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Raw Milk: the Good, the Bad, and the Ugly

With health trends coming in and out the topic of raw milk is sure to pop up. What exactly is raw milk? Raw milk is simply milk that has not been pasteurized. This is how milk was consumed for centuries until Louis Pasteur discover the process of pasteurization. During pasteurization milk is heated up to the point that most bacteria are killed but not to boiling point yet because once milk is boiled it does not taste very pleasant. However, the rise in attention for raw milk leads to the need to be informed on why it has gained importance, why was it overtaken by pasteurization, and what is to be done.

There are many benefits of raw milk. One of them is that enzymes that would normally be destroyed by heat during pasteurization are kept intact. Why this is important is because the human body does not digest lactose, a sugar found in milk, very well. "In most of the world's population the ability to digest lactose declines sharply after infancy. High lactose digestion capacity in adults is common only in populations of European and circum-Mediterranean origin" (Mace). The reason why enzymes, especially lactase, are important is that they break down and digest lactose. The enzymes left in raw milk are so

effective that in fact “80 percent of those who experience lactose intolerance find that they can drink raw milk with no problem, because it contains beneficial bacteria that produce the enzyme lactase” (Onusic, Hartke). Also, in a survey conducted found this estimate to be true:

Based on these findings, 6% of people living in households which have an arrangement to receive fresh unprocessed milk from dairy farmers, report that a healthcare professional has told them that they have lactose intolerance. And of these, 81% report that they are able to drink fresh unprocessed milk without the symptoms they had with commercial store-bought (Grade A, pasteurized and homogenized) milk. (Beals)

If the enzymes are in fact delicate enough to be destroyed during pasteurization how do they survive the high acidity of our stomachs? With this in mind how is it possible to be benefited by the enzymes present in milk if they could be destroyed in the process of digestion? The answer lies in the milk itself. Acids in the stomach are “offset by the fact that fresh whole milk is a buffer, that is an agent that keeps the pH steady” (Beals). Therefore, the enzymes in the milk are kept intact and can be used to aid in digestion later.

Another benefit of raw milk is that many of the nutrients are also still left intact. During pasteurization “part of the vitamin C...20 percent of the iodine present in raw milk” (Armchair Science). “Phosphatase (needed for calcium absorption), the Wulzen factor (prevents stiffness and arthritis), vitamin A” (Klotter) are destroyed or distorted. These nutrients are important because they help the body perform. Vitamin C helps with the

“protection against immune system deficiencies, cardiovascular disease, prenatal health problems, eye disease, and even skin wrinkling” (Zelman). Vitamin A helps you with “vision, a healthy immune system, and cell growth” (Vitamin A (Retinoid) Benefits for Vision and Health). By not pasteurizing milk all these beneficial nutrients can remain in the milk and when you consume the milk they will go into the body.

But, there are withdraws to raw milk as well. Usually milk is collected and pasteurized. “For example, pasteurization heats milk for, say, half an hour at 145°F (63°C), or for just 15 seconds at about 161°F (72°C)” (Nestle 93). This kills most microbial like bacteria and viruses leaving the milk you drink with fewer microbes then before pasteurization. Some of these microbial are helpful to you in digestion but some can be dangerous for you by causing illness and even sometimes death if not treated. Dangerous microbes that can possibly be found in raw milk are “Salmonella, E. coli...listeriosis, typhoid fever, tuberculosis, diphtheria, and brucellosis” (Food). Since raw milk is not pasteurized whatever microbial that are in the milk present when harvested go directly to you. “ The utters of cows are anything but sterile, and even when they are washed and disinfected, bacteria still get into the milk”(Nestle 92). These microbes in milk are said to be the cause of on an “average of 5.2 outbreaks per year linked to raw milk have occurred in the U.S. between 1993 and 2006--more than double the rate in the previous 19 years” (Unpasteurized milk).This is why, when “Louis Pasteur in 1864, [found that] pasteurization kills harmful organisms responsible for such diseases” (Food) pasteurization became widespread.

There are many things to know about pasteurization and unpasteurized products as

well. To start off, “Pasteurization DOES NOT mean that it is safe to leave milk out of the refrigerator for extended time, particularly after it has been opened” (Food). Just because pasteurized milk has killed off many of the microbes it has not killed all of them. “After pasteurization, the lactic acid bacilli are killed. The milk, in consequence, cannot become sour and quickly decomposes, while undesirable germs multiply very quickly” (Armchair Science). If you do consume raw milk be aware of the possibilities that could happen and get to know your producer. Make sure that the milk is tested for microbes and that the cow is also tested for diseases. The Food and Drug Administration or FDA states that “bacteria in raw milk can be especially dangerous to people with weakened immune systems, older adults, pregnant women, and children” (Food). If you plan on consuming raw milk or feeding raw milk to others then it is essential to consider if they or you fall into any of these categories. “Raw milk is sold legally in 25 states” (Raw Milk). If it is legal to buy raw milk in your state then feel free to go out to the store to buy it. But in states that it is illegal to sell raw milk, like Colorado, there usual is a system where you can buy shares of a cow. How this works is that you pay the farmer part of a cost in the up keeping of the animal that you have a share in and in return you receive raw milk.

Thus, the choice to drink raw milk is entirely up to the individual. There are many pros to drinking raw milk like the benefits of enzymes in digestion and the added nutritional value. There are also cons to drinking raw milk like the possibility of microbes like bacteria and viruses. There are many benefits to the consumption of raw milk and like regular milk there is a possibility to get sick from drinking milk as well. So giving raw milk a try could be a possibility if you are interested in the health benefits of raw milk. Like I mentioned earlier

you should take into consideration whether you are in the at risk group before consumption and get to know your provider before you go full steam ahead with this.

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