

# **Major Shift About Whole Milk – Now a Health Food?**

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#### **STORY AT-A-GLANCE**

- For decades, Americans have been told to avoid whole milk due to its saturated fat content, which has been falsely accused of clogging arteries and causing heart disease.
  This guidance goes back to the first edition of the dietary guidelines, issued in 1980, and most studies performed since then have exonerated full-fat whole milk
- > Most studies have found that dairy products are associated with lower risks of high blood pressure, heart disease and Type 2 diabetes, regardless of fat content. And even though full-fat dairy products have higher calorie content, they don't appear to contribute to weight gain either
- > A 2018 Lancet study found that, compared to those who did not consume dairy (milk, yogurt and cheese), those who consumed two or more servings per day were 17% less likely to die from any cause, 23% less likely to die from cardiovascular disease, and 34% less likely to die from a stroke
- Another large-scale trial found those with the highest levels of milk fats in their diet had a 29% lower incidence of Type 2 diabetes
- > The most ideal choices are products made from raw, unpasteurized milk, as the pasteurization process destroys many valuable nutrients. Pasteurization also destroys lactase, the enzyme responsible for the breakdown of lactose. Many people with lactose intolerance have no problem drinking raw milk, because it has lactase in it

For decades, Americans have been told to avoid whole milk due to its saturated fat content, which has been falsely accused of clogging arteries and causing heart disease.

To this day, the U.S. dietary guidelines and health authorities like the American Heart Association and the World Health Organization recommend drinking low-fat or skim milk for this reason.

However, as Dr. Dariush Mozaffarian, a cardiologist and professor of medicine at Tufts University, recently told New York Times reporter Alice Callahan,<sup>1</sup> this guidance goes back to the first edition of the dietary guidelines, issued in 1980, and most studies performed since then have exonerated full-fat whole milk.

In fact, most studies have found that dairy products are associated with lower risks of high blood pressure, heart disease and Type 2 diabetes, regardless of fat content. What's more, even though full-fat dairy products have higher calorie content, they don't appear to contribute to weight gain, either.

# **Dairy Protects Heart Health**

For example, a 2018 Lancet study,<sup>2</sup> which followed 136,384 adults across five continents for nine years, found that, compared to those who did not consume dairy (milk, yogurt and cheese), those who consumed two or more servings per day were:

- 17% less likely to die from any cause
- 22% less likely to die from cardiovascular disease
- 34% less likely to die from a stroke

Milk and yogurt, in particular, were associated with a lower risk of mortality and/or major cardiovascular events, and there was no discernible difference between low-fat and high-fat products. Cheese and butter intake were not significantly associated with these outcomes. Serving sizes were as follows:

- Milk and yogurt 1 cup or 244 grams
- Cheese one slice or 15 grams
- Butter 1 teaspoon or 5 grams

## There's More to Milk Than Milk Fat

As noted in the Lancet paper:<sup>3</sup>

"... dietary guidelines recommend minimizing consumption of whole-fat dairy products for cardiovascular disease prevention ...

However, dairy products and dairy fat also contain potentially beneficial compounds — including specific amino acids, medium-chain and odd-chain saturated fats, milk fat globule phospholipids, unsaturated and branched-chain fats ... vitamin K1 and K2, and calcium — and can contain probiotics, many of which also affect health outcomes.

Therefore, the net effect of dairy intake on health outcomes might not be reliably informed solely from its effect on a single risk marker (i.e., LDL cholesterol) or fatty acids."

The authors also review the results from previous meta-analyses,<sup>4</sup> none of which were able to discern a significant problem with dairy. For example, one meta-analysis of cohort studies found higher milk intake lowered the risk of high blood pressure while having "a neutral effect on cardiovascular disease."

The DASH trial also found a link between milk consumption and reduced blood pressure. Other meta-analyses have punctured the LDL argument as well. One such analysis, which included 20 randomized trials, found a "non-significant" increase in LDL cholesterol among those who consumed either low-fat or high-fat dairy products. Ditto for cheese.

One potential reason for this is because milk fat is packaged in globule phospholipids, which help bind cholesterol in your digestive tract.<sup>5,6</sup>

Another large-scale trial,<sup>7</sup> also published in 2018, which pooled results from 16 cohorts from the U.S., Europe, Australia and Taiwan, involving 63,682 individuals with a follow-up of nine years, found those with the highest levels of milk fats (odd-chain fatty acids 15:0

and 17:0, and trans-palmitoleic acid specifically) had a 29% lower incidence of Type 2 diabetes.

# No Need to Avoid Full-Fat Dairy

According to The New York Times,<sup>8</sup> an independent panel of nutrition experts is currently reviewing the evidence<sup>9</sup> on how saturated fat consumption affects your cardiovascular disease risk. Their findings may eventually result in updated dietary guidelines, with regard to dairy.

In the meantime, Penny Kris-Etherton, Professor Emeritus of nutritional sciences at Pennsylvania State University, recommends three servings of dairy per day as part of a balanced diet, and "Based on the most recent dairy fat data … it's probably OK if one or two of those servings are whole-fat milk, yogurt or cheese."<sup>10</sup>

Curiously, Kris-Etherton still recommends plant-based oils like canola oil, soybean oil and margarine instead of butter, which is flat-out horrible advice, as these oils are loaded with mitochondrial-destroying linoleic acid (LA), which appears to be one of the primary drivers of chronic disease. To learn more about this, see my previous report, "Linoleic Acid – The Most Destructive Ingredient in Your Diet."

# **Raw Milk Is Your Best Option**

When it comes to dairy products, whether we're talking about milk, yogurt, cheese or butter, the most ideal choices are products made from raw, unpasteurized milk, as the pasteurization process destroys many valuable nutrients. Even organic grass fed dairy is not identical to raw dairy.

Unfortunately, the U.S. Centers for Disease Control and Prevention to this day claims that "All raw milk is risky,"<sup>11</sup> simply because it hasn't been pasteurized. According to the CDC:<sup>12</sup>

"The use of good hygiene practices on the farm can reduce but cannot eliminate the chance of milk getting contaminated. Healthy animals can carry germs that make people sick. Also, testing isn't a guarantee that raw milk is free from harmful germs. Even if testing one batch of a farm's raw milk does not find harmful germs, the next batch can contain them.

Plus, tests do not always detect low levels of contamination. Germs that go undetected in raw milk can multiply between the time the milk is tested and people drinking it."

While it's true that raw milk CAN be contaminated, the reality is that it rarely ever is. As explained in the video above, raw milk contains components that protect against disease-causing pathogens.

# Fact: You are 35,000 times more likely to get sick from other foods — including pasteurized dairy — than you are from raw dairy.

Research<sup>13</sup> by Dr. Ted Beals shows you are actually 35,000 times more likely to get sick from other foods than you are from raw dairy. This includes pasteurized dairy, which has been linked to 73 deaths, whereas raw milk has not been linked to a single death so far.<sup>14</sup>

The key to healthy raw milk is making sure it's from organically raised grass-fed cows. Never ever drink raw milk obtained from concentrated animal feeding operations (CAFOs).

Doing so could indeed be life threatening, as CAFOs are hotbeds for pathogens of all kinds. In fact, the propensity for pathogens to thrive in CAFOs is one of the reasons the milk must be pasteurized in the first place. It's simply not safe to drink otherwise. Of course, pasteurization also extends shelf life, which is a convenience, but it comes at a cost to health.

## **Iowa Has Legalized Raw Milk Sales**

The video above is from 2014 and, sadly, not much has changed since then, at least not on the federal level. Some states, however, have gotten wiser about raw milk. Iowa, for example, signed Senate File 315 into law earlier in 2023, which allows farmers to sell raw milk directly to consumers in the state. The law came into effect July 1, 2023.

This, despite heavy lobbying AGAINST the bill by the Iowa State Dairy Association, the Iowa Dairy Foods Association and the Iowa Public Health Association.

The reason they're so against legalizing the sale of raw milk is because by preventing farmers from selling directly to consumers, processors can (and do) price fix the market. As a result, they can push small, family dairy farms out of business, leaving industrialized, CAFO dairy farms to dominate.

# **Raw Milk Can Bring Farmers Out of Poverty**

In its Campaign for Real Milk, the Weston A. Price Foundation describes the stark difference in income for farmers selling conventional, pasteurized milk compared to those selling raw milk, and once you understand the economics of the situation, it's easy to see why Big Dairy wants to keep raw milk under wraps.

A conventional dairy farmer may receive about \$16 per hundredweight (100 pounds), which keeps him and his family in near-poverty:<sup>15</sup>

"In order to maximize his return, he has modern Holstein cows and he feeds them lots of grain. So, he may get 190 hundredweight per year from each cow, which works out to a total yearly income of about \$90,000 in round numbers, most of which is eaten up with feed and vet bills.

His wife has to work to bring in some cash and obtain health insurance, and they live just above the poverty line. If they have gone into debt and the prices drop even a little bit, or their cows produce less than expected, they lose their farm." In contrast, a farmer selling raw, grass-fed dairy directly to consumers will have a very different outcome — one that allows him to thrive while selling a superior, healthier product to his customers:<sup>16</sup>

"He would use Guernseys, Jerseys or some other old-fashioned breed because these cows do better on grass. He would only get about 100 hundredweight per cow per year, about half as much, but if he sells the milk at \$6 per gallon, he would get at least three times as much for the milk.

Actually, some farmers are getting \$10 or even \$15 per gallon for their raw milk, but let's be conservative and stick to the figure of \$6 per gallon. If he sells it at \$6 per gallon, he makes about \$73 per hundredweight.

At \$73 per hundredweight, he grosses \$7,300 per cow per year. With 30 cows his gross income on the milk products alone is \$219,000. If he makes cheese, yogurt, kefir or butter, his gross income will be more.

But there's more. If Mike makes butter, cream and cheese, he will have whey and skim milk as by-products, which is free food for pigs and chickens. So, in addition to milk and milk products, he can sell eggs, chicken, turkeys, pork, bacon and lard as by-products."

As they make more money, raw milk farmers can also provide a major boost to rural economies. If 100 farms in Wisconsin could provide raw milk to 50 local families, it would lead to more than \$10 million in "increased wealth and well-being" for Wisconsin residents, according to the Farm-to-Consumer Legal Defense Fund.<sup>17</sup>

### **Raw Milk Is the Healthiest Choice**

Raw milk is also far healthier for you in terms of nutrition. Beneficial components destroyed by pasteurization include:<sup>18</sup>

- Lactoferrin, which binds to iron
- Lactoperoxidase, which has antimicrobial properties

- Enzymes, needed for healthy digestion
- Prebiotics that support gut health

Raw milk also contains highly bioavailable calcium to support thyroid and adrenal health, along with higher amounts of potassium, B vitamins, choline and zinc. (Pasteurized milk actually contains about 70% less zinc than raw.) The saturated fats in raw milk also aid in the production of important hormones, including testosterone, pregnenolone, DHEA and progesterone.

Pasteurization also destroys lactase, the enzyme responsible for the breakdown of lactose into glucose and galactose (the two sugars that makes milk taste sweet). Once broken down into its two constituent parts, each sugar can then be absorbed by your bowel.<sup>19</sup>

Lactase deficiency is one of the primary reasons for lactose intolerance, as your bowel cannot absorb the undigested lactose. On a side note, lactose intolerance could be indicative of low thyroid function, as your thyroid aids in the production of lactase in your intestines.<sup>20</sup> Many people with lactose intolerance have no problem drinking raw milk, because it has lactase in it.

# How to Assess the Quality of Raw Milk

When choosing raw milk, remember that quality matters. Raw milk produced by CAFOs, which is intended for pasteurization, is typically not safe for consumption as the cows live in filthy conditions and are typically in poor health. CAFO raw milk often tests positive for pathogens and must be pasteurized to kill the pathogenic bacteria before it's safe to drink.

Raw milk produced by small, grass fed dairies, which is intended to be consumed in its fresh state, is another animal entirely. Even so, the Raw Milk Institute has created standards to look for when choosing raw milk to ensure its quality and safety. The common standards for raw milk farmers include:<sup>21</sup>

Having a Risk Analysis and Management Plan (RAMP) for raw milk production; this is a basic food safety plan that includes risk assessment and mitigation for milk handling, manure management, feed sources, human factors (such as health of the milking team), nutritional management of the cow, cleaning protocol, health screening of animals and much more.

Frequent testing (based on their individual RAMP) for zoonotic pathogens such as salmonella, E. coli, campylobacter and listeria, none of which are permitted.

Monthly testing for coliform bacteria, with a target rate of less than 10 coliforms per milliliter (ml) raw milk over a three-month average.

Monthly testing for Standard Plate Count, with a rolling three-month average of less than 5,000 per ml raw milk.

Selling raw milk for direct human consumption only from their own farm (not comingled with raw milk from other dairies).

Providing documentation and assurance that herds are free of brucellosis and tuberculosis (TB), and that they're tested once per year or meet local TB requirements.

To locate a farmer selling raw milk near you, check out the Campaign for Real Milk's raw milk finder page.

### **Sources and References**

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- <sup>5</sup> Gut March 2020; 69(3): 487-501
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- <sup>9</sup> Dietary Guidelines Work Under Way
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- <sup>13</sup> Real Milk March 16, 2021

- <sup>14</sup> Real Milk, See Raw Milk Is Safe illustration
- <sup>15, 16</sup> A Campaign for Real Milk, The Economics of Raw Milk
- <sup>17</sup> FarmtoConsumer.org Economic Impact on Wisconsin From the Sales of Raw Milk
- <sup>18, 20</sup> Twitter George Ferman June 3, 2023 Twitter thread
- <sup>19</sup> NIH Causes and Diagnoses of Lactose Intolerance
- <sup>21</sup> Raw Milk Institute, Common Standards