#### **Dear Senator Vinehout:**

I was disappointed yesterday, that after a 5 hr journey to the hearing of the raw milk bill, I did not have a chance to speak, even though I arrived an hour early. (After the announcement that we should put our departure times on the forms, I went back and gave the aides that information, as they had not indicated that when we first arrived.) Therefore, I wish to reply in print to comments made.

# 1. PEER-REVIEWED RESEARCH

The question of "peer reviewed, scientific" articles came up several times. I am familiar with this line of reasoning, having two Bachelor's degrees, one in biology and one in nursing. I work as an ER nurse in the main hospital in my county. "Peer review" is considered to be a gold standard in science-speak.

However, as in most situations nowadays, it pays to FOLLOW THE MONEY. All researchers get grants—from whom? Of course, the answer is from large corporations or "institutes" comprised of large corporations. The question to ask is, "what large corporation will fund a study on the health benefits of raw milk?"

To give an example of this, cast your mind back to when we first started hearing about the dangers of trans fats, around the mid-1990s. What most people don't realize is that way back in the 70s, a researcher discovered that they were indeed very dangerous. Her name was Mary Enig, and she was a grad student at U of Maryland working on lipid research. When she discovered this, Central Soya, Kraft, Proctor & Gamble, and the Institute for Shortening and Edible Oils went to the scientific community and made threats. She and the university were told funding would be cut.

However, unlike most people who have their reputations and livelihood at stake, she didn't back down. Through the FOI Act, she obtained a report prepared by a government committee on nutrition and human needs, and saw that the USDA had added when subtraction was needed and other falsifying of data! (This is similar to the Climategate scandals in both the UK and the USA today: no money is put forward for scientists to discover that human activity does NOT materially affect the earth!)

So between the early 70s and the mid-90s people were unknowingly ingesting harmful substances, on the advice that their doctors gave them to switch from butter to margarine! Talk about the impact on public health! This is what we get when we rely too heavily on "peer-reviewed, scientific" articles, and ignore anecdotal evidence.

### 2. DIRE EFFECTS OF PATHOGENS

There are three mentioned by Mr. Ingham: E. coli (specifically the O157 strain), Campylobacter, and Salmonella. I will deal with these first, then with other pathogens.

E. coli is a "coliform" and is normal gut flora. Without it, we'd be unable to synthesize vitamin K/2. The

only problem arises when a pathogenic form is ingested. When cows are fed grass, their rumens are alkaline, and the E. coli shed from them will not be pathogenic to humans, as our stomach acid will kill it.

However, when cows are fed corn, as we see in confinement operations, their rumens become unnaturally acidic, thus allowing any "bad" E. coli to survive the trip through a human stomach. But the farmers who sell raw milk do not keep their cows in confinement. Rather, those animals are kept on grass or hay, so the potential problem from E. coli is minimal to nil.

Per the CDC website, most E. coli infections are due to meat (number one BY FAR), prepackaged cookie dough, pizza, Taco Bell, or spinach (only the one highly publicized outbreak). Per another site, Jack in the Box restaurants were also implicated. And of course, infected water is also a common means of transmission; 921 cases in NY in 1999 were reported after people attended a county fair and were exposed to contaminated water, some were cross-infected with Campylobacter. Most E. coli infections simply result in diarrhea.

Mention was made of "kidney failure" from E. coli. Only those infected with the strain that produces the Shiga toxin are affected, about 0.002%. Of those, 95% will have diarrhea. Of those, only 0.0002% will die. Total mortality combining the diarrhea-negative patients gives a total mortality rate of 0.000216%. As one speaker said, "It's a numbers game." So it is, and one must be honest re. actual risk, which is minuscule from raw milk from grass-fed cows.

Campylobacter is usually sporadic. Seasonal increases are observed; however this is taking isolated cases across the US as a whole, and is NOT seen as a "massive outbreak" here or there. Campylobacter is usually spread by fecal contamination, and in addition to livestock, cats and dogs are also culprits as vectors. Most people get infected from contaminated water, therefore DATCP's decision to attribute one speaker's siblings' Campylobacter infections to raw milk, is especially egregious, knowing that they had played in a stream. The largest single outbreak, affecting 3000 people, occurred in 1978 from contaminated water.

A large Australian study found the most common food-borne cause of Campylobacter to be undercooked chicken; not surprising, considering how most chickens are raised in crowded houses with air so foul, if the exhaust fans failed, they'd die from asphyxiation. (Slaughter techniques are especially dirty, too.)

Most Campylobacter cases resolve on their own in 5 days or less. Several speakers mentioned another dire "side effect": Guillain-Barre. Again, they were disingenuous to say the least. Guillain-Barre is a SYNDROME, not a specific disease in itself. It is an autoimmune condition that CAN follow Campylobacter, but can also follow pneumonia and viral infections. According to the NIH, "nobody knows" what causes GB. The only cases I have seen were subsequent to people getting VACCINES. What are we to think of the health risk with vaccines? (I have seen kids develop seizures some weeks after receiving the MMR.) The vet who mentioned the BG story, also admitted that his colleague got sick initially from tending a sick calf, NOT from raw milk!

Salmonella is the final one mentioned by Mr. Ingham. I find this to be ridiculous, as Salmonella is the commonest cause of food poisoning and can be spread by almost anything. Some recent large outbreaks were: 2006--chocolate, 2007--frozen pot pies, 2008-- cereal and peppers, 2009—turtles and peanuts. Not all cases are stool-cultured, and in ER we just treat and release. Only when we are told by Public health to culture, do we do that. It is NOT routine! Therefore, there are FAR more cases of this than appear at the CDC website, as they only pay attention to large outbreaks.

Salmonella is incredibly mild as food poisoning goes, is usually connected with eating prepared foods, and is usually over with swiftly. I believe anybody over 30 has probably had it at least once, and thought it was "stomach flu". And since it CAN be spread, other family members COULD get it, so they'd believe even more that it was "flu". It is interesting that the major outbreaks listed by the CDC did not include raw milk at all. The commonest suspected food, is of course eggs, but see above for causes of recent outbreaks.

Other pathogens mentioned included Listeria and Coxiella, as well as "antibiotic resistant" organisms. Listeria would be the one pathogen I'd have any real concern about, and it can cause miscarriages. It is usually found in contaminated meat products, especially hot dogs, cold cuts, and pate' as well as in smoked fish. Soft cheeses are another source; however, in the USA, Feta or Camembert or any blue cheeses are commercially made from PASTEURISED milk, yet they are still on CDC's "naughty list" for pregnant women!

CDC reports include multistate outbreaks from turkey meat and PASTEURISED milk. There is some indication that pasteurization does not kill listeria, and it does not kill Johnnes, thought by many to be responsible for Crohns (human Johnnes) and ulcerative colitis. The fact that patients can usually cure themselves by avoiding pasteurized milk, supports this.

The reason soft cheese are more likely to harbor listeria is that even if pasteurized, the milk can still contain pathogens, which then can multiply in the cheese due to different curing times, etc. than for hard cheeses.

There is another pathogen for pregnant women to avoid, and that is Toxoplasma, which is believed to infect up to 33% of the WORLD'S population. It can cause heart, liver, eye and brain disease (encephalitis), as well as possibly schizophrenia. Pregnant women are cautioned not to empty kitty litter boxes, as cats are common carriers. Should we then ban cats? After all, 33% is a lot higher than the percents involved with other pathogens!

As to Coxiella and Q fever, I am shocked that Dr. Paulson even brought this one up. He surely knows it is an AIRBORNE infection! (Some tick-bite infections also occur.) It is possible for dust containing it to contaminate open containers of food of any kind, if left in a barnyard, but what real person would do that!? None of the raw milk farmers are milking into open buckets! This is certainly approaching the realms of illusion!

Antibiotic-resistant organisms are highly unlikely to be found in any organic operation, as these farmers do not use antibiotics. The raw milk farmers are organic; therefore it is truly ridiculous to suggest that this would ever be a problem! If they do have an animal with some intractable lowgrade infection (usually subclinical mastitis), they ship it, as do conventional farmers.

#### 3. PURPORTED CONCERNS RE. TESTING

Mr. Ingham mentioned a story about students at Madison, and used it as an example of how small sample size is "unreliable". This is patently a false analogy. For one, as stated before, pathology "is a numbers game"; therefore in a homogeneous mix such as milk, if a low count is found, it indeed does mean that there is a low count throughout.

Second, if "small" samples are to be suspected, then why are somatic cell counts OK? They're small too! What about the samples of bulk tanks referenced by one speaker; one can't imagine they used the whole tank for a test!

#### 4. RATES OF ILLNESS AND RATE OF RAW MILK USE

It is not enough to claim "food-borne illnesses go up when raw milk use goes up". As we all know, statistics can be used many different ways. And we all also agree that there have been numerous waterand food-borne illnesses from many sources in the last decade. At the same time, there have been more states willing to allow raw milk. The two are concomitant phenomina but not necessarily connected.

As to the rate of raw milk usage, I suggest is vastly higher than anybody realizes. I personally know nine families that resorted to owning their own dairy animals due to DATCP's unreasonable rule interpretation. They buy neither store milk nor raw milk, instead milking into open buckets and using their own milk. We do the same. Nobody has ever become sick, even though this practice is considered horrendous by "experts".

Additionally, as I work in ER, I do come into contact with farmers or farm workers (usually due to accidents not illness.) I often ask if they use bulk-tank milk, or mention that we do. They universally do use that milk, as well as do many neighbors and relatives. Therefore the actual rate of raw milk consumption is higher than DATCP or anybody else will ever know! It quite amused me to hear one speaker talking about "enforcement" regarding selling with no license. DATCP does not know, and will never know, how many people do use raw milk, so if they don't know about them, how can they "enforce"?

Now consider that these are bigger herds managed conventionally, and therefore likely have higher cell counts and pathogen counts due to management differences between them and small organic farms. (Per the comment, "I wouldn't manage any differently if I sold to people or to creameries"—no,

a conventional farmer wouldn't.) And, THEY STILL ARE NOT GETTING SICK from their milk! We have friends who have 300+ cows, and they do not get sick from their milk. The disease rates are actually much lower than depicted, considering the higher rate of consumption overall.

Finally, a little-known fact is that experiments were done in which raw milk was inoculated with pathogens. After a certain time period, they tested the milk and could find no trace of the pathogens. This is because raw milk does contain enzymes that kill, and HELPUL bacteria that compete with, the bad ones. This is also why raw milk sours (ferments) due to the lactic bacteria, whereas pasteurized milk ROTS and smells like feces.

#### 5. COSTS OF OUTBREAKS

As stated before, public health does not require testing in all circumstances. Therefore the claim that somehow there would be "widespread outbreaks" causing increased expense, does not hold water. For example, when the H1N1 started making its rounds, we were told to culture all patients who had that general type and who had fevers above a certain temp and certain other criteria.

When the numbers from the state lab indicated that very few of the flus were H1N1, they then changed their policy, and said we were not to culture anybody anymore! I and many co-workers believe that this was due to the fact that not many people were getting H1N1, and the powers that be, wanted to continue to hype it. Because their new tactic was to count ALL flus as H1N1! This, even though their own numbers proved it was not a big deal compared to "ordinary" flu!

The excuse was that "it cost too much", but if that were the case, why bother to culture anybody at all? Why not just report all flus as H1N1 to begin with? It was obvious that they were HOPING it would be a bigger deal, thus justifying all their hype and additional expense of state lab testing. (There's vaccines to be sold!) Then when they realized otherwise, they resorted to lumping all flulike symptoms into "H1N1".

Further, as to costs, perhaps there would not be as many money worries if that egregious budget had not been passed, guaranteeing shortfalls. Be that as it may, DATCP still managed to find money to do a sting operation last fall. If DATCP were to make it easier for raw milk farmers, the state could capture the sales tax. As it is, considering the huge "black market" for raw milk, including sources DATCP will never know about, doesn't it make sense to legalize sales, thus capturing at least SOME of the revenue from sales?

As far as public health funds go, they do not have to do hands-on patient care, nor do they even know about all patients with food poisoning as stated above. The only increase they'd have to worry about would be an increase in paperwork, which actually does not cost very much at all. In hospitals, we are asked to do increasing amounts of paperwork, and this does not change the hospital's costs in the slightest.

I understand the concerns about negative publicity. But how many people know that the biggest milk-borne disease outbreak, affecting over 200,000, was due to PASTEURISED milk? It is significant that CDC did not report this, and that the information was found instead in JAMA and FDA Consumer. This indicates that government entities are indeed selective in what they choose to report, and that the outbreak did not materially affect the dairy industry.

Given a supposed disease outbreak (as opposed to SCATTERED incidences of disease) due to raw milk, I can see that it could bring negative publicity to the dairy industry. However, I cannot imagine that they wouldn't use it to their advantage, by claiming how much better pasteurized is! This would rather work in their favor, as everyone knows there is a difference between the two milks. They could spin this to the utmost, and they likely would.

#### 6. MISCELLANEOUS COMMENTS

Pasteur was referenced. Does anybody remember that his main contribution was the saving of the WINE business? In fact, when he was told that pasteurization was being done on milk, he exclaimed, "What have they done to my beautiful food?" At the end of his life, he drew back from the microorganism theory of disease, preferring instead the concept of "milieu".

This refers to the idea that everyone is exposed to pathogens, but only some get sick due to their underlying state of ill-health (disrupted milieu). Per the testimony of many for whom raw milk was a literal lifesaver, raw milk provides a healthier milieu. Likewise, for someone who has been living off fast food and soda to try it, may be too much for their system. Since there is no way to test milieu, DATCP will not pursue this, but it remains a valid thought.

MDs are not trained in nutrition; they admit as much if asked. Also, you should see what they eat—that alone will convince you!

As I hinted before, there is a tendency to minimize anecdotal data. However, since there will never be studies funded on health benefits of raw milk, as no corporation stands to make money off it, anecdotals must be admitted as evidence. I can tell you, the week before a full moon is usually crazy in ER, OB and even Med-Surg, and RNs will all agree on this. The week after is quiet, and is also when people and animals bleed less, so wisdom tooth extraction and calf castration should be done then. You'll NEVER see a "peer reviewed" study done, but it's no less true for all of that!

A mention was made of a "tracking device", which is merely code for NAIS. We do not need tracking DEVICES, just good records. Any farmer can keep written records of who comes on what day. NAIS has been cut at the federal level, so WI needs to follow suit and let it die a natural death. Those that wish to use it may, but it should not be forced on people. McGraw wants to make it a requisite for a grade A license, per his testimony at the e. Miller trial. This should not come into the equation!

## 7. MY CONCERNS

My first is the sloppy methods DATCP and other health departments do epidemiological studies. If a private lab was contracted, and performed as sloppily as DATCP, they'd be FIRED. If an ER doctor only asked a patient with a rash, if he used a certain laundry soap, and failed to ask about chemicals at work, foods eaten, new pets, etc, that would be malpractice. Yet DATCP fails to complete investigations.

Here is an example: "In the 2001 incident, 70 of 75 persons confirmed with illness drank unpasteurized milk, according to a report issued by DATCP and accepted without further investigation by the Centers for Disease Control (CDC). The dairy, Clearview Acres, disputed the official numbers, citing widespread cases of illness in the area. Independent reports gleaned from emergency room nurses estimated that campylobacter infection afflicted as many as 800 individuals--most of whom did not drink raw milk--throughout Northwest Wisconsin during the twelve weeks following November 10, 2001. Reports of illness continued for eight weeks after provision of raw milk to cow-share holders had ceased. The discrepancy in government figures and those of Clearview Acres was due to interview tactics of local officials. Afflicted individuals admitted to Hayward Area Memorial Hospital, serving Sawyer County, were questioned as to whether they drank raw milk. Medical personnel tested only those who had consumed raw milk." (PROBABLY BECAUSE THEY WERE TOLD TO BY PUBLIC HEALTH) "All others were given Cipro and sent home without further investigation. Reports of illness in other hospitals were ignored. By omitting cases of illness by those who had not consumed raw milk, officials inappropriately created a statistical association of illness with raw milk.

Clearview owners reported that only 24 members of 300 cow-share families became ill, most of whom had consumed hamburger at a local restaurant. No illness occurred in the remaining 361 individuals who consumed raw milk from Clearview Acres farm.

Clearview Acres had an excellent history of cleanliness. In October 2001, just a month before the alleged outbreak, Clearview Acres received the second highest rating of all farms receiving federal inspection. The rating was 99 out of a possible 100. The dairy regularly tested its milk for presence of pathogens. All tests, including those for campylobacter, had been negative. After DATCP claimed that a test for campylobacter in State laboratories came back positive, Clearview Acres's requests for additional performed tests were refused."

"The Ashland cheese case involved an elderly couple who had made fresh curd cheese for decades without incident. Many people became sick at a graduation party where the cheese was served, along with many other foods. DATCP did not test other food served at the party and it is not known how the cheese had been handled after purchase."

"In their press release, DATCP cites a report issued by the Centers for Disease Control and Prevention on alleged outbreaks of foodborne illnesses from raw dairy from 1998 to 2005. This report is posted at KSU Food Safety Article

While DATCP claims that the report shows 45 outbreaks tied to raw diary consumption, the report

actually lists 33 outbreaks.

Some of the outbreaks are based on press releases or newspaper reports rather than published articles. Ninety-four percent of the reports either had no valid positive milk sample or no valid statistical association. One of the outbreaks (two reports) was traced to pasteurized milk and one of the reports (cited twice) was traced to pasteurization failure. In three of the reports, the source of information was unpublished or not verifiable.

Most significantly, the one death claimed in the report (reported as two deaths by DATCP) was not cited in any of the reports in the table."

"A September 16, 2009 news release from the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) is typical of official anti-raw milk statements, replete with bias and inaccuracies to create the impression that raw milk should be singled out as a dangerous food. The report alleges 35 confirmed cases of Campylobacter jejuni infection among shareholders of the Zinniker Family Farm, Elkhorn, Wisconsin. Although DNA test results allegedly found the same strain of C. jejuni in 25 of the patients and manure samples obtained from 14 out of 30 milking cows on the farm, the agency did not find C. jejuni in any of the raw milk from the farm.

The Zinnikers provide milk to nearly 200 families; thirty-five individuals became sick and, of those, not all 35 drank the milk during the time period in which the illnesses originated. DATCP has not provided information regarding other individuals in the area who may have contracted C. jejuni; most seriously, DATCP failed to test the water at the farm and also failed to investigate other possible vectors of disease, including attendance at the recent Walworth County Fair."

"Given DATCP's failure to fully investigate all possible causes of the illness, the state's history of bias in sampling techniques, the agency's undercover activities, inaccuracies in citing cases of illness and lack of focus on cases involving pasteurized milk-as well as the growing popularity of the raw milk movement in Wisconsin and pressure on lawmakers to make raw milk more available-we anticipate that DATCP will attempt to use this incident as a pretext for establishing an outright ban on all sales of raw milk in Wisconsin.

A double standard is evident. Only raw milk is singled out for removal from the food supply, not pasteurized milk, peanut butter, spinach, green peppers, cookie dough and hamburger, all of which have caused widespread illness nationwide in recent years. Wisconsin raw milk consumers are at risk of losing their freedom of choice." (above quotes from <a href="realmilk.com">realmilk.com</a>)

#### Other states also do this. I quote:

WASHINGTON, DC, June 17, 2008--A Center for Disease Control and Prevention (CDC) report [www.cdc.gov/mmwr/preview/mmwrhtml/mm5723a2.htm] issued June 13, 2008 has been carefully crafted to implicate raw milk from Organic Pastures Dairy in California ("Dairy A," OPDC) with six cases of E. coli O157:H7 illness. The illnesses occurred at the height of the California E. coli outbreak associated with contaminated Dole brand baby spinach, which resulted in over 200 cases and three

#### deaths.

According to the CDC report, raw dairy products from the dairy were allegedly associated with two hospitalizations and four additional illnesses yet the report itself contradicts this conclusion. To begin, the report noted that the alleged outbreak strain of E. coli O157:H7 that was found in the children was not found in any of OPDC's samples. Also, the report admits that no E. coli was found in any of the environmental samples collected at the milk plant. Moreover, the report states that samples from three heifers yielded a different strain of E.coli O157:H7 yet the report fails to state that those three heifers were not even producing milk at the time. Nevertheless, the CDC sought to place blame on the dairy products because some of the product samples contained somewhat elevated counts of beneficial bacteria, which are destroyed by pasteurization. (from westonaprice.org)

"On October 3, 1985, students and teachers from northern California, and some of their family members, made a field trip to a San Joaquin County dairy. Of the 50 attendees from whom information was available, 23 (46%) became ill with Campylobacter jejuni infection...Neither the cows nor milk were cultured." (CDC website)

DATCP is fond of saying disease outbreaks are LINKED to raw milk. They certainly do everything they can to LINK in people's minds, raw milk and disease. But they admittedly do not test, so they legally cannot say they have TRACED it to raw milk. You heard with your own ears, a speaker state DATCP told her family they were attributing her siblings' infection to raw milk, when it was obvious they got it from a stream!

It is the height of sloppiness not to test. How can we take seriously DATCP's claims of being "scientific" when these methods are most UNscientific? Even a high school experiment would be better set up than the way they do their "data" collection!

I also have a concern with some of the wording in the bill itself. Concerns re. requirements for Grade A license were already expressed, and I share those. Also, I find it alarming the wording "Either the milk producer or the consumer provides a sanitary container for the product that has been prepared in a sanitary manner..." This is "code" for an on-farm bottling plant, which could easily be required later due to content of chap. 80 in WI Administrative Code. The wording ought to read, "ONLY THE CONSUMER provides the container"; otherwise, this bill may do more harm than good to small farmers.

This suggested wording could also cut down on potential disease, because milk improperly handled could become contaminated. If only one customer's container was dirty, then only they would become sick. But if there were a bottling set-up, and it became contaminated, more than one family would become sick. If DATCP requires bottling, it seems to me that they WISH for greater disease outbreak, or else wish raw milk farmers to leave the state, as this will be prohibitively expensive.

In fact, lowa's similar bill is much better: "A person who operates a dairy farm may sell milk or a milk product regardless of whether (it) is unpasteurized or ungraded, if it is produced by that dairy farm and sold to an individual..."

I question the liability clause. Perhaps it should read something to the effect that a consumer signs an informed consent, (as is done in hospitals). When a patient signs that, the doctor is virtually absolved from liability, but in extreme cases could in theory still be sued. But the burden of proof now rests on the patient, not the doctor, and that is an important distinction.

I hope you will take time to think on the views I have expressed.

Thank you,

**Emily Matthews**