### WHAT HAPPENED TO MILK?

A Land flowing with milk & honey was part of God's provision (Ex3:8). American pioneers relied upon the many products raw milk provided themlong before refrigeration. Pasturalists of Africa still rely on the milk from their cattle. What happened to the milk of advanced societies that makes it inherently bad?

# **HISTORY**

The industrialization period brought about some "bad practices" that weakened herd health and made milk vulnerable to sickness. One such practice was feeding cattle a grain mash byproduct from liquor distilleries, also known as swills.

No longer dependant on pasture feeding, farmers could raise herds on smaller parcels of land and live closer to the cities. Confinement, and a lack of Mother Nature's diet, created a series of herd health issues that require antibiotic treatments for the cows and causes milk issues.

Rather than treat the source of the problem the heating of milk (pasteurization) became relied upon to treat the symptoms (Schmid, 2009).

#### **CURRENT PRACTICES**

A century later, cattle are often still raised in confinement and grain feed. Some livestock are now fed distillers grains which are the byproduct of ethanol. Research by Kansas State revealed a dangerous elevation of E. coli O157:H7 in these herds (Kansas State University, 2007). Hence, the continued reliance on pasteurization and antibiotics.

### **SANITATION METHODS CAN ENSURE RAW MILK SAFETY**

Today, much more is known about methods of sanitation, the origin of harmful bacteria, and conditions, i.e. containment, that affect herd health. This knowledge, when put to use, can ensure safe raw milk product. In fact, raw milk dairies are able to achieve better test results than pasteurized milk.

#### **CLEAN RAW MILK IS SAFE - COLD OR WARM**

Most don't know that raw milk is its own ecological system, teaming with living enzymes and nutrients.

When collected under sanitary conditions, raw milk can sit out for days & weeks & months without refrigeration. As raw milk sours, it just becomes a different type of milk product - but is still safe to eat. "Lactic-acid bacteria is what makes milk undergo natural fermentation. Lactic-acid bacteria changes milk sugars into lactic acids, which protect unpasteurized milk from undesirable organisms that would otherwise cause it to spoil. Nature's way of preserving milk is to let it sour. (I'm talking about whole, raw milk. Once it has been pasteurized, homogenized, defatted, etc., milk doesn't sour. It simply spoils.)" (Williams, 2011).

The fermented, healthy cultures that are inherent in raw milk must be added to pasteurized milk to make yogurt.

Our Western experience with pasteurized milk should not confuse or limit the truth about the properties of raw milk. Stainless steel tanks, modern sanitation methods & healthy herd monitoring and treatment make it easier than ever to collect clean raw milk that is free from harmful levels of pathogens. It is possible to produce pathogen free raw milk over a sustained period of time. We have data from raw milk producers selling to 50,000 customers weekly who test multiple times a week & have been pathogen free for over a decade. (Organic Pastures, 2011). It can be done. So why all the resistance?

Prepared by Stacy Pearson, Raw Milk Institute

#### **OPPONENTS**

The Mn Dept of Agriculture's experience with swill-fed and containment herds causes them to believe that all milk is inherently bad & they uphold that raw milk does not offer any health benefits (Mn Dept. Ag, 2011).

When statistics for food borne illness are reported, organizations like the CDC require the use of multipliers to "represent" experiences that were not bad enough to be reported. Multipliers skew the truth & are used to frighten people into thinking that easier access to raw milk will lead to more illness. Interestingly, the CDC does not report the millions of lactose intolerance illnesses caused by processed milk but they do acknowledge illness from produce, meat and eggs (Fallon-Morell, 2007).

When Milk Producers Associations oppose easier access to raw milk, one must ask if that's because they are responsible to protect the market-share of their commercial producers. Expanding raw milk access introduces competition which raises resistance. Especially when pasteurized operations would have to upgrade in order to meet safety standards without the use of killing-heat if they wanted to enter the raw market.

Compounding the issue, news stories can use terminology that certain food borne illness is "linked" to raw milk even though the illness may not have been *caused* by raw milk. The term "linked" is not a legally binding term, therefore it is often used to report instances where raw milk may have only been suspected but was never actually *tied* to an illness. Accused of causing E.coliO157:H7 illness, one Mn dairy farmer's food tested negative of the bacteria according to his court documents, yet the Dept of Ag (Mn Dept. Ag, 2011) reports that his product was "linked to" the bacteria.

# **WHY RAW MILK?**

Raw milk is a SUPER FOOD! Americans are sick. Immune systems are compromised. Lactose intolerance, a systemic rejection to pasteurized dairy product, is on the rise. Even homogenization, the process of breaking down the size of the fat cells in milk, is blamed for poor arterial health because nature intended for larger fat cells to stay outside of artery walls but homogenized fat cells are so small they can enter the arterial walls and other organ tissue. When milk is pressed through the process of homogenization, cell walls burst and intercellular protein is released. The presence of intercellular protein is another reason some experience dietary rejection when consuming processed milk product (Schmid, 2009).

Mayo Clinic was founded based on Dr. Crew's ability to treat illness and serious disease with the dependable healing powers of raw milk (Crew, 1929).

"The status raw milk gained as a remedy for chronic diseases throughout hundreds of years vanished with the coming of pasteurized milk" (Howell, 1985). Great volumes exist, extolling the health benefits of raw milk like the remarkable results asthmatics have when they turn to raw milk (MnSenateMedia, 2011).

Illness caused by Lactose Intolerance has risen to epidemic proportions. It is caused by the lack of enough Lactase enzyme in the digestive system to break down the lactose in milk. Raw milk contains Lactase which enables the body to break down & absorb lactose. Pasteurization kills off the good bacteria, causing problems for many people who consume it (Williams, 2011). Most lactose intolerant individuals report no negative symptoms from raw milk & find once their guts are repopulated with the healthy bacteria of raw milk that consumption of some pasteurized products like ice cream and cheese is tolerated (MnSenateMedia, 2011).

# IT'S ABOUT ACCESS TO A LEGAL PRODUCT OF 60 YEARS

The right to purchase raw milk directly from the farmer, without a license, has been protected by the Minnesota State Constitution since the founding of the state, "Article XIII, Sec. 7" (Minnesota Constitution).

Sixty years ago, when pasteurization procedures were legislated, the law allowed for the continued legal access of raw milk sales on the farm where it was produced. The problem is that the local dairy farm isn't four miles away anymore, it's a four-hour round trip! New legislation proposes to make it easier for consumers to get raw milk without breaking the law if they ask their neighbor to bring them a few gallons from the farm or if farmers deliver.

Prepared by Stacy Pearson, Raw Milk Institute

### **REFERENCES**

Crewe, JR. (1929). Raw milk cures many diseases. Certified Milk Magazine. January, p 3-6.

Exodus 3:8. Holy Bible, King James Version. Crusade Bible Publishers, Nashville, 1975.

Howell, E. (1985). Enzyme Nutrition: The Food Enzyme Concept. Avery, New York, New York, 1985, 100-101.

Kansas State University (2007, December 12). Cattle Fed Byproducts of Ethanol Products Harbor Dangerous E. Coli Bacteria. Retrieved on February 25, 2011 from http://www.sciencedaily.com/releases/2007/12/071204091851.htm

Minnesota Constitution (2011). Minnesota Constitution. Retrieved on February 26, 2011 from http://www.house.leg.state.mn.us/cco/rules/mncon/Article13.htm

Minnesota Department of Agriculture (2011). Unpasteurized (raw) milk in minnesota. Fact Sheet. February 2011.

Minnesota Senate(2011). S.F. No. 147, as introduced - 87th Legislative Session (2011-2012). Retrieved on February 26, 2011 from https://www.revisor.mn.gov/bin/bldbill.php?bill=S0147.0.html&session=ls87

MnSenateMedia (2011). Press Conference on Mn Raw Milk Bill SF 147. Retrieved Jan 28, 2011 from Http://www.youtube.com/watch?v=e9NRLCmkZ8Q&feature=email

Morell, S. (2007). FDC and CDC bias against raw milk. Weston A. Price Foundation. Retrieved on April 22, 2011 from http://www.westonaprice.org/press2/665-press-release-2007mar12?qh=YTozOntpOjA7czoxOToiY2xhaW0gb2Ygd2lkZXNwcmVhZCl7aToxO3M6MjM6IndpZGVzcHJIYWQgaWxsbmVzcyBmcm9tljtpOjI7czoxMzoiZ

2007mar12?qh=YTozOntpOjA7czoxOToiY2xhaW0gb2Ygd2lkZXNwcmVhZCT/aToxO3M6MjM6IndpZGVzcHJIYWQgaWxsbmVzcyBmcm9tIjtpOjI7czoxMzoiZnJvbSByYXcgbWlsayI7fQ%3D%3D

Organic Pastures (2011). Raw milk info and frequently asked questions - What are pathogens, have they ever been detected at OPDC? Retrieved on February 8, 2011 from http://www.organicpastures.com/faq.html

Schmid, Ron (2009). The Untold Story of Milk. NewTrends Publishing, Inc. Washington, DC, 2009, 261-262.

Williams, Dr. David (2011). Fight bacteria with bacteria- Living foods for better health. Dr. David Williams.com. Retrieved April 9, 2011 from http://www.drdavidwilliams.com/defaultBlank.aspx?contentID=24991