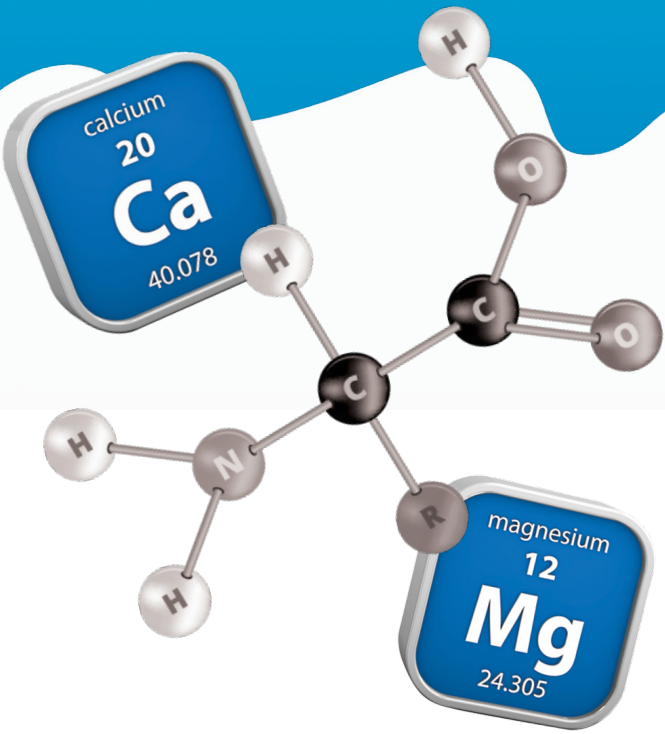
When choosing the right beverage, look beyond the shape of the carton! A beverage may look like milk, but it could fall short of nutrients.

References available at:
milk.org/Health-and-Nutrition/Health-Care-Professionals

MAKING INFORMED CHOICES

HOW MILK AND PLANT-BASED BEVERAGES COMPARE

There are many different types of milk and plant-based beverages available at the grocery store. It's important to know the differences between these beverages so you can make informed choices.



For more information, visit milk.org.

¹ <https://www.mdpi.com/2072-6643/13/3/842/htm>
² <https://pubmed.ncbi.nlm.nih.gov/34746213/>
³ <https://food-guide.canada.ca/en/healthy-eating-recommendations/limit-highly-processed-foods/>
⁴ <https://food-guide.canada.ca/en/healthy-eating-recommendations/make-it-a-habit-to-eat-vegetables-fruit-whole-grains-and-protein-foods/>
⁵ <https://academic.oup.com/advances/article-abstract/12/6/2068/6325326?redirectedFrom=fulltext&login=false>
⁶ <https://www.frontiersin.org/articles/10.3389/fnut.2021.761442/full>
⁷ <https://www.frontiersin.org/articles/10.3389/fnut.2022.957486/full>
⁸ <https://www.frontiersin.org/articles/10.3389/fnut.2022.957486/full>
⁹ <https://www.frontiersin.org/articles/10.3389/fnut.2022.957486/full>
¹⁰ <https://www.sciencedirect.com/science/article/abs/pii/S0958694618301900>

Plant-based beverages are sold alongside milk. You may mistakenly think they are interchangeable because the cartons look the same. This is not the case. Here are four reasons why:

1 Milk is a whole food; plant-based beverages are an ultra-processed food.

Dietary guidelines recommend eating more whole foods and cutting back on ultra-processed foods. This helps lower the risk of heart disease, cancer and other chronic diseases.^{3,4}

The only ingredients in milk are milk and vitamins. Some plain unsweetened plant-based beverages contain only water, vitamins and the plant they are named for (almond, soy, etc.).

However, studies show that 90% of plant-based beverages are ultra-processed foods. That means they contain sweeteners, hydrogenated oils, hydrolyzed protein, flavour enhancers, emulsifiers, or thickeners.⁵



2 Milk has more protein than plant-based beverages.

Most plant-based beverages contain one gram of protein per cup. Milk has nine grams of protein per cup.

BEVERAGE	PROTEIN CONTENT (GRAMS PER CUP)
Milk (skim, 1%, 2% or whole)	9
Almond beverage	1
Cashew beverage	1
Oat beverage	1
Macadamia beverage	1
Coconut beverage	0
Rice beverage	1
Soy beverage	8

Only soy beverages contain a comparable amount of protein, however it is a lower protein quality. Researchers rank protein quality based on digestibility, and milk protein ranks higher than soy protein.⁶

3 Milk has more vitamins and minerals than most plant-based beverages.

Plant-based beverages do not contain the same array of 15 vitamins and minerals that are found in milk. Plant-based beverages are often fortified with vitamins and minerals. Still, milk contains a wider array of nutrients and has more potassium, phosphorus and zinc.⁷

4 Calcium may not always be absorbed from plant-based beverages.

Calcium in milk is naturally occurring, and milk provides 30% of the % Daily Value (DV). Calcium is added to plant-based beverages through fortification. The amount added can range from 23-38% DV.

But there's one catch. The calcium that's added to plant-based beverages sinks to the bottom of the beverage container as sediment. So, the nutrient content of plant-based beverages depends on whether the product has been shaken or not before you drink it.⁸

In a study comparing the calcium content of plant-based beverages before and after shaking, researchers learned that unshaken samples are lower in calcium compared to well-shaken beverages.⁹

Here's how much calcium is lost:

BEVERAGE	LOWER CALCIUM CONTENT IF NOT WELL-SHAKEN
Almond beverage	14%
Soy beverage	18%
Rice beverage	96%
Oat beverage	97%

Since calcium is naturally occurring in milk, it does not sink to the bottom as sediment, and more is consumed and absorbed by the body.¹⁰