

We a source of  
calcium, pantothenic  
acid, selenium,

Nutrition



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We have always heard any drinking milk is so important for our total health. After all, milk is fortified with a range of vitamins including, vitamin B12 and B2, vitamin D and A, as well providing a source of calcium, pantothenic acid, selenium, biotin and protein which can aid our general health. In this article, you will know what homogenized milk as well as difference between homogenized milk and pasteurized milk. What is homogenized milk?

Homogenization is a completely different process than pasteurization, so we can have pasteurized milk that has not been homogenized and vice versa. Most of the milk we see on the supermarket's shelf is both homogenized and pasteurized and a lot of people will never understand the difference between the two.

Pasteurization is the process that maximum people are amazed with that. The homogenization process quickly heats and then cools the milk to kill harmful germs and micro organisms in milk. Difference between homogenized and pasteurized milk: Homogenization is likely done with the big machines and doesn't involve any additives and much like homogenization, arguments exist for and against it. It's advantageous for large-scale dairy farms to homogenize milk because the process allows them to mix milk from different herds without any issues. By preventing cream from rising to the top, homogenization also leads to a longer shelf life which is attractive to consumers and also allows large farms to ship greater distances and do business with more retailers. Homogenization makes it easier for dairies to filtrate out the fat and create two percent, one percent and skim milk. But as with most mechanical processes, when you homogenize milk, you not only

change the size of the fat globules, you also rearrange the fat and protein molecules which could alter how they act in the human body.

Finally, it is the next step after pasteurization. Manufacturers use it to alter milk for human consumption. While pasteurization involves heating the milk to kill bacteria, homogenization involves processing milk so that the cream does not separate.

This results in a well mixed beverage that has the same consistency throughout the final milk product. Finally, Homogenization makes it easier for dairies to filter out the fat and create two percent, one percent and skim milk. Process of homogenization: Homogenized milk passes through small tubes during processing. These tubes reduce the size of the fat molecules in the milk.

This allows the fat, or oil portion of the milk, to remain mixed in with the water portion. During pasteurization, milk's white cells collect on the bottom of the vats after heating. The homogenization process also helps to reverse this action and redistribute the white cells throughout the milk. Harmful facts:

- v Homogenization is not always a good thing. The process itself reduces the size of fat molecules in the milk. With smaller fat molecules, the fat may be easier for your body to absorb.
- v The size of protein molecules in homogenized milk are also reduced, meaning this protein is not absorbed, but simply passed through the body.
- v This means that even though we have always been told that milk was healthy, homogenized milk could be contributing to weight gain and poor nutrition.

v It could also be contributing to the hardening of arteries and other heart issues. v Many types of homogenized milk also contain harmful added hormones. v In some research, these hormones themselves have been linked to issues like cancer. v Homogenization process makes the fat molecules small enough to bypass digestion, milk's natural hormones and the hormones that cows receive to produce more milk also bypass digestion. Therefore, these hormones directly interact with your body's hormones. v Homogenization makes fat easier to absorb. Pasteurized milk: Pasteurization is the process of heating milk up and then quickly cooling it down to eliminate quantity of bacteria.

To make healthy pasteurization, milk can be heated with the amount of certain temperatures in sense of degrees, but this method is not very common. More common is heating milk up to at least 170.6 degrees that is known as on little high temperature short time pasteurization. Milk treated with pasteurization and hotter the pasteurization temperature, the longer the milk will keep.

In slightly as a different process, milk can be pasteurized at a much higher temperature for just two to three seconds, producing that will be called as ultra-high temperature milk and that keeps for months and also pasteurization does not kill all dangerous micro organisms in milk, but it is intended to kill some little quantity of bacteria and make some different enzymes inactive participation. Pasteurization does not reduce the milk nutritional value and that inactivates certain enzymes and decreases quantity of vitamins like Vitamin A and it argues that milk is not a major source of Vitamin C. any raw milk can contain dangerous bacteria that can pose

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serious health risks to you and your family. The pasteurization process kills those bacteria. Process of pasteurization: It is not just the cool packet in our kitchen but also that makes that possible but the way the milk and other foods are specially treated before they reach your home and the key is a process called pasteurization, where fresh foods are heated deeply on high temperatures to kill the dangerous bacteria, then cooled rapidly before being shipped out to grocery stores. By greatly increasing the shelf life of packaged foods, pasteurization has proved itself to be one of the most important food preservation technologies ever developed.

With non pasteurized milk, we are not getting the constant level of nutrients that we would then otherwise have in other different kinds of milk.

By the way this makes it very unique and ensures that we will not have to worry about any particular risk on health issues and when it comes to other different types of milk, there is a whole host of other issues that could pop up. This means that if you are someone that is very concerned about getting the right amount of added nutrients, make sure you are drinking pasteurized milk are not. Benefits of pasteurization: v Pasteurized milk can be a source of pathogens that cause food borne illness that can result in sickness, hospitalization and death. This is because milk may be contaminated in a variety of ways.

v Pathogens can be spread through feces, water, soil that may be on the cow's udder, sores on the teats, or from the hands of the dairy worker. v Microorganisms such as Salmonella, Listeria, Yersinia, Campylobacter, Staphylococcus, Mycobacterium bovis, Coxiella burnetii, Brucella, and E. coli are killed or greatly reduced by pasteurization. v Although some claim that <https://assignbuster.com/we-a-source-of-calcium-pantothenic-acid-selenium/>

raw milk has improved nutritional value, cures diseases, and even tastes better. v Pasteurized milk has no scientifically documented health benefits. v It is strongly discouraged for children, those that are pregnant, elderly. v Those with weakened immune systems because they have the greatest risk of food borne illness from pasteurized milk and milk products.

Pregnant women also run the additional risk of miscarriage. v Pasteurization destroys 100% of pathogenic bacteria, yeast and mould and 95% to 99% of other bacteria. v Pasteurized milk is fortified with this vitamin, which promotes calcium absorption and plays a key role in bone health. v Only levels of riboflavin, or vitamin B2, decrease significantly during the pasteurization process.

v Pasteurized milk is still an important dietary source of this vitamin. v Low risk of sickness by pasteurization milk; with pasteurized milk, you can rest easier knowing that you're consuming milk that is devoid of most contaminants that would make people sick. v This is very important to know because as most people wouldn't know, it's something that can cause a lot of headaches, both literal and figurative, assuming you're not consuming pasteurized milk. By erring on the side of caution, you will be drinking healthier milk by making sure it's pasteurized milk. Effect of pasteurized milk: The trouble with milk pasteurization is that it can undermine the quality of the milk. Not only does pasteurization kill bad bacteria and pathogens, it also kills or severely damages some of the most important nutrients in the milk, nutrients that make milk the whole, nutrient-dense super food that its proponents claim it to be. Lack of nutrients: It might sound paradoxical that pasteurized milk would have fewer  
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nutrients, but the truth is that pasteurized milk has fortified minerals rather than naturally-occurring ones. This can be a problem because most fortified minerals and nutrients aren't as bioavailable as the naturally-occurring counterparts.

So sure, you might be getting good-tasting milk, but it isn't providing the same level of benefits. Pasteurized milk often features a lot of hormones and other synthetic byproducts. While many of these have no known side effects, we as humans haven't been consuming them for very long. So the jury is still out on whether or not they are good for us over many years.

It is possible to have pasteurized milk that hasn't been homogenized and homogenized milk that hasn't been pasteurized. Conclusion: The main difference between homogenized milk and pasteurized milk is pasteurization is better than homogenization. Pasteurization has a small effect on the vitamins naturally found in milk. Overall, drinking pasteurized milk is still the safest way to enjoy the health benefits of milk.