



Who thought making a healthy choice would be a challenge when it came to selecting the right milk for your family. After all, there is the full fat version, two medium fat versions, and a non-fat version. Piece of cake, right? Not so fast! In the past few years the dairy aisle has exploded with milk substitutes which are often plant based. Now, instead of 4 types of milk (which sometimes seems complicated enough)

we have what seems like an endless selection of products to choose from. Each new product comes with a tag line or selling point that seems catchier than the last. In the following short paragraphs you will find comparison information on several different types of milk along with some quick facts at the end. This information is designed to help you make the best choice for your family when it comes to nutrients sitting on the shelf of your refrigerator.

Almond Milk: Almond milk is made from ground almonds and water. Unsweetened almond milk is generally low in calories because of the high amount of water in the product. Though almond milk is low in calories, it is also lower in nutrients, especially protein. Though fortified almond milk can pack in as many vitamins as some other milks, it is still often low in B Vitamins, trace elements, and essential fatty acids. It does however, offer a fairly high amount of Vitamin E.

Pros: Low kcal, High in Vitamin E. **Cons:** Very low Protein

Cashew Milk: Like other nut milks cashew milk is made by mixing cashews with water. Unsweetened cashew milk has 60 kcal/cup and has no saturated fat or cholesterol in it. Due to how nut milks are processed cashew milk is also low in protein. Fortified cashew milk can exceed some of the nutrient offerings of dairy milk. It can be a good source of calcium and Vitamin D.

Pros: Creamy taste and texture **Cons:** Low in Protein.

Flax Milk: Flax Milk is made by combining cold-pressed flax oil with water, thickeners, and emulsifiers. Because of the flax base the milk that is created has a good amount of omega-3 essential fatty acids in it. Flax milk is low in calories and can be fortified to make it a competitor in its offerings of calcium, Vitamin D, and Vitamin B12. Flax milk naturally has a very low protein content.

Pros: Low-Calorie, high in essential fatty acids **Cons:** Very low protein

Rice Milk: This plant based substitute is often made from boiled brown rice and brown rice starch. Though it may be the most hypoallergenic plant based milk substitute, it is low in protein, and contains no fiber. Rice milk has very small amounts of calcium naturally, but is usually fortified by the manufacturer.

Pros: Best for multiple allergies **Cons:** Lowest protein, often has added sugars

Soy Milk: Soy beans are processed through soaking, crushing, cooking, and straining to make this milk alternative. Soy milk has the same amount of protein as dairy milk and naturally contains manganese and magnesium. Manufacturers often fortify this product with Vitamin A, E, D and B12. Most soy beans in today's world are genetically modified so, though soy milk is not heavily processed it may contain genetically modified organisms (GMO's). Additionally, soy milk has both beneficial and not so helpful plant chemicals that are found naturally in soy.

Pros: High Protein, Low Processing **Cons:** Higher fat, can be high in sugar

Oat Milk: Oat milk is derived from oats that have been cleaned, toasted, and hulled; water; and possibly other grains and beans. Oat milk is low in cholesterol, overall calories, and saturated fat. The beverage is higher in fiber and protein than other alternatives and contains iron, Vitamin E, and folic acid. Due to the natural sugars found in this beverage it may have a higher carbohydrate count.

Pros: Fiber, iron, and moderate Protein **Cons:** Ingredients may contain allergens.

Coconut Milk: Grated and squeezed coconut meat help make this high calorie, high fat milk substitute. Often used in cooking (not for drinking) this alternative packs a whopping 48gm of fat per cup with 43 of those being from saturated fat. Manufacturers are starting to offer coconut beverage which is essentially water diluted coconut milk which is intended for drinking. This drink contains little protein, but far less fat than coconut milk and contains potassium as well as some iron and fiber. If fortified, this beverage can be a good source of calcium and Vitamin D as well.

Pros: Good source of potassium, contains iron and fiber **Cons:** High fat, Low Protein



Hemp Milk: Cannabis Sativa is the plant that is used to make this alternative. The hulled seeds of the plant are used. The varieties of hemp used are low in THC (the mind altering portion of the plant family) and provides an earthy flavor. This plant based milk may be an option for those allergic to gluten, nuts, and soy, and may be used for those on low starch diets. Hemp milk (though not a great source) does supply some protein, magnesium, calcium, fiber, iron, potassium, and helpful plant chemicals. Hemp milk also provides a good dose of essential fatty acids (Omega 3's, and 6's).

Pros: High in essential fatty acids **Cons:** Higher fat than cow's milk, earthy flavor.



Pea Milk: Yellow field peas provide the base for this plant based alternative to milk. The peas are milled into a flour that is then processed to separate the starch and fiber from the protein. The protein is then further processed and blended with water and other ingredients. Because the protein is blended back in, pea milk is a good source of protein providing almost as much as cow's milk. The beverage is fortified so that it is also a good source of calcium.

Pros: High in protein, creamy taste/texture **Cons:** Not widely available.

Cow's Milk: Cow's milk is made by mechanically expressing milk produced through the natural process of lactation. Cow's milk is naturally high in protein, calcium, and Vitamin D. Since the protein in cow's milk is from an animal source it is by nature of a higher quality than protein found in plants. Cow's milk is available with differing amounts of fat (Skim, 1%, 2%, Whole) and normally only has naturally occurring lactose sugars in it.

Pros: High in protein, calcium, and Vitamin D **Cons:** Contains lactose, may be high in saturated fat, may be derived from cattle treated with antibiotics/hormones.

Goat's Milk: Goat's milk, like cow's milk is produced naturally through mammalian lactation. Goat's milk is very similar to cow's milk, but often has a higher fat content than whole cow's milk. Some people may try consuming goat's milk as an alternative to cow's milk when a milk protein allergy is a concern. The proteins in goat's milk, though somewhat different, are still often a trigger for milk protein allergies. Additionally, goat's milk, like virtually all mammalian milks (including human), contains lactose.

Pros: High in protein, Calcium, and Vitamin D **Cons:** High in saturated fat.

Quick Facts for thought:

- Animal protein is of better quality than plant protein and is easier for our bodies to use
- Cattle farming is a very large source of methane and contributes to greenhouse gas emissions
- It may take 9 times more land use to make a liter of dairy milk than some plant based alternatives
- Rice milk production also produces a modest amount of methane
- It takes a third more water to produce a liter of cow's milk than it does to produce some of the more thirsty plant alternatives
- Cow's milk is a well rounded, easy to absorb beverage that contains protein, fat, vitamins, minerals, and other nutritional substances.



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