SB 308 states

(a)The on-farm retail sale of milk or milk products shall be lawful, so long as each container of ungraded raw milk sold or offered for sale contains a label that clearly states the following: "This product contains ungraded raw milk that is not pasteurized and, as a result, may contain organisms that cause food-borne illness, especially in infants, young children, older adults, pregnant women and people with weak immune systems." This statement shall be in letters of a uniform size and no smaller than the largest font used elsewhere on the label.

It is this characterization of raw whole milk that I object to. Even though it clearly follows FDA guidance, let's look at the accuracy of that guidance.

In August 2012, the FDA issued a bulletin, Food Facts, in which they claim: Unpasteurized Milk Can Pose a Serious Health Risk

Milk and milk products provide a wealth of nutrition benefits. But raw milk can harbor dangerous microorganisms that can pose serious health risks to you and your family. According to an analysis by the Centers for Disease Control and Prevention (CDC), between 1993 and 2006 more than 1500 people in the United States became sick from drinking raw milk or eating cheese made from unpasteurized milk. They further claim that Raw milk DOES NOT kill dangerous pathogens by itself.

WRONG! Raw milk subjected to a biochemical analysis has multiple protection systems against contamination from harmful bacteria and viruses.

Destroys pathogens in the milk.

Stimulates the Immune system.

Builds healthy gut wall.

Prevents absorption of pathogens and toxins in the gut.

Ensures assimilation of all the nutrients.

These protection systems are destroyed by pasteurization.

The main points claimed by the FDA are:

1. pasteurization does not diminish milk's nutritive value and.

2. pasteurization ensures the safety of milk and prevents foodborne illness.

First, let's compare the bioavailability in raw milk vs. pasteurized milk. A study in 1928 published in the Journal of Biological Chemistry demonstrated that adults who drank raw milk (designated in the study as "fresh" milk) had better "calcium balance" in their bones compared to those who drank pasteurized milk.

The enzyme phosphatase is destroyed by pasteurization. Phosphatase is needed to break down the calcium and magnesium in milk, so that it can be absorbed by the body. The minerals in pasteurized milk pass through the body without being absorbed. Pasteurization also destroys the lactoglobulins that are responsible for carrying vitamins A & D into the body. A lack of vitamin D further lowers the amount of calcium being absorbed.

Well, well, well, it sounds like raw whole milk is indeed more nutritious than pasteurized milk.

2. The safety of Raw Milk vs. Pasteurized

I'll let the CDC's studies show the difference:

Summary Table 1. Relative Risk Ranking and Predicted Median Cases of Listeriosis for the Total United States Population on a per Serving and per Annum Basis

Relative Risk Ranking	Predicted Median Cases of Listeriosis for 23 Food Categories					
	Per Serving Basis[a]			Per Annum Basis[b]		
		Food	Cases		Food	Cases
1	High Risk	Deli Meats	7.7×10^{-8}	Very High	Deli Meats	1598.7
2	High Risk	Frankfurters, not reheated	6.5×10^{-8}	High Risk	Pasteurized Fluid Milk	90.8
3	High Risk	Pâté and Meat Spreads	3.2×10^{-8}	High Risk	High Fat and Other Dairy Products	56.4
4	High Risk	Unpasteurized Fluid Milk	7.1×10^{-9}	High Risk	Frankfurters, not reheated	30.5
5	High Risk	Smoked Seafood	6.2×10^{-9}	Moderate Risk	Soft Unripened Cheese	7.7
6	High Risk	Cooked Ready-to-Eat Crustaceans	5.1×10^{-9}	Moderate Risk	Pâté and Meat Spreads	3.8
7	Moderate Risk	High Fat and Other Dairy Products	2.7×10^{-9}	Moderate Risk	Unpasteurized Fluid Milk	3.1
8	Moderate Risk	Soft Unripened Cheese	1.8×10^{-9}	Moderate Risk	Cooked Ready-to-Eat Crustaceans	2.8
9	Moderate Risk	Pasteurized Fluid Milk	1.0×10^{-9}	Moderate Risk	Smoked Seafood	1.3
10	Low Risk	Fresh Soft Cheese	1.7×10^{-10}	Low Risk	Fruits	0.9
11	Low Risk	Frankfurters, reheated	6.3×10^{-11}	Low Risk	Frankfurters, reheated	0.4
12	Low Risk	Preserved Fish	2.3×10^{-11}	Low Risk	Vegetables	0.2
13	Low Risk	Raw Seafood	2.0×10^{-11}	Low Risk	Dry/Semi-dry Fermented Sausages	<0.1
14	Low Risk	Fruits	1.9×10^{-11}	Low Risk	Fresh Soft Cheese	<0.1
15	Low Risk	Dry/Semi-dry Fermented Sausages	1.7×10^{-11}	Low Risk	Semi-soft Cheese	<0.1
16	Low Risk	Semi-soft Cheese	6.5×10^{-12}	Low Risk	Soft Ripened Cheese	<0.1
17	Low Risk	Soft Ripened Cheese	5.1×10^{-12}	Low Risk	Deli-type Salads	<0.1
18	Low Risk	Vegetables	2.8×10^{-12}	Low Risk	Raw Seafood	<0.1
19	Low Risk	Deli-type Salads	5.6×10^{-13}	Low Risk	Preserved Fish	<0.1
20	Low Risk	Ice Cream and Other Frozen Dairy Products	4.9×10^{-14}	Low Risk	Ice Cream and Other Frozen Dairy Products	<0.1
21	Low Risk	Processed Cheese	4.2×10^{-14}	Low Risk	Processed Cheese	<0.1
22	Low Risk	Cultured Milk Products	3.2×10^{-14}	Low Risk	Cultured Milk Products	<0.1
23	Low Risk	Hard Cheese	4.5×10^{-15}	Low Risk	Hard Cheese	<0.1

[a]Food categories were classified as high risk (>5 cases per billion servings), moderate risk (<5 but ≥1 case per billion servings), and low risk (<1 case per billion servings).

[b]Food categories were classified as very high risk (>100 cases per annum), high risk (>10 to 100 cases per annum), moderate risk (≥1 to 10 cases per annum), and low risk (<1 cases per annum).

Year	Genus_Species	Ill	Hospitalizations	Deaths	Food Vehicle	Source
1966	Shigella flexniri	97	N/A*	N/A	pasteurized milk	CDC 1966
1975	Salmonella newport	49	2	0	pasteurized milk	CDC 1975
1976	Yersinia enterocolitica	38	36	N/A	pasteurized milk	Black et al. 1978 cited by Marler 2009
1978	Salmonella Typhyimurium	66	15	N/A	pasteurized milk	CDC 1979
1982	Yersinia enterocolitica	172	N/A	N/A	pasteurized milk	Tacket et al. 1984 cited by Marler 2009
1983	L. monocytogenes	49	N/A	14	pasteurized milk	Fleming et al. 1985 cited by Marler 2009
1984	Salmonella Typhyimurium	16	N/A	N/A	pasteurized milk	CDC 1984
1985	L. monocytogenes	142	N/A	28	pasteurized cheese	MarlerClark 2015
1985	Salmonella Typhyimurium-MDR	150,000	N/A	18	pasteurized milk	Ryan et al, 1987
1986	Campylobacter jejuni	33	N/A	N/A	pasteurized milk	Birkhead et al. 1988 cited by Marler 2009
1994	L. monocytogenes	45	4	0	pasteurized milk	Dalton et al. 1997 cited by Marler 2009
1995	Yersinia enterocolitica	10	N/A	N/A	pasteurized milk	Ackers et al. 2000 cited by Marler 2009
1999	Staphylococcus aureus	3	0	0	ice cream, commercial	CDC 2015(a)
2000		14	2	0	pasteurized milk	CDC 2015(a)
2000	Salmonella enterica	132	N/A	N/A	ice cream, commercial	CDC 2015(a)
2000	Salmonella Typhyimurium-MDR	93	6	N/A	pasteurized milk	Olsen et al. 2004; MarlerClark
2001	Salmonella enterica	4	1	0	cheese, pasteurized	CDC 2015(a)
2001	Norovirus unknown	34	N/A	N/A	multiple cheeses, pasteurized	CDC 2015(a)
2001		13	0	0	cheese, pasteurized	CDC 2015(a)
2001		3	0	0	cheese, pasteurized	CDC 2015(a)
2001	Norovirus Genogroup II	73	0	0	cheese, pasteurized	CDC 2015(a)
2001		3	0	0	ice cream, commercial	CDC 2015(a)
2001		5	1	N/A	ice cream, commercial	CDC 2015(a)
2002	Norovirus Genogroup I	25	0	0	pasteurized cheese	CDC 2015(a)
2002	Norovirus Genogroup I	52	N/A	N/A	potato, mashed; whole milk, pasteurized	CDC 2015(a)
2002		10	0	0	pasteurized cheese	CDC 2015(a)
2002	Salmonella enterica	116	4	0	milk, 2% milk pasteurized	CDC 2015(a)
2002	Norovirus Genogroup I	19	0	0	ice cream, commercial	CDC 2015(a)
2003	Norovirus Genogroup I	9	0	0	pasteurized cheese	CDC 2015(a)
2003		2	N/A	N/A	ice cream, commercial	CDC 2015(a)
2003	Staphylococcus aureus	3	N/A	N/A	ice cream, commercial	CDC 2015(a)
2004	Salmonella enterica	100	5	0	other milk, pasteurized	CDC 2015(a)
2004	Norovirus unknown	14	0	0	pasteurized cheese	CDC 2015(a)
2004	Norovirus unknown	18	0	0	ice cream, commercial	CDC 2015(a)
2004	Staphylococcus aureus	132	12	0	ice cream, commercial	CDC 2015(a)
2005	Campylobacter jejuni	200	1	0	pasteurized milk	CDC 2015(a)
2005	Norovirus Genogroup I	6	0	0	ice cream, commercial	CDC 2015(a)
2005	Salmonella enterica	26	11	0	ice cream, commercial	CDC 2015(a)
2006		5	0	0	pasteurized cheese	CDC 2015(a)
2006		2	0	0	pasteurized cheese	CDC 2015(a)
2006	Listeria monocytogenes	3	0	1	pasteurized cheese	CDC 2015(a)
2006	Norovirus Genogroup II	11	0	0	pasteurized swiss cheese	CDC 2015(a)
2006	Campylobacter jejuni	1644	7	0	other milk, pasteurized	CDC 2015(a)
2007	Norovirus Genogroup II	11	0	0	quiche; whole milk, pasteurized	CDC 2015(a)
2007	Listeria monocytogenes	5	5	3	other milk, pasteurized; skim milk, pasteu	CDC 2008
2007	Salmonella enterica	20	9	0	pasteurized cheese	CDC 2015(a)
2007	Salmonella enterica	6	2	0	pasteurized cheese	CDC 2015(a)
2008	Listeria monocytogenes	8	4	0	pasteurized cheese	CDC 2015(a)
2008	Norovirus Genogroup I	11	0	0	ice cream, commercial	CDC 2015(a)
2009	Norovirus Genogroup II	30	3	0	pasteurized cheese, milk, other	CDC 2015(a)
2010	Listeria monocytogenes	6	4	1	pasteurized cheese	CDC 2015(a)
2011	Listeria monocytogenes	2	2	0	pasteurized cheese	CDC 2015(a)
2012	Other - Chemical/Toxin	6	0	0	pasteurized milk	CDC 2015(a)
2013	Listeria monocytogenes	9	8	1	pasteurized cheese	CDC 2015(a)
2013	Listeria monocytogenes	6	6	1	pasteurized cheese (Cheese-Le Frere)	CDC 2013
2013	E.coli, Shiga toxin-producing	4	1	1	ice cream, commercial	CDC 2015(a)
2014	Listeria monocytogenes	8	6	1	pasteurized cheese	CDC 2014
2015	Listeria monocytogenes	10	10	3	ice cream, commercial	CDC 2015(b)
2015	Listeria monocytogenes	24	21	1	pasteurized cheese	CDC 2015(c)
	TOTALS	**153657**	**188**	**73**		

The first study, in September 2003, the FDA, USDA and CDC jointly released a report comparing the risk of listeriosis carried by various foods. The report estimated how many people were likely to catch listeriosis from a given food per year on an absolute basis and on a per serving basis.

On a per-serving basis, this report estimated that deli meats are 10.8 times more dangerous than raw milk and that non-reheated hot dogs are 9.2 times more dangerous than raw milk. Since deli meats are so commonly consumed, on an absolute basis they carry 515 times as great a risk as raw milk.

The FDA has yet to inform us that “hot dogs and deli meats are inherently dangerous.”

The FDA also points out that between 1993-2006, 1500 over a 13year period equals 115 per year that were ill from raw milk. But the CDC shows that over a 49 year period from 1966-2015, 153,657 became sick from pasteurized milk products for an average of 3135 people per year that had food poisoning from pasteurized milk products. More people consume pasteurized milk products but still that number is significant. FDA why the vendetta against raw whole milk.

Conclusion: Raw milk should be clearly labeled Raw Milk without the warning, ”This product contains ungraded raw milk that is not pasteurized and, as a result, may contain organisms that cause food-borne illness, especially in infants, young children, older adults, pregnant women and people with weak immune systems." .

Unless of course, you plan on putting the same warning on deli meat, hot dogs and pasteurized milk.

Allen Loomis

Resources:

The Battlefront for Better Nutrition. Dr. Royal Lee. July 15, 1950

Quantitative Assessment of Relative Risk to Public Health From Foodborne Listeria monocytogenes Among Selected Categories of Ready-to-Eat Foods

Center for Food Safety and Applied Nutrition Food and Drug Administration

U.S. Department of Health and Human Services

Food Safety and Inspection Service

U.S. Department of Agriculture September 2003.

RESPONSE TO THE FDA

A Point-by-Point Rebuttal to the

Anti-Raw Milk PowerPoint Presentation

By John F. Sheehan, BSc (Dy), JD,

Division of Dairy and Egg Safety

Prepared by

The Weston A. Price Foundation

November, 2007 (Links to FDA PPT updated August 20, 2010)

The Weston A. Price Foundation