

hen was the last time your refrigerator didn't have any milk? Not because you ran out or you waited too long to buy another gallon, but because it flat out wasn't there? For most of us, this is an unlikely scenario. From birth, we develop an intrinsic relationship milk that we carry into adulthood. We're emotionally tied to the stuff. Milk isn't just a thirst-quenching liquid; we see it as a source of nutrition. But how healthy is it really?

Conventional milk bought in a grocery store barely resembles the source material anymore. Large factory farms force-feed their malnourished cows additives and supplements to increase production. All of these chemicals are passed into the milk that we drink. Dairy companies may try to reduce the quantity we ingest, but harmful chemicals are still there. After heating their raw fluids in an attempt to burn out additives through pasteurization, we're left with a final product that's both bland, potentially harmful and not nearly as nourishing as we're told it is.

If anyone were to be a specialist on milk, it would

be Mark Kastel of the Cornucopia Institute, which is dedicated to maintain the integrity of organic milk. "We've seen a tremendous drop in the traditional value of the food in this country," he says. "And truly organic milk, we know that it's much higher in all kinds of beneficial compounds like omega fatty acids, CLA, which is an amino acid that is thought to protect against cancer and heart disease, and antioxidants."

So what's the difference? In order to understand the health benefits and risks, one has to look at the three types of milk available: Conventional, organic, and raw.

Conventional milk, which is most milk found in grocery stores, comes from giant farms that cram their cattle into tight fitting stalls to maximize production. The animals don't graze; they don't even have room to sit down. The packed conditions lead to a lot of sickly cows. To combat this, the animals' food, which is already made up of supplements instead of substance, is laced with constant antibiotics and bovine growth hormone (BGH) to maximize output. The milk they produce is undrinkable. It's bombarded with harmful and genetically engineered chemicals that aren't good for the cow, let alone us. The companies then pasteurize the milk by superheating it in an attempt to cook out the many elements they put there in the first place. After that, the liquid is hydrogenated to separate the creme from the milk. That's how we get the whole, 2%, 1%, and skim gradients. It removes the fatty

crème, but instead of eliminating all of the fat, it actually breaks it down and reduces the size of the molecules instead. Our bodies aren't equipped to digest them properly when they're in this form. Instead, they tend to build up and lead to other health problems. The milk we drink would actually be harmful to a baby cow.

What was once taken at face value is now being questioned. Milk so ubiquitous but 95 percent of it is, in the long term, poisonous. Health conscious consumers are turning to organic milk.

For milk to be labeled "organic" it must meet strict guidelines set up by the USDA. It prohibits additives, hormones, and even antibiotics in the feed; the small quantities of a cow's antibiotics we consume increases our resistance to other medications. Cows must have freedom to graze in pastures free from all pesticides and herbicides and, with limited exceptions, eat only grass. This works in the cows' favor; the animals are ruminants and this is their natural eating environment anyway. The requirements may seem steep but it's in our best interests, as well as that of the cow; everything a cow eats or drinks finds its way back into the milk. The final product is then pasteurized to remove all bacteria and reduce health risks.

Some even consider pasteurization unnecessary. While not harmful, it kills most of the beneficial bacteria that help us absorb vitamins and boost our immune system. Bloomington dairy farmer Luke Rhodes has been drinking raw milk all of his life. He currently has over 150 customers who also appreciate the health benefits of raw milk and actively seek it in its more natural and nutritional form. "We were certified organic for four years," he says. "We dropped the certification, but we still carry the organic practices. We don't use any herbicides, pesticides, antibiotics, or hormones. Anything in question at all with the organic standard we don't use. While upholding a legitimate certification would allow him to sell his product to stores, he claims that the standards are what's important, not the piece of paper saying so. All of his customers come to his farm and see firsthand what his operation looks like. There are no secrets; everyone knows what's going into the milk.

Rhodes is not allowed to sell milk to them directly; raw milk is actually illegal to sell in Indiana for human consumption. Only about half of the states in the U.S. allow the sale of raw milk. Instead, anyone interested participates in his cow share program. Like a company, they buy stock in a cow, pay a monthly boarding fee, a later delivery fee, and Rhodes keeps them stocked with milk. "What we're seeing is that people start to learn about what kinds of foods are really healthy for them," says Bobbi Boos, a local vegetable farmer and one of Rhodes' customers. "Then I think they're gonna demand it. And if it's not available in the stores, those things will surface."

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The Monroe County Health Department follows the state Health department's policies in regards to raw milk and retail. Any business selling milk must abide by state health codes and sell pasteurized milk. As for consumer consumption, a representative of Monroe County says that, "it's the consumer's right to choose. It's just like if someone wants to eat runny eggs or undercooked meat. There's a risk you'll get sick, but it's your decision. Milk is pasteurized to remove the bacteria. If you want to drink raw milk in your own home and you get sick because of it, that's on you."



knowledge and consumers are starting to think smarter, people are turning to organic milk in such waves that grocery stores are selling out. Mac Mclauchlin, who coordinates the groceries and merchandise of Bloomingfoods, says that "as of right now, we're not experiencing any difficulty in stocking the shelves with organic milk. Consumer demand has definitely increased and prices are currently in an upswing, but that's not to say that we won't have a problem in the future." When grass is not available, the prices of the organic grains farmers are required to use rise in price and they're not able to produce enough. This, coupled with an increased consumer demand, has created an organic milk shortage

Cow share programs like the one on Rhodes Farm, while not illegal, are looked down upon by the USDA and the large dairy companies. "We have very powerful agro-businesses with lots of campaign money for our elected officials and lots of lobbyists all lined up to tell you that if you drink raw milk, you're gonna die," Kastel of Cornucopia says. "Well, isn't it a coincidence that the infrastructure to make and produce raw milk is totally outside of their control?"

It's no secret that any raw food can be contaminated, but that's a universal truth for all farms, not just dairy. "We

don't have people dying all over the country from this," Kastel continues, "and yet there are still people who sadly still get sick from all kinds of food that come out of our traditional industrial food system whether that's spinach, eggs, or numerous incidents of deadly e.coli contamination in ground beef. We're not banning all

spinach, eggs, or numerous incidents of deadly e.coli contamination in ground beef. We're not banning all these things." It's organizations like Cornucopia who have made it their mission to not only research the benefits of organic farming, but also enforce standards and ethics. "Congress has passed legislation that puts the responsibility on the shoulders of the USDA to protect the consumers from fraud and to protect farmers from unfair competition," Kastel explains. "They have not performed well. Our goal is to keep pressure on, because [organics] has now grown into a 30 billion dollar industry." In their effort to look after the small farmer as well as the industry as a whole, Cornucopia is currently calling Martek Biosciences – part of a \$12 billion conglomerate – into question for their formulated oils that are being processed with synthesized chemicals. The practices are a direct violation of organic standards and can lead to health issues for milk and infant formulas, but as of right now, the USDA has yet to do anything about the claim. Meanwhile, the products continue to be sold in stores.

Now that more of this information is becoming public

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in the Midwest. Interested in the increased health benefits, but unable to find organic milk in stores, some are turning to farmers like Luke Rhodes, for raw milk. "The cow share program has been growing fairly drastically over the past year," he says. "It's almost growing faster than what we can increase in production."

For those interested in

organic milk, Cornucopia actually rates every organic brand in the country on their website: http://www.cornucopia.org/dairysurvey/index.html. They separate which brands buy their milk from factory farms and which buy theirs from farmers whose cows have names, not numbers. It's an attempt to educate consumers as to where their milk is actually coming from. It helps cut through

the veil as to who is using "organic" as product branding and who is legitimately concerned with the

integrity of the final product.

Kastel explains that thirty years ago, "we were spending about 16% of our incomes on food and about 8% on health care. And those numbers have almost perfectly inverted. Today we have the cheapest food in the world – bar none – and absolutely the most expensive health care delivery system. And that would be OK if we were healthy. But, the byproduct is that we have exponential increases in debilitating, chronic health problems from asthma and diabetes, heart disease, raising infant mortality, and lowering longevity compared to any other developing country. So, we really have to back up and think 'is this cheap food that we're buying such a great deal?"

He likes to refer to organic milk as a "gateway product" for most families, as it's the very first organic product that comes into their homes. Many are turning to organic milk instead of conventional milk from a factory farm for all of the additives and chemicals that it doesn't have. Instead, the healthier viewpoint may be to consider what organic milk actually *does* contain and how those beneficial aspects actually affect your long term health in a positive way, unlike most of the other milk found in refrigerators.