The Value of Raw Milk as a Healthy Food

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Reasons People Buy our Milk

• Taste - creamy, but not heavy and has amazing flavor

• Health – use to treat cases of lactose intolerance, allergies, IBS, skin conditions, inflammation, depression, obesity and autism. (Recommended by health care professionals)

• Treat animals well – first-hand view of clean, healthy, grass-fed cows

• Whole, real, unprocessed, grass-based food

• Trust – Have a connection with us and see our immaculate barn and sanitary conditions. Customers always comment on how nicely our barn smells.

• Support local – they like knowing their money is going directly to
Raw Milk has been a human staple for 6,000 years!

- Raw milk has been long been a staple in many cultures across the world.

- Evidence of early dairy farming in Northern Europe, India, Egypt, North Africa and elsewhere.

- Raw milk is mentioned more than 50 times in the bible. ‘A land that floweth with milk and honey’ was the fertile and all providing land of ancient Palestine.
What went wrong with raw milk?

- The industrial revolution spawned the first confinement farms
- “Swill dairies” associated with alcohol distilleries were disease-filled, manure pits and very profitable!
- Milk watered down with contaminated water, sick dairy workers and diseased cows spread illness
- Many people (especially babies) got sick or died

Quote from an observer of the day:

Raw Milk’s Regulatory Crossroads

Put cows back on the farm and go back to making safe milk?

or

Pasteurize swill milk so it wouldn’t kill people???
Widespread Pasteurization

- Kept low cost, low quality milk on the market
- Standardized Milk Ordinance Enacted in 1924, today this is called the Pasteurized Milk Ordinance (PMO)

This set of regulations, (now adopted by all states) has improved milk production from the days of swill dairies, but it still allows …

- large, crowded confinement dairy operations
- feeding of concentrates, industrial food wastes and GMO’s
- regular use of hormones
- co-mingled milk from many large farms and many thousands of cows
- allows milk from sick cows (acidosis, mastitis) to enter the food supply
Historic vs Modern Milk Risks

• Major communicable diseases associated with swill milk have largely been eradicated from the US\(^1\) (TB, Brucellosis and Typhoid)

• Scientific understanding and technological advances have made milk (raw and pasteurized) a relatively safe food\(^2,3,4\)

• Testing, vaccinations, water chlorination, and pasteurization of contaminated milk have greatly increased milk safety
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CDC’s Current Milk Safety Data

- FOIA request from FTCLDF outlines 33 years (1973-2005) of data on raw and pasteurized milk outbreaks in the U.S.¹
- 1,585 total illnesses attributed to **raw** milk (average of 48 illnesses per year in the US)
- 19,835 total illnesses attributed to **pasteurized** milk (average of 601 illnesses per year in the US)

“Raw milk’s contribution to the nation’s foodborne illness problem [is] miniscule.”

-David Gumpert (journalist, author, in response to CDC’s Report on Raw Milk Outbreaks)

CDC Food Borne Illness Data

• CDC data show that 27,645 foodborne illnesses were reported in 2006.

• According to CDC statistics, 48 out of 27,645 total foodborne illnesses each year in the US are attributed to raw milk.

• This means 0.17% of foodborne illnesses are caused by raw milk in the U.S.

• In 2006, the food commodities associated with the largest number of illnesses were poultry (21%), leafy vegetables (17%) and fruits or nuts (16%).

Raw Milk Consumption Rates

• 2002 CDC Survey of consumers in 9 states, estimates the percentage of raw milk drinkers to be between 2.5% and 4%\(^1\)

• Extrapolating nationally, there are 7-12 million raw milk drinkers in the U.S.\(^2\)

• Largest retail raw milk farm is Organic Pastures Dairy in Fresno, Ca. which provides raw milk and raw milk products to 35,000 regular consumers\(^2\)

• Survey of Vermont dairy farmers estimates that over 175,000 gallons of raw milk will be sold in Vermont in 2010.\(^3\)


Risks Adjusted for Consumption of Milk (raw and pasteurized) Compared With Other Foods

Statistical Evidence that Raw Milk is Not More Dangerous than Other Foods

• In a 2003 USDA/FDA report: Compared to raw milk
  515 times more illnesses from *Listeria* due to deli meats
  29 times more illnesses from *Listeria* due to pasteurized milk

When adjusted for consumption rates, deli meats present a 10x greater risk of listeriosis than raw milk.

You are ten times more likely to get listeriosis from your turkey sandwich than from drinking a glass of raw milk.
Two Raw Milks, All Raw Milk is *NOT* Created Equally

- Scientific evidence shows that pasture based animal products are safer and of superior nutritional quality than food from confinement systems.

- The following is a conclusion reached in Dr. Cathy Donnelly’s recent paper in the Journal of Dairy Science.

“Our results indicated that most raw milk intended for small-scale artisan cheesemaking in Vermont was of high microbiological quality with no detectable target pathogens despite the repeat sampling of farms. This suggests that factors inherent to small herds and flock sizes, the lack of extended milk holding, seasonal milking, and pasture-based feeding play a role in the overall quality of milk.”

This milk is produced specifically to be consumed *without* pasteurization.
This milk is produced specifically to be consumed after pasteurization.
I DO NOT recommend consumption of this milk, raw or pasteurized!
Confinement Dairy Production

• 95% of US milk is from confinement operations

• Confinement animals are many times more likely to harbor human pathogens\textsuperscript{1,2,3}

• Development of antibiotic resistant pathogens linked to sub-therapeutic use of antibiotics in animals in confinement\textsuperscript{6}

• Udder infections, acidic rumens, lameness, high cull rates are more prevalent then in pasture-based systems\textsuperscript{4,5}

• Quality of food produced from confined animals has been shown to have unhealthy proportions of Omega 3,6,9 ratios\textsuperscript{7}
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PMO vs Vermont Raw Milk Standards

Bacterial Limits Allowed by Law

- Grade A Raw Milk Bound for Pasturization (comingled)
- Grade A Raw Milk Bound for Past. (on a single farm)
- Grade A Pasteurized Milk (in the store)
- Vermont Certified Raw Milk

*cells per ml*
PMO vs Vermont Raw Milk Standards

Coliform Limits Allowed by Law

*the PMO does not require testing of coliform levels in wholesale milk at the farm
PMO vs Vermont Raw Milk Standards

Somatic Cell Count (Herd Average) Limits Required by Law

- Grade A Raw Milk Bound for Pasteurization
- Vermont Certified Raw Milk
The Health Enhancing Properties of Grass-Fed Raw Milk

- Probiotics – maintains healthy gut flora which enhances immune function and reduces chronic inflammation
- Intact Enzymes – enables complete protein digestion and mineral absorption
- CLA’s– shown to decrease risk of chronic illness
- Healthy fats - Omega 3, 6, 9 in balance
- Full compliment of vitamins and minerals
Probiotics, Necessary for a Functioning Immune System

Dr. Robert Luby, is a Colombia trained, 20 year practitioner of family medicine, with teaching appointments at UVM, the University of Massachusetts and Tufts University medical schools. Dr. Luby recommends patients replace pasteurized milk with pasture-based raw milk as a first line therapy. He has had good results, especially in patients with asthma, seasonal allergies and eczema. Below is a quote from him.

“I challenge you to consider that there are 5 macronutrients rather than three; fat, protein, carbohydrates PLUS fiber and beneficial bacteria as well. Beneficial bacteria are the most important nutrient in milk and are destroyed during pasteurization. We are the first society in history to not regularly consume large amounts of probiotic, beneficial bacteria laden foods. The results are shockingly increasing rates of chronic disease such as heart disease, diabetes and cancer.”
Allergies and Asthma

• European study involving 15,000 children shows a direct link to raw milk and decreased rates of allergies and asthma\(^1\)

• Ruled out other factors such as exposure to the farm environment

• Concludes that protective effect may be transferred to non-farm populations through raw milk consumption

Lactose Intolerance

• Caused by insufficient levels of the lactase enzyme in the gut\textsuperscript{1}

• Raw milk contains bacteria which produces the enzyme lactase \textsuperscript{2,3}

• Survey of lactose intolerant, raw milk drinkers finds that 83% can digest raw milk with no problem

• Very common reason consumers seek out raw milk
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“Raw milk is good food. Raw milk is good medicine. Access to raw milk is access to health care.”

-Dr. Robert Luby

Thank you!