American Milk: The Raw Deal

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The first time I ordered from the website, I selected the "Kamal" option, since it was near my parents' Lincoln Center apartment. A poorly worded email reminded me to make sure that my order was in the system by Thursday at midnight, in order for them to process a Saturday delivery. The pickup instructions offered no actual address, but that Saturday I was at the specified intersection at the appointed time. I waited for 30 minutes under a threatening sky. I wondered if I should be looking for a van or a truck, or whether it would have any signage. The contact number I was given at checkout for Kamal rang unanswered, with no voicemail. I kept calling.

When the deliveryman did finally call me back, his unidentifiable accent was so strong I could barely catch a word. I asked to speak to his driver instead, and I finally tracked them down in front of my parents’ building, in a generic SUV. Neither man was named Kamal—through a stilted, broken conversation, I met the Egyptian driver Moaz M, and his companion Moose, with whom I’d initially tried and failed to communicate. Moaz was somewhat helpful, which was in stark contrast to Moose, whose accent was the least of his problems; his speech was slurred and he had trouble standing up straight.

Out of a cooler in the back of their van came two unmarked half-gallon plastic bottles, one with a pink cap, one brown. Moaz stood there, expectantly, with a wad of cash in his hand.

Here, I found myself involved a perfect example of a “grey market” sale, where goods are sold outside of authorized manufacturer or owner guidelines (popular examples include electronics, pharmaceuticals and even frequent flyer miles). Though this exchange felt like some sort of illicit drug run, these two bottles contained something that is sold in every grocery store in the city—milk. But unlike going to the nearby Whole Foods for a regular carton of 2 percent, this was what I had to
do to obtain raw (as in, unpasteurized and unprocessed) milk in New York City.

Moaz clarified that the brown-capped bottle was the “Guernsey” milk—raw whole milk, which was what I was after. The bottle with the pink cap, the “European Cattle” had 4.3 percent milk fat. The total for the bottles came to $10.50—cash only, on delivery—which is about four times what a gallon of regular milk goes for at Whole Foods. I forked it over.

Once upstairs with the two still cold bottles, I poured glasses for myself and my mother. Naturally, the thought occurred to me—was this actually safe to drink? How did I know this was the real deal, and that what I was pouring wasn’t liquid anthrax? Still, I made sure not to display my hesitation, since I didn’t want to alarm my mother.

This was only the latest new and somewhat adventurous thing my mother, Marjorie Ehrenreich, and I had embarked upon together; we learned to ski together, and even bungee jumped as a pair long ago in Interlaken, Switzerland. Like me, Marjorie is a born and bred New Yorker: she loves her city because it is a wonderland for adventurous spirits like us. Eclectic cuisine (we are both diehard Indian food fanatics), the latest fitness trends (I recently got her to try Bikram Yoga) and fashion crazes—it’s all here in the Big Apple. But as active and engaged as she is, at 67, my mother is now faced with a decidedly less enticing adventure.

Although she has absolutely no symptoms of osteoporosis, my mother’s bone density test results have grown increasingly alarming for more than a decade. Referring to horror stories of women in her condition breaking ribs from a violent sneeze, her orthopedist has consistently urged her to try bisphosphonates and other drugs purported to increase bone density, but most of these drugs are considered somewhat dangerous, even by the
FDA—some have been linked to aggressive forms of osteosarcoma, and have a two-year lifetime dosage cap.

“My doctor has wanted me to try these terrifying black-label drugs for years now, and I am still resistant. I’ll try anything else—even raw milk,” my mother says on a late spring walk in Central Park. She walks with the purpose of a New Yorker, carrying her small frame with speed and assurance. With a regal high forehead and deep auburn hair, she has a delicate European face that is only now starting to show the slightest hints of exhaustion.

Marjorie is looking to alternative means to strengthen her bones. Her godson, an LA-based raw food activist, introduced our family to the idea of raw milk a few years ago, and I was the first to take to it—slowly. The idea of drinking milk that has not been processed to prevent various microbial pathogens took some getting used to. But now, my mother is hoping to get raw whole milk to help with her bone health, and also keep her weight up. In addition to bone density loss, she also suffers from debilitating headaches, and has grown wary of many of the foods she used to eat for fear they are causes of her pain. At 5 foot 4 and a half, this can have serious consequences; she has weighed as low as 113 pounds, when her doctors say she should really be closer to 120.

“I feel trapped,” Marjorie says at her home near Columbus Circle. “So many foods seem to be triggers now. I have cut out so much and don’t really have an appetite anymore.”

Proponents for raw milk see it not only as something that can help with bone health, but as a nutrient-rich restorative that bestows overall health and equilibrium to the system as a whole.
"Raw milk is designed to make young ones grow healthy and fast—whether it's a cat or a baby," says clinical nutritionist Alfredo Urso. Urso is a raw foods advocate in Southern California who believes that tinkering with milk (or any food) beyond how nature intended is a bad idea. He calls this “denaturing,” and includes pasteurization in that category. After those practices, he says, “[milk is] not even a food anymore. It is a white liquid that many doctors advise not to drink.”

"Raw milk is designed to make young ones grow healthy and fast—whether it's a cat or a baby."

ML Healey, a chicken farmer and personal organizer in Easton, New York, concurs.

“I drink raw milk because I eat real food,” she says.

Healey, 63, travels 75 miles every month to get her raw milk at Hawthorne Valley Farm in Columbia County. “It’s unadulterated...It’s kind of a no-brainer for unprocessed nutrition.”

It’s no surprise that raw milk began to present itself as a potentially viable solution to my mother’s health woes. The trend of drinking raw milk has steadily grown in popularity in New York City over the last few years. As part of the growing farm-to-table and raw foods movement, more people are seeking it out—straight from humanely raised, clean cows, with no heating or processing. It was even spoofed in a recent spot on Saturday Night Live, as a staple of the bicoastal bubble-like left wing that didn’t see the Trump presidency coming.

“We get asked about it all the time,” says Ann Herpel, general coordinator of the Park Slope Food Co-op in Brooklyn. Though the co-op sells hemp seeds, ever-trendy sauerkraut and more, it cannot sell raw milk. “People from neighboring states, where
raw milk can be legally sold, just assume we have it. But we’d get in trouble if we sold it here.”

Most milk sold in the U.S. is subject to strict processing requirements, including pasteurization, a heating process that kills pathogens and keeps milk safe and clean in today’s cost-optimized, factory-farmed dairy industry. But when it comes to raw, unpasteurized milk, it’s a more delicate matter, since the production, sale and distribution of the product is governed by legislation that varies greatly state by state. In the northeast, raw milk can be legally bought and sold in Pennsylvania and Connecticut, while in New Jersey and Rhode Island, the stuff is patently illegal. In New York, Massachusetts and Vermont, unpasteurized milk can only be sold on actual farms. Those seeking this type of milk in New York City have to either leave town to buy it on a farm, or depend on sketchy grey market sales from online delivery services, like I had done.

In New York, raw milk must also carry clear signage that warns consumers that the product is not pasteurized and “does not offer the protection of pasteurization.” Without pasteurization, milk must be continually monitored and protected from harmful bacteria and pathogens, ones that would otherwise be destroyed by the practice (of course, pasteurized milk must also be kept to strict guidelines in order to remain fresh and disease-free).

But many believe that raw milk, when prepared and handled properly, is not harmful at all, and indeed contains more nutrients than processed milk. “Raw milk is the original superfood, very potent. Its nutritional content is not compromised,” says Urso.

Yet the dairy establishment, which consists of lobbyists and policy-makers on behalf of the dairy industry as a whole, see it differently.
“Raw milk makes people sick,” says Peggy Armstrong, vice president of communications at the International Dairy Foods Association, which acts as a voice for the large-scale American dairy industry in Washington D.C. This industry is a $125 billion business that strongly believes in the standard of pasteurization.

"Raw milk makes people sick."

Armstrong’s association works with a partner entity, the National Milk Producers Federation, to lobby in Washington for the interests of mainstream dairy producers and sellers. Both of these organizations are quick to refer to studies conducted by the CDC, some from as recent as this year, that pinpoint the food-borne illnesses associated with raw milk consumption.

Urso agrees with Armstrong that raw milk can make consumers sick, but only to an extent. “She's absolutely correct,” Urso says, “however, we need to take a step back and ask, 'How are the cows raised?’” Urso points to foul conditions that have been well documented on YouTube of some factory farms of major dairy suppliers.

"To raise a cow on grass is pretty expensive, so farmers keep them in barns and feed them grains and chain them around the neck so they can’t move,” Urso says. “They sleep in their feces and urine, which allows for microbial contamination."

But when cows are raised humanely and in clean conditions, Urso says, the milk is perfectly safe: “I've been eating raw dairy for 17 years, and have never once been sick from it.”

ML Healey also reports that her raw dairy intake has not made her sick. She hasn’t had health insurance since she was 19, but keeps healthy by eating as much unprocessed food as possible.
Testimonials like these are what helped me get over my initial resistance to raw milk, when I first tasted it in Los Angeles about 10 years ago. But the resistance was there. Every time I was offered raw milk, I balked, because of the built-in fears I had of veering away from the industry standard. My family friends were plugged into an underground wealth of knowledge about raw and unprocessed foods and wares, most of which seemed steeped in at least a little bit of an overarching paranoia; scented candles were to be avoided at all costs, canola oil was poison, and cooked, heated foods—pasteurized milk included—were dead things that caused more disease than nourishment.

The raw food movement gained traction in Los Angeles in the early 2000s, with enthusiasts organizing underground raw food markets before there was any legislation on the matter. After the biggest market, known as Rawesome, was raided in 2010 and 2011 in Venice, the ensuing efforts to keep raw milk available in part helped establish the state-by-state legislation seen today.

“The county showed up with the police department, sheriff, CIA, FDA, CDC, ABC, every organization,” says Urso, who was a longtime shopper at Rawesome and knows former owner James Stewart well. “About 40 people in total, with guns. Machine guns. They were pointing machine guns at the gallons of milk. It was lunacy.”

"This has nothing to do with health. Microbes in milk, it's got nothing to do with that. It’s about money, that’s it."

Urso refers to that raid as well other repeated seizures of raw milk in California—specifically of Organic Pastures, one of the largest producers—as proof that there is something amiss within the mainstream establishment. “Anything which takes process away from corporations... anything which threatens a
corporation, is going to become 'illegal,'” he says. “This has nothing to do with health. Microbes in milk, it’s got nothing to do with that. It’s about money, that’s it.”

Chris Galen, vice president of communications for the National Milk Producers Federation, has trouble believing that all it would take to keep raw milk safe is a cleaner bovine environment. “A cow's rectum is directly above a cow’s udder,” he says. “No one is going to legislate that out of existence.”

Galen has helped to spearhead campaigns to keep the sale of raw milk unilaterally illegal, most recently in the state of Louisiana, where a grassroots effort to lift the three-year ban against raw milk sales was shot down this spring. Louisiana is one of the nine states that do not allow the product to be produced or sold in any form, while other states like Florida and Maryland allow its sale only as pet food.

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Everything Galen does, he says, is to ensure the safety of the general public. “Pasteurization was a great advance,” Galen says. “It’s rather ridiculous that so many are now disputing that. It’s a lot like the controversy surrounding vaccinations.”

To be sure, people on both sides of the fence can agree that pasteurization was a good thing, which in the 19th century was regarded as the single most revolutionary advance in protection against microbial and bacterial threats. Up until then, milk, a perfect breeding ground for pathogens like E. coli and listeria when not monitored, was often responsible for illness and death.
Pasteurization all but neutralized these threats, which allowed for an unprecedented growth and industrialization within the dairy industry. As developments carried over into the 20th century, even more streamlined practices were put into place, including time-saving UHT, or ultra high temperature pasteurization, as well as homogenization, a process in which heated milk is pumped at high pressure to separate the liquid down to its base molecules, ensuring that milk fat is distributed evenly.

Raw milk enthusiasts say these measures are exactly why they have sought out unprocessed milk. Pasteurization and homogenization, they say, change the properties and nutritive benefits of milk. “It’s like drinking a dead thing,” says ML, remembering the powdered pasteurized milk her father fed her as a child. “It was disgusting.”

Urso refers to the fact that the forerunners to the Mayo Clinic coined “The Milk Cure” in the 1920s, which was a testament to the disease-curing properties of raw milk and raw butter. Many people still seek out these products today for their medicinal benefits, which they say are not present in pasteurized dairy.

"There's no magic enzymes that disappear because you heat up the milk."

Galen claims that nothing, or very little, is lost in the processing of milk. “There’s no magic enzymes that disappear because you heat up the milk,” says Galen. “The things you hear I would put in the realm of fantasy.”

But Joanna Purpich, a recent graduate from journalism school, points to something very useful that might be lost in mainstream milk. When she was younger, she says, she always had terrible stomachaches after drinking milk. Her mother,
Roxie, remembers this as well, citing lactose intolerance. Indeed, the instance of lactose intolerance in the general public is high—the Physicians Committee for Responsible Medicine pegs it at around 75 percent of the world’s population and 25 percent in the U.S.—which are statistics that the general public has slowly absorbed.

When Purpich, 25, was a teenager, her parents took her to a new farmer’s market in Katy, Texas. A vendor offered a sample of raw milk. When Purpich balked, claiming an allergy, the vendor insisted that her problems stemmed from the pasteurization process. “It tasted good, I liked it. I cajoled my mom into buying a small bottle. Then the next week, we went back. I didn’t have any problems,” Purpich said.

Now, Purpich no longer drinks cow’s milk, or only uses an alternative like soy. This is mainly because raw milk is so hard to find. “I don’t think I would have really sought it out, even now, unless somebody was selling it across the street,” she says. “Pasteurization seems like it’s unnecessary. I’m surprised they haven’t come up with another way of making milk safe to drink that doesn’t make people sick.”

For Purpich and lactose intolerant people like her, raw milk could perhaps be a viable option, but not only is it not available across the street—it is not available anywhere remotely near the city. To find raw milk that I could legally buy in New York, I drove over two hours to Hawthorne Valley Farm near the town of Ghent. There, I met farmer and creamery manager Jeremy Shapiro.

After graduating from the University of Vermont in Burlington in 2014 with a major in ecological agriculture, the boyish, sandy blond-haired Shapiro thought he wanted to be a vegetable farmer.
“I thought being a farmer meant to drive a tractor and be outside all day,” says Shapiro, 24, chuckling.

Instead, he came to Hawthorne Valley, where he quickly accrued a wealth of knowledge and expertise in milk.

"I thought being a farmer meant to drive a tractor and be outside all day."

"I came here and started really enjoying the whole [dairy-making] process. I like how it's more consistent than vegetable operations. There's more of an art to it," Shapiro says, as we stand in a small room in the creamery dominated by one stainless steel vat, shaped like an enormous drum, which is connected by a series of pipes leading to the walls and ceiling. This 4,500-pound collection tank is the first, last and only stop for milk that will be sold at the farm’s general store, which is located on the property. The milk on Shapiro’s farm goes from udder to collection vat, and collection vat to bottle.

To prepare and maintain raw milk properly, however, is labor intensive and costly, for two reasons. First, cows must be kept in far superior conditions than those on farms where their milk is destined to be pasteurized, with extra special attention paid to hygiene. Shapiro tests the milk’s microbial levels even more than required, and there is a more involved schedule of when to pasture and when to milk the cows. “We follow the herd,” Shapiro says, explaining that the cows here are given freer reign than elsewhere (they are also treated more humanely—calves are not immediately taken away from their mothers, as they are in larger scale operations). Aside from that, the paperwork and oversight at hand is extensive when it comes to raw milk, since farms that produce it must answer to advisors and health
inspectors ranging from the Milk Board, Department of Agriculture and Markets and even sometimes the CDC.

Shapiro takes me to a cramped office in a building adjacent to the main creamery, and faces a bulletin board overflowing with forms, certificates and detailed milking schedules. “The inspectors are here pretty often,” Shapiro says. He rises to the challenge of making and maintaining raw milk, in spite of the work it takes, because for him it is an ideological choice to produce fresh, pure milk.

But challenging, it is. “All of the things we do in our farm to take extra care definitely affects milk production, and it affects our bottom line, and how much we produce,” Shapiro says. For instance, some of the milk normally slated for sale goes to the newborn calves who are allowed to continue suckling their mothers.

Originally, Hawthorne Valley had considered buying a pasteurizer (a purchase that would total in the tens of thousands of dollars), since pasteurizing the milk would allow them to sell it off-farm to a much wider variety of vendors. But that was slowly de-prioritized as the years went on due to their ideology. Certainly, this choice comes at a cost; for one, caring for and maintaining cows to the standards required for healthy raw milk is higher, and requires more man hours. Jeremy mentions that some of the farm’s milkers log 60- to even 80-hour workweeks. And of course, since they can only sell the raw milk on their own farm, the return on investment is considerably lower (in fact, only about 10 percent of the milk Hawthorne produces is sold in its liquid, raw form). Shapiro himself has even considered moving from his home in Ghent to a place on-farm, in order to cut his own cost of living. “It’s tough for a lot of farms,” Shapiro says. “Farmers are not getting paid really low amounts for milk.”
One of the workarounds, however, is raw milk cheese. Since cheese must be aged as part of its preparation, it encounters considerably less pushback—most or all of the disease-causing agents found in raw milk are neutralized by that aging process (typically 60 days minimum). Therefore, Hawthorne’s cheeses are allowed to be sold off-site, and make it as far down as the Union Square Greenmarket in New York City, where they are very popular.

Shapiro surveys his cheeses in the wet, chilly subterranean cellars of the Hawthorne Valley creamery with an air of connoisseurship. He would love to be able to sell the true source material of the cheese—raw milk—in Union Square as well.

“People in the city are always like, 'Oh, why don’t you have raw milk?’” Shapiro says. “And we have to tell them it’s illegal.” He is currently working on a petition to remove the language ‘on farm sales only’ from the NYS Department of Agriculture and Markets’ rules and regulations, which would solve this issue. Granted, it would mean added care in the proper transport of the milk by way of refrigerated trucks, but the farmer is confident this investment would pay off. At last count, he had twelve signatures, and hopes to get many, many more.

The day I visit Hawthorne Valley, it is pleasantly mild for mid-November, and the bold sun is warm enough to allow the 30 to 40 milking cows to roam the fields that roll along the hills directly adjacent to the farm. “We rotate the grass so they are not always eating the same thing,” Shapiro says, “and when it gets too cold in wintertime we keep them inside and feed them a fermented hay mix.” This is the best and healthiest way to go, he says, contributing to the health of the cow and the taste of the milk.

In the barn, we meet Nebraska, one of the 20 or so “dry” cows (not currently milking) on the property. A gorgeous shade of
grey somewhat lighter than a Russian blue cat, Nebraska looks at me with an intelligence altogether different than one might expect from these braying, smelly animals.

Hawthorne’s barns and milking area are big and airy, the pastures vast and lush, even for this late in the season. Observing Jeremy at work, it occurred to me that making raw milk is a lot like operating without a safety net, but as with most well-trained acrobats, Jeremy Shapiro exemplifies the type of seasoned experience he needs to produce quality milk that won’t make those who drink it sick. And the numbers show it: the instances of illness from raw milk are comparatively low. In California, which has been at the forefront of the raw food and dairy movement for years, there have been no deaths related to raw milk for 37 years. This is noted in an open letter to the CDC by Mark McAfee, owner of Organic Pastures, which sells raw milk across the state.

“In California, we have legal retail-approved raw milk in 400 stores consumed by 75,000 consumers each week. This retail legal raw milk is tested and state inspected and far exceeds pasteurized milk product standards without any heat or processing,” McAfee wrote to the CDC in 2012. “Two years ago, I submitted a FOIA request to the CDC to request data on the two deaths that the CDC database claims were from raw milk. The data I received back from the CDC showed that in fact there had been no death from raw milk at all. The two deaths had been from illegal Mexican bath tub cheese and not raw milk from any place in America.”

Conversely, the rate of illness from pasteurized milk, which is much more widely available to the public than its raw counterpart, is comparatively higher, with 10 deaths reported by the CDC for the same period, between 1998 and 2010. McAfee correctly noted in his letter that the last people to die from milk
had drunk pasteurized milk from Whittier Farms in Massachusetts, in 2007.

Still, raw milk remains marginal at best, and the public at large is still dubious of a product that exists largely outside of industry standards. “I think it’s like an automatic question that one would have,” says my mother, “and it really goes back to the number that the dairy industry does on everybody—that raw milk, unpasteurized milk is dirty. Can you get sick from it, does it have germs?”

"It really goes back to the number that the dairy industry does on everybody—that raw milk, unpasteurized milk is dirty. Can you get sick from it, does it have germs?"

From an early age, my mom loved milk. She puts it in her coffee every morning, and is a big fan of cheeses and yogurts. She saw the “Got Milk?” ad campaigns that were immensely popular in the 90s and 00s, with celebrities like Whoopi Goldberg posing with milk mustaches and promising that mainstream milk would strengthen the bones and bodies of any who drank it. But in spite of my mother’s high intake of pasteurized dairy, she is still faced with bones that have grown weaker. The Physicians Committee for Responsible Medicine corroborates: there is no conclusive science that proves that mainstream milk prevents osteoporosis.

Central to the raw milk debate—and to my mother’s condition—is whether pasteurization destroys or diminishes the nutrients found in milk, mainly bacteria like lactobacillus that help digestion, enzymes like linoleic acid that help those processes along, and minerals like calcium, known to strengthen bones. The dairy lobby again cites CDC studies that counter the charge that heating milk to the levels necessary for pasteurization
compromise these elements, but raw foodists wonder as to the validity of these studies.

Sally Fallon, founding president of the non-profit nutritional education foundation Weston A. Price, is prepared to source other studies that go against the dairy lobby and CDC’s claims. “There are 12 additional studies out of Europe demonstrating that raw milk actually protects against asthma, allergies and many other ailments,” she says. This is due to the higher nutritional content found in the raw milk, she says. Both she and Urso also point to the scientific fact that almost all enzymes—in milk and not—are heat sensitive and cannot withstand pasteurization.

For someone like my mother, there seemed to be enough evidence to justify giving raw milk a shot, in spite of the purported risks. This is how, after weeks of online perusing, I found the delivery website Udder Milk.

Billing itself as a raw dairy “creamery co-op on wheels,” Udder Milk offers raw honey, grass-fed meats, esoteric spices and even papyrus paper, but their main draw is unpasteurized cow milk. Customers in New York City can choose from various types of raw cow dairy products, but the site’s descriptions—such as “Gallon Guernsey”—aren’t very informative. The pickup options are even more mysterious, with choices like “Manhattan with Kamal,” on 57th Street and Ninth Avenue, on Saturdays at 5:30 p.m.

It turned out that Moaz the driver was also Udder Milk’s general manager, and when I later asked him to share more on his company, he was not forthcoming about how long the business had been in operation or from which farms its milk came. He did tell me that he was based in eastern Pennsylvania, a state which allows the retail sale of raw milk, but if his business is transporting the product across state lines into New York,
where retail sales are not legal, it makes sense that he wouldn’t want to share.

In the end, I engaged with Udder Milk on four separate occasions, but each pickup required repeated phone calls and a dedicated search of the intersection given to me, as well as adjacent streets. Their window of time for pickup—sometimes as small as one half hour—can be hard to honor in a city like New York. Ultimately, I couldn’t help but wonder if all this is a way Udder Milk attempts to avoid intervention by the authorities.

Since my mother began drinking raw milk eight months ago, she has secured her weight at 116 pounds, and has drastically improved her appetite. But because it’s such an involved process, I have not been able to get my mother raw milk as frequently as I would like. Udder Milk does offer a regular weekly delivery option, but the minimum is $20 and my mother (correctly) asserts that there is no way she could drink that much milk in one week. And since Udder Milk does not take credit cards, there is the added hassle of leaving cash with the doorman each week, as well as making sure to be around promptly so as to shuttle the spoil-prone dairy upstairs and into the fridge.

So for now, it’s still up to me to meet Middle Eastern men on street corners to get raw milk from the trunks of their cars, which I then bring to my mother.

That first time, I remember how the white liquid gleamed in the glasses. The milk from the brown-capped bottle, called Guernsey on the site for the cows from which it comes, is the whole milk, rich with the fats and nutrients that raw milk proponents savor. My mother was initially hesitant about drinking milk with so much fat, but I explained that she
desperately needed it, in its purest and most natural form, to increase her weight.

Finally, she drank.

“Once I tasted it, I’ve never tasted milk like that—that’s amazing,” my mother says. “The Guernsey is divine.”