We can have pasteurized milk that has

Nutrition

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 B12and B2, vitamin D and A, as well providing a sourceof calcium, pantothenic acid, selenium, biotin and proteinwhich can aid our general health.

In this article, you will know whathomogenized milk as well as difference between homogenized milk and pasteurizedmilk. Whatis homogenized milk? Homogenization is a completelydifferent process than pasteurization, so we can have pasteurized milk that hasnot been homogenized and vice versa. Most of the milk we see on thesupermarkets shelf is both homogenized and pasteurized and a lot of people willnever understand the difference between the two. Pasteurization is theprocess that maximum people are amazed with that. The homogenization processquickly heats and then cools the milk to kill harmful germs and micro organismsin milk. Differencebetween homogenized and pasteurized milk: Homogenizationis likely done with the big machines and doesn’t involve any additives and muchlike homogenization, arguments exist for and against it.

It’s advantageousfor large-scale dairy farms to homogenize milk because the process allows themto mix milk from different herds without any issues. By preventing cream fromrising to the top, homogenization also leads to a longer shelf life which isattractive to consumers and also allows large farms to ship greaterdistances and do business with more retailers. Homogenization makes it easierfor dairies to filtrate out the fat and create two percent, one percent andskim milk. But as with most mechanical processes, when you homogenizemilk, you not only change the size of the

fat globules, you also rearrange thefat and protein molecules which could alter how they act in the human body. Finally, it is the next step after pasteurization.

Manufacturersuse it to alter milk for human consumption. While pasteurization involvesheating the milk to kill bacteria, homogenization involves processing milk sothat the cream does not separate. This results in a well mixed beverage thathas the same consistency throughout the final milk product. Finally, Homogenization makesit easier for dairies to filtrate out the fat and create two percent, onepercent and skim milk. Process ofhomogenization: Homogenizedmilk passes through small tubes during processing. These tubes reduce the sizeof the fat molecules in the milk.

This allows the fat, or oil portion of themilk, to remain mixed in with the water portion. During pasteurization, milk’swhite cells collect on the bottom of the vats after heating. The homogenizationprocess also helps to reverse this action and redistribute the white cellsthroughout the milk. Harmful facts: v Homogenization isnot always a good thing. The process itself reduces the size of fat moleculesin the milk. With smaller fat molecules, the fat may be easier for your body toabsorb. v The size of protein molecules in homogenizedmilk are also reduced, meaning this protein is not absorbed, but simply passedthrough the body. v This means that eventhough we have always been told that milk was healthy, homogenized milk couldbe contributing to weight gain and poor nutrition.

v It could also becontributing to the hardening of arteries and other heart issues. v Many types ofhomogenized milk also contain harmful added

hormones. v In some research, these hormones themselveshave been linked to issues like cancer. v Homogenization process makes the fat molecules small enough to bypassdigestion, milk's natural hormones and the hormones that cows receive toproduce more milk also bypass digestion. Therefore, these hormones directlyinteract with your body's hormones. v Homogenization makes fat easier to absorb.

Pasteurized milk: Pasteurizationis the process of heating milk up and then quickly cooling it down to eliminatecertain bacteria. For effective pasteurization, milk can be heated up tocertain degrees, but this method isn't very common. More common is heating milkup to at least 161. 6 degrees which is known as high temperature short time pasteurization. Milk treated with pasteurization.

The hotter the pasteurization temperature, the longer the milk will keep. In a slightly different process, milk can bepasteurized at a much higher temperature for just two to three seconds, producing what's called ultra-high temperature milk that keeps for months. Pasteurization does not kill all micro-organisms in milk, but is intended tokill some bacteria and make some enzymes inactive. Pasteurization does notreduce milk's nutritional value. Pasteurization inactivates certain enzymes andreduces certain vitamins like Vitamin C; it argues that milk is not a majorsource of Vitamin C. Raw milk can harbor dangerous bacteria that can pose serious health risks to you and your family. Thepasteurization process kills those bacteria.

Process of pasteurization: It's not just the cool packet in your kitchen that makes this possiblebut the way the milk and other foods are specially

treated before they reachyour home. The key is a process called pasteurization, where freshfoods are heated briefly to high temperatures, to kill off bacteria, thencooled rapidly before being shipped out to grocery stores. By greatlyincreasing the shelf life of packaged foods, pasteurization has proved itselfto be one of the most important food-preservation technologies ever developed. With non-pasteurized milk, you are not getting the same level ofnutrients that you would otherwise have in other kinds of milk. This makes itvery unique and ensures that you won't have to worry about any serious healthissues. When it comes to other kinds of milk, there is a whole host of otherissues that could pop up. This means that if you are someone that is veryconcerned about getting the right amount of added nutrients, make sure you aredrinking pasteurized milk are not.

Benefits of pasteurization: v Pasteurized milk canbe a source of pathogens that cause food borne illness that can result insickness, hospitalization and death. This is because milk may be contaminatedin a variety of ways. v Pathogens can bespread through feces, water, soil that may be on the cow's udder, sores on theteats, or from the hands of the dairy worker. v Microorganisms suchas Salmonella, Listeria, Yesinia, Campylobacter, Staphylococcus, Mycobacteriumbovis, Coxiella burnetii, Brucella, and E. coli are killed or greatly reducedby pasteurization. v Althoughsome claim that raw milk has improved nutritional value, cures diseases, andeven tastes better. v Pasteurized milk has no scientificallydocumented health benefits.

v It is strongly discouraged for children, thosethat are pregnant, elderly. v Those with weakenedimmune systems because they have the greatest risk

of food borne illness frompasteurized milk and milk products. Pregnant women also run the additional riskof miscarriage. v Pasteurizationdestroys 100% of pathogenic bacteria, yeast and mould and 95% to 99% of otherbacteria. v Pasteurized milk isfortified with this vitamin, which promotes calcium absorption and plays a keyrole in bone health. v Only levels of riboflavin, or vitamin B2, decrease significantly during the pasteurization process.

v Pasteurized milk isstill an important dietary source of this vitamin. v Low risk of sicknessby pasteurization milk; with pasteurized milk, you canrest easier knowing that you’re consuming milk that is devoid of mostcontaminants 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 ofcaution, you will be drinking healthier milk by making sure it’s pasteurizedmilk.

Effect of pasteurized milk: The trouble with milk pasteurization is that it canundermine the quality of the milk. Not only does pasteurization kill badbacteria and pathogens, it also kills or severely damages some of the mostimportant 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 milkwould have fewer nutrients, but the truth is that pasteurized milk hasfortified minerals rather than naturally-occurring ones. This can be a problembecause most fortified minerals and nutrients aren’t as bioavailable as thenaturally-occurring

counterparts. So sure, you might be getting good-tastingmilk, but it isn’t providing the same level of benefits.

Pasteurized milk often features lotsof hormones and other synthetic byproducts. While many of these have no knownside effects, we as humans haven’t been consuming them for very long. So thejury is still out on whether or not they are good for us over many years.

It is possible tohave pasteurized milk that hasn’t been homogenized and homogenized milk thathasn’t been pasteurized. Conclusion: The maindifference between homogenized milk and pasteurized milk is pasteurization isbetter than homogenization. Pasteurization has a small effect on the vitamins naturally found in milk. Overall, drinking pasteurized milk is stillthe safest way to enjoy the health benefits of milk.