

INGREDIENTS: ALMONDMILK (FILTERED WATER, ALMONDS), CALCIUM CARBONATE, TAPIOCA STARCH, SEA SALT, POTASSIUM CITRATE, CARRAGEENAN, SUNFLOWER LECITHIN, NATURAL FLAVORS, VITAMIN A PALMITATE, VITAMIN D2 AND D-ALPHA-TOCOPHEROL (NATURAL VITAMIN E).
NOT FOR USE AS AN INFANT FORMULA

Explanation of Ingredients Found in a Popular Brand of Almond Milk

Filtered Water and Almonds- Pretty self-explanatory. If I had to guess the almonds are heat processed.

Calcium Carbonate- [Calcium](#) carbonate is an important chemical compound made up of one atom of calcium bonded to one atom of carbon and three atoms of oxygen. Its molecular formula is CaCO_3 . Common names for this compound include [limestone](#), [calcite](#), aragonite, chalk, and marble, and while all contain the same substance, each has different processes underlying its formation. Calcium carbonate is used in cements and mortars, producing lime, in the steel industry, glass industry, and as an ornamental stone. And Oh yes, it is apparently used in food products.

Tapioca Starch: sometimes called **tapioca flour**, is a refined white [flour](#) made from the [cassava root](#). It is broadly used as a thickener for [sauces](#), [soups](#) and [stews](#). It can also be used in [baking](#). Tapioca starch is very fine and starchy, and is often used as a substitute for [arrowroot starch](#) and [cornstarch](#). It is [gluten-free](#), and is often added to gluten-free baking as a thickener and binder to make up for the lack of [gluten](#) in those recipes.

Sea Salt- Sea salt is formed from the natural evaporation of ocean water, generally in man-made pools near a protected shoreline. It is 98% sodium chloride, compared to table salt's 99.9% purity. The remaining 2% can include trace [minerals](#) such as iron, [magnesium](#), sulfur, or [iodine](#). Unlike table salt, which may be mined from land-based sources, natural sea salt does not contain added anti-caking ingredients or [potassium iodide](#). It is also considered Kosher, which means it has been approved by rabbis for use by observant Jews

Potassium Citrate - **Potassium citrate** is a [potassium salt](#) of [citric acid](#) with the molecular formula $\text{C}_6\text{H}_5\text{K}_3\text{O}_7$. It is a white, slightly [hygroscopic](#) crystalline powder. It is odorless with a [saline](#) taste. As a [food additive](#), potassium citrate is used to regulate acidity and is known as [E number](#) E332. Medicinally, it may be used to control [kidney stones](#) derived from either [uric acid](#) or [cystine](#).

Carrageenan - A common food additive that is extracted from a type of red seaweed, *Chondrus crispus*, which is popularly known as Irish moss. Carrageenan, which has no nutritional value, has been used as a thickener and emulsifier to improve the texture of ice cream, yogurt, cottage cheese, soy milk and other processed foods.

Sunflower Lecithin - Sunflower lecithin is a type of phospholipid abundant in sunflower seeds. This fatty substance is obtained by dehydrating a sunflower seed and separating it into three parts: the oil, gum, and other solids. Lecithin comes from the gum byproduct of this mechanical process. Nutritionally, it is an [emulsifier](#) that endows foods with a creamy, moist, smooth texture. Sunflower lecithin is often used in chocolates, faux butters and baked goods, such as muffins.

Natural Flavors - "The term natural flavor or natural flavoring means the essential oil, oleoresin, essence or extractive, protein hydrolysate, distillate, or any product of roasting, heating or enzymolysis, which contains the flavoring constituents derived from a spice, fruit or fruit juice, vegetable or vegetable juice, edible yeast, herb, bark, bud, root, leaf or similar plant material, meat, seafood, poultry, eggs, dairy products, or fermentation products thereof, whose significant function in food is flavoring rather than nutritional."

Vitamin A Palmitate - Vitamin A is a group of compounds that includes retinoids and carotenoids. Vitamin A from plant sources is a carotenoid that your body can transform into a retinol, while vitamin A from animal sources is already in a form of retinol that's easily absorbed by your body. Vitamin A palmitate is the form of vitamin A found naturally in animal sources and also produced synthetically.

Vitamin D2 - D2 or [ergocalciferol](#), and vitamin D3 or [cholecalciferol](#); vitamin D without a subscript refers to either D2 or D3 or both. These are known collectively as calciferol.^[86] Vitamin D2 was chemically characterized in 1932. In 1936, the [chemical structure](#) of vitamin D3 was established and proven to result from the [ultraviolet irradiation](#) of 7-dehydrocholesterol.^[87] Chemically, the various forms of vitamin D are [secosteroids](#); i.e., [steroids](#) in which one of the bonds in the steroid rings is broken.^[88] The structural difference between vitamin D2 and vitamin D3 is in their [side chains](#). The side chain of D2 contains a [double bond](#) between carbons 22 and 23, and a [methyl group](#) on carbon 24.

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Alpha Tocopherol - α -Tocopherol is a form of [vitamin E](#) that is preferentially absorbed and accumulated in humans.^[2] The measurement of "vitamin E" activity in [international units](#) (IU) was based on fertility enhancement by the prevention of spontaneous abortions in pregnant rats relative to alpha-tocopherol.

There are three [stereocenters](#) in alpha-tocopherol, so this is a [chiral](#) molecule.[\[3\]](#) The eight [stereoisomers](#) of alpha-tocopherol differ in the arrangement of groups around these stereocenters. In the image of *RRR*-alpha-tocopherol, all three stereocenters are in the *R* form. However, if the middle of the three stereocenters were changed (so the hydrogen was now pointing down and the [methyl group](#) pointing up), this would become the structure of *RSR*-alpha-tocopherol. *RSR*-alpha-tocopherol and *RRR*-alpha-tocopherol are [diastereomers](#) of each other. These stereoisomers can also be named in an alternative older nomenclature, where the stereocenters are either in the *d* or *l* form.[\[4\]](#)