Whole milk, cheese and butter have long been demonized as unhealthy, their saturated fat content incorrectly identified as a driver of obesity, heart disease and related health problems. We now know eating fat does not make you fat. Science has also demolished the idea that saturated fats clog your arteries and promote heart disease. On the
contrary, these fats are important for optimal health, and combat many of today's chronic diseases, including heart disease.

While the low-fat myth still lives, the 2015 Dietary Guidelines for Americans\(^1\) does recognize that reducing TOTAL fat intake has no bearing on obesity or heart disease risk.

Instead, the guidelines rightfully warn that sugar and refined grains are the primary culprits. Unfortunately, the guidelines fall far short by still suggesting a 10% limit on saturated fats especially, and the low-fat dairy recommendation remains. This, even though mounting research supports consumption of full-fat dairy products over low-fat ones.

**Full-Fat Dairy Consumption Has No Influence on Mortality Rates**

In a recent article in The Atlantic,\(^2\) senior editor Dr. James Hamblin discusses "the vindication" of full-fat dairy, and the research that's tossing low-fat recommendations by the wayside. One of the most recent studies,\(^3\) which analyzed the blood fats in more than 2,900 adults, found the mortality rate during a 22-year period was identical regardless of their levels. "The implication is that it didn't matter if people drank whole or skim or 2-percent milk ..." Hamblin writes.

At the end of the day, consumption of dairy fats — either high or low — does not appear to influence your risk of death.

Corresponding author Marcia de Oliveira Otto, assistant professor of epidemiology, human genetics, and environmental science at the University of Texas School of Public Health, told Hamblin, "I think the big news here is that even though there is this conventional wisdom that whole-fat dairy is bad for heart disease, we didn't find that. And it's not only us. A number of recent studies have found the same thing."

For example, a systematic review and meta-analysis\(^4\) published in 2014, which looked at 32 observational studies with well over half a million participants, concluded that, "Current evidence does not clearly support cardiovascular guidelines that encourage
high consumption of polyunsaturated fatty acids and low consumption of total saturated fats."

Otto did note, however, that whole milk is likely a healthier choice for the fact that low-fat products contain added sugars, and excessive sugar consumption, as you probably know, raises your risk of virtually all chronic disease.

Also, while dairy consumption overall had no impact on mortality, Otto's team found certain saturated dairy fats did have specific health benefits. For example, those with higher levels of heptadecanoic acid — a component of butterfat — had a 42% lower risk of stroke. Other studies have found heptadecanoic acid may also help reverse prediabetes\(^5\) and full-fat dairy such as whole milk has been linked to a lower risk of Type 2 diabetes.

**Raw Versus Pasteurized Milk**

No discussion about dairy would be complete without mentioning there's a big difference between pasteurized dairy products and raw ones. Milk can only be consumed in its raw, unpasteurized state if the milk comes from organically-raised, grass fed cows.

Animals raised in concentrated animal feeding operations (CAFOs) are not only routinely fed antibiotics and other drugs, making their milk unsuitable for raw consumption, their living conditions promote disease that necessitates pasteurization to kill of pathogens.

From a nutritional perspective, the differences in diet also play a significant role. Raw, grass fed cow's milk contains a number of health-promoting components that you simply cannot get from pasteurized CAFO milk.

The grain- and sugar-based diets of CAFO cows alter their digestive health and the nutritional composition of the milk. According to a 2015 study\(^6\) in The Journal of Allergy and Clinical Immunology, children who drink raw milk have lower rates of viral and respiratory tract infections, including regular colds. According to the authors:
"Early life consumption of raw cow's milk reduced the risk of manifest respiratory infections and fever by about 30% ... [T]he public health impact of minimally processed but pathogen-free milk might be enormous, given the high prevalence of respiratory infections in the first year of life and the associated direct and indirect costs."

As evidenced in other studies, they confirmed that raw milk boosts immune function and lowers inflammation, as revealed by reductions in C-reactive protein levels among raw milk drinkers. Raw milk also contains:

| Healthy bacteria (probiotics) that nourish your gut microbiome | Beneficial raw fats, amino acids, and proteins in a highly bioavailable form, all 100% digestible |
| More than 60 digestive enzymes, growth factors and immunoglobulins (antibodies). These enzymes are destroyed during pasteurization, making pasteurized milk harder to digest | Vitamins A, B, C, D, E and K in highly bioavailable forms. Also has a balanced blend of minerals (calcium, magnesium, phosphorus and iron) the absorption of which is enhanced by live lactobacilli |
| Phosphatase, an enzyme that aids and assists in the absorption of calcium in your bones, and lipase enzyme, which helps to hydrolyze and absorb fats | Healthy unoxidized cholesterol |
| High amounts of omega-3 fats while being low in inflammatory omega-6 | Conjugated linoleic acid (CLA), which has a number of health-promoting benefits, including anti-cancer activity |

Is Raw Milk Dangerous?

While the authors suggest that raw milk may have health hazards that need to be overcome, such fears are vastly overblown, and their views are probably just reflecting
the official propaganda against raw milk, which appears to be more about protecting the CAFO dairy industry than protecting consumers against truly dangerous products.

The U.S. Food and Drug Administration (FDA) and the U.S. Department of Agriculture (USDA) insist that raw milk will increase your risk of death and disease, but Europe — where raw milk consumption is far more common — is not experiencing this issue, and foodborne illness statistics offer no support for such fears whatsoever. In fact, research by Dr. Ted Beals shows you're 35,000 times more likely to get sick from any other food than raw milk.

Both the FDA and USDA warn that raw milk can carry disease-causing bacteria — completely ignoring and overlooking the fact that these bacteria are the result of industrial farming practices that lead to diseased animals. Healthy animals raised on pasture simply will not harbor dangerous amounts of pathogenic bacteria. The only way their raw milk warning would make sense is if it specified that you should never drink unpasteurized CAFO milk, as that could indeed be disastrous.

Grass fed milk, on the other hand, rarely ever poses a health risk when consumed raw, provided the producer is following good, sanitary practices, and organic dairy farms are required to follow stricter protocols in this regard. An investigation by Mark McAfee, CEO of Organic Pastures Dairy — which included a FOIA request to the Centers for Disease Control and Prevention for data on deaths claimed to be related to raw milk — revealed:

- There have been no reported deaths from raw milk in California
- The two deaths the CDC lists as being related to raw milk were actually due to illegal Mexican bathtub cheese, and not raw milk produced in the U.S.
- The last people to die from milk died from contaminated pasteurized milk
- According to a Cornell study performed on CDC data, 1,100 illnesses were linked to raw milk between 1973 and 2009. Meanwhile, 422,000 illnesses were caused by pasteurized milk. While no one died from raw milk, there were at least 50 deaths from pasteurized milk or pasteurized cheese
Research Exonerates High-Fat Cheese

As with whole dairy, research into the health effects of cheese have come to exonerating conclusions as well. As reported by Joana Maricato, an analyst at New Nutrition Business, in 2015:

“In the past, studies focused on analyzing individual nutrients and their effects on the body. Now, there is a growing tendency to look at foods and food groups as a whole ... As a consequence, amazing results are appearing from studies on dairy and particularly cheese, proving that the combination of nutrients in cheese has many promising health benefits that were never considered in the past.”

For example, research published in 2016 found eating high-fat cheese helps improve your health by raising your high-density lipoprotein (HDL) cholesterol. Higher HDL levels are thought to be protective against metabolic diseases and heart disease. Nearly 140 adults were enrolled in the 12-week study to investigate the biological effects of full-fat cheese.

Divided into three groups, the first two were told to eat either 80 grams of high-fat or reduced fat cheese each day. The third group ate 90 grams of bread and jam each day, with no cheese. None of the groups saw any significant changes in their low-density lipoprotein (LDL) cholesterol, but the high-fat cheese group increased their HDLs.

Another study published that same year showed that cheese consumption helps prevent fatty liver and improves triglyceride and cholesterol levels — parameters used to gauge your cardiovascular disease risk. Studies have also found that full-fat cheese can be useful for weight management. In one, they found it helps ramp up your metabolism, thereby reducing your obesity risk.

Roquefort cheese in particular has been linked to cardiovascular health and improved longevity, courtesy of its anti-inflammatory properties. Cheese — especially when made from the milk of grass-pastured animals — is also an excellent source of several nutrients that are important for health, including:
- High-quality protein and amino acids
- High-quality saturated fats and omega-3 fats
- Vitamins and minerals, including calcium, zinc, phosphorus, vitamins A, D, B2 (riboflavin) and B12
- Vitamin K2 (highest amounts can be found in Gouda, Brie, Edam. Other cheeses with lesser, but significant, levels of K2: Cheddar, Colby, hard goat cheese, Swiss and Gruyere)
- CLA, a powerful cancer-fighter and metabolism booster

**Butter and Fermented Raw Dairy Are Superior Choices**

While raw, whole milk provides plenty of valuable health benefits, it is still high in natural sugars, and could easily throw you out of ketosis if you're on a cyclical ketogenic diet. You can still reap the benefits of raw dairy, though, by including cheese, butter and fermented products such as kefir or yogurt made from raw, grass fed milk.

Personally, I go through anywhere from half to a full pound of raw butter every week, typically on sweet potatoes that I consume after my strength training sessions. Studies have linked butter consumption to a number of health benefits, including a lower risk of heart disease, cancer, arthritis, osteoporosis, asthma and obesity. It also promotes thyroid health and good digestion, and supports fertility and growth and development in children.

Raw, organic yogurt and kefir have the added benefits of being lower in sugar and providing you with high amounts of probiotics, both of which are side effects of the fermentation process. Store bought yogurt and kefir really cannot compare though.

For starters, they're typically chockfull of added sugars, which nourish disease-causing bacteria in your gut. And, since they are pasteurized, commercial yogurt and kefir contain only the probiotics added back in afterward. These facts apply to both organic and nonorganic brands.
Many may also contain artificial sweeteners, colors, flavors, and additives, none of which will do your gut and overall health any favors. The good news is yogurt and kefir are both easy to make at home, provided you have access to raw milk. For guidance and instructions, see "How to Make Fresh Homemade Yogurt."

Sources and References

2. The Atlantic July 19, 2018
3. American Journal of Clinical Nutrition July 11, 2018; nqy117
5. Cheese Reporter August 7, 2015
6. Journal of Allergy and Clinical Immunology January 2015; 135(1): 56-62.e2
7. A Campaign for Real Milk December 17, 2012
11. Dairy Science and Technology July 2016; 96(4): 539-549
12. Telegraph October 22, 2009
15. Telegraph December 17, 2012