

**Response to P1007 PRIMARY PRODUCTION & PROCESSING
REQUIREMENTS FOR RAW MILK PRODUCTS
(AUSTRALIA ONLY)**

Submitted by:

Steven Rosa
Engineer / Management Consultant
5/4 Lisson Grove
Hawthorn Vic 3122
0409539900
steven.rosa@gmail.com

Introduction

I welcome the opportunity to comment on the raw milk proposal P1007 and congratulate you on your first steps to adjust current laws in response to consumer demand, recommending Option 3 products to be legally sold. However, I don't believe that report alters the current legislation far enough and would like to challenge some of the assumptions that have led to falling short of recommending Option 4 (Category 1,2,3) products to be sold. My preference is for Option 4 products to be allowed because ultimately this question is about consumer choice. The "risk vs reward" decision about raw milk is one that consumers should make themselves, not one that should be legislated by the government. As an example, smoking and alcohol are known killers, yet consumers still have the final choice about using these products. I have been consuming raw milk and raw milk products regularly for the last 3 years and not only have I not been sick, I have not had a cold/flu or had a day off work in that time. As a vegetarian, I rely on and choose raw milk and raw milk products to provide me with the essential protein, calcium, B12 and other nutrients that I require.

Hamburger, mayonnaise, ice cream, eggs, lunch meats, seafood, lettuce and pasteurised milk have all caused outbreaks of food borne illnesses, yet these products continue to be available, as they should be. Carefully produced raw milk has an outstanding safety record. For an example of best practice raw milk production processes and safety records see:

<http://www.organicpastures.com/labTests.html> and
www.rawusa.org

The consistently outstanding safety record of Organic Pastures raw milk dairy in the United States demonstrates that with the right processes in place, it is possible to guarantee the pathogen free production of raw milk for human

consumption.

The statement that Option 4 is not considered acceptable because they present too high a risk to public health and safety is technically incorrect. Risk is defined as a combination of "likelihood" and "consequence". Risk management rates risks based on the likelihood of them occurring and then considers the seriousness of the consequence if the event did occur.

| | | RISK ESTIMATE | | | |
|------------|-----------------|---------------|------------|--------------|----------|
| | | Low | Moderate | High | High |
| LIKELIHOOD | Highly Likely | Negligible | Low | High | High |
| | Likely | Negligible | Low | Moderate | High |
| | Unlikely | Negligible | Negligible | Low | Moderate |
| | Highly Unlikely | Marginal | Minor | Intermediate | Major |
| | | CONSEQUENCES | | | |

Data shows that the incidence of illness from dairy products is rare - in Australia there have only been 8 reported incidents of food borne illness attributed to raw milk product consumption between the years of 1995-2004 (A Risk Profile of dairy Products in Australia, FSANZ 2006). Compare this with the 5.4 million cases of gastroenteritis in Australia each year attributable to food (A Risk Profile of dairy Products in Australia, FSANZ 2006). The likelihood of raw milk containing harmful pathogens when it is milked from healthy cows in modern sterile conditions with best practice processes in place is "highly unlikely" (see "Organic Pastures" <http://www.organicpastures.com> data from example above). The impact to humans if contaminated milk is consumed is commonly a gastrointestinal upset and might be considered "minor" to "intermediate" - so the overall risk rating for the consumption of raw milk is at best "negligible" or "low", not "moderate" and definitely could not be considered "high" - this puts raw milk in possibly the same category as other raw foods e.g. sushi, uncooked chicken, salami, oysters etc. Any of these products have the potential to cause harm if incorrectly handled and stored. In it's normal and natural state, when milked from a healthy cow there is nothing inherently bad, evil or dangerous about raw milk. Raw milk has been consumed by humans safely for thousands of years and is still consumed regularly and safely by humans today all over the world. The only way that problems arise in fresh foods - whether it's sushi, oysters, chicken, pate, milk or whatever is when the the products have not been processed or stored correctly and pathogens have made their way into the product. This is a handling / distribution issue and sometimes an animal health issue, but not a problem with the product itself. What is the risk to public health of cigarettes, alcohol, high fat foods? They are all known adversely impact health, yet they are freely available. Why is there a double standard when it comes to raw milk consumption? Even if

a risk is considered to be “high”, risk mitigation strategies can be put in place to reduce the risks to “low”.

"Category 3 products present the highest risk. By definition, these products allow the survival and growth of any pathogens present."

True, the risk may be relatively higher, but the overall risk is still not “high” (see discussion of rating risks above). If healthy cows are milked in modern sterile conditions and the milk is stored and distributed correctly using best practice processes, then there are no harmful pathogens present in the raw milk. If these conditions are met, then the risk is negligible to low. It's irrelevant to say that survival and growth of pathogens is possible if there are no pathogens present. Incorrectly handled oysters, chicken, salami etc have the same potential to allow the survival and growth of pathogens present. Due to different production standards and processes, it's likely that not all raw milk that is currently produced in Australia will meet these minimum safety standards. Milk from high volume bulk milk dairies may be of an inferior quality and may contain a higher level of pathogens than milk from mainly grass fed small volume dairies. This is because large volume dairies rely on the fact that they will be pasteurising their milk, their aim is not to produce pathogen free raw milk and this is why pathogen levels in their raw milk prior to pasteurisation might be measured as high. A specialist raw milk dairy, on the other hand, would need to have the correct processes in place to ensure pathogen free raw milk (eg see Organic Pastures and rawusa.org safety standards). The pathogen level in the end product in either case can be tested to ensure safety. This legislation is not about making all milk raw – it's just about allowing a small number of specialised raw milk dairies to produce high quality pathogen free raw milk to be legally sold for human consumption.

"The Risk Assessment work undertaken has shown the levels and frequency of contamination of raw milk by pathogens can be minimised to a degree by certain animal health and production practices however, such controls cannot eliminate pathogens and pathogen-free milk cannot be guaranteed."

True, modern animal health and production practices reduce the risk to the safety of raw milk for human consumption to “negligible” or “low”. It should be a requirement of all raw milk dairy producers to ensure that they are using best practice health and safety procedures in the production of raw milk. If there is a doubt, then regular testing for pathogens can be performed to ensure that the final raw milk product is free of pathogens (eg see best practices of Organic Pastures <http://www.organicpastures.com>) Pathogen free salami, chicken, oysters can never be guaranteed, but animal health and production practices can reduce the risk to “negligible” to “low” for these products just like in the case of raw milk. If the risk of drinking raw milk really was high, then we would be seeing dairy farmers and other raw milk consumers all over the world regularly getting sick or dropping dead. Analysis of the available data shows that this is simply not

happening (A Risk Profile of dairy Products in Australia, FSANZ 2006). The rare cases of gastrointestinal upset etc are a result of incorrect handling, distribution or poor herd health (eg I note that some of the reported cases involve school children drinking unpasteurised milk while on school camp or raw milk being consumed on farms). This incidence frequency is in line with incidence levels for other food poisoning cases in things like salami, oysters, sushi etc. Just like any other commercial raw food company, no raw milk dairy business owner wants to produce a harmful product. If they do produce an unsafe or inferior product, their brand would be tainted and they would soon be out of business. This commercial requirement to ensure a quality product is another driver that will ensure safety in the final raw milk product. Raw milk is a niche, high quality, premium product and is priced as such. If there was any doubt in a consumers mind that they were not getting value for money, they can continue to buy regular and cheaper pasteurised milk.

Additionally, Category 3 raw milk and raw milk products have little history in the Australian market and therefore there would be little consumer understanding of the risks associated with their consumption.

This is not a proposal to allow all Australian milk to be sold as raw. This is about providing consumers with choice. If the average consumer is unsure then they can continue to buy pasteurised milk - this is no change from today. It's likely that raw milk would remain a niche product and would only be available in specialty stores and not at the local milk bar or supermarket. As such, consumers would still have to go out of their way to seek out raw milk. The fact that the average Australian has little understanding of the risks associated with raw milk consumption is irrelevant for a specialty product that will never be widely available. Clear labeling of raw milk in whatever way is deemed appropriate can help to ensure consumers understand the risks of the raw milk that they are buying. Stringent testing and best practice safety procedures can ensure there are no pathogens in raw milk.

Extensive communication and education programs and potentially labelling requirements would need to be implemented to inform consumers of the risk and to counter misleading claims by raw milk advocates that claim the products do not pose a risk (or the risk is outweighed by the benefits), especially for vulnerable groups. The same is also likely for producers who do not understand the risks associated with producing and supplying Category 3 products.

Again, for the average Australian, raw milk is and will remain a niche product. If needed, label raw milk with whatever warnings are deemed necessary and pass the associated costs on to the consumer, but leave the final choice to the consumer. I note that cigarettes are labeled with horrific photographs and warning labels, however the choice is still up to the consumer to buy the product or not. This is not a proposal to make all milk raw. Raw milk is a specialty

product. The risks for harm in the consumption of drinking raw milk that has been correctly and safely produced is “negligible” to “low” - all the available data supports this fact and it is not “misleading” to say this. It is technically incorrect and “misleading” to say that the risk is “high”. When serving to "vulnerable" groups, if deemed necessary the label could carry a simple recommendation to boil the milk prior to consumption - but leave the final decision up to consumers. If I buy raw chicken from a supermarket and consume it without cooking I will likely get sick, but it would be absurd to demand all chicken be cooked before being sold. Ongoing education for all raw food products is prudent practice in any industry and the raw milk dairy industry is no different. Producers should be using best practice modern, sterile processing methods - in the same way that a fish monger, salami maker etc needs to ensure certain practices are followed to ensure the safety of their products. For the majority of dairies that want to continue to produce pasteurised milk and for the consumers that want to consume it, there is no impact.

Category 3 products.

This option will allow the greatest flexibility in how dairy products are processed. However, as Category 3 products have been found to present too high a risk, allowing these products to be produced will compromise the level of protection of public health and safety.

Agreed, consumers and producers want the greatest flexibility and the right to choose. It is incorrect to say that category 3 products have been found to present "too high a risk" This is an incorrect statement - the risk if following modern processing methods combined with the safety net of regular testing is “negligible” to "low". To arrive at any other conclusion is technically incorrect. All the available data showing incidence and consequence supports the fact that the regular consumption of raw milk products poses a “negligible” to "low" risk to public health and safety. The level of protection of public health and safety will definitely not be compromised if best practice raw milk production processes are followed to produce raw milk

(see Organic Pastures <http://www.organicpastures.com>).

The general public won't be buying raw milk - it will always be a specialty product and the average person much less likely to be exposed to raw milk. To say that it compromises the level of public health and safety is just not supported by data.

A major motivating factor for raw drinking milk consumption is the perception that the nutritional profile of raw milk is superior to pasteurised milk. Milk itself is one of the most complete of all foods, containing nearly all the constituents of nutritional importance to humans. Pasteurisation does not impact on the nutritional importance of milk products in the Australian diet. Milk and milk products have been shown to be the richest source of calcium in the Australian diet and are important contributors to protein, vitamin A, riboflavin, vitamin B12, zinc and iodine. Further information on the contribution of various nutrients to the Australian diet is

provided in the Technical Assessment (Attachment 1).

The technical assessment of raw milk does show that it has a superior nutritional profile than pasteurised milk – clearly backing up the claims of raw milk supporters. This is particularly clear in the case of vitamin C levels. This is not a merely a perception, it is a scientific fact as verified by the FSANZ study of the available research. See also the supporting data from “The Michigan Fresh Unprocessed Whole Milk Workgroup” (<http://www.miffs.org/Mlfuwmilk/benefitsvalues.htm>), which clearly shows many areas where raw milk has a superior nutrition profile to pasteurised milk. I believe that it’s misleading to take the fact of superior nutrition profile in raw milk and downplay it by stating that there is not a major difference in terms of the overall contribution of milk for these nutrients to the average Australian diet. What is an “average” Australian diet? Not every Australian eats an “average” Australian diet. I am an Australian and also choose to eat a vegetarian diet. In my diet, raw milk provides a major source of protein, calcium and B12 amongst other things. Some days, raw milk is the only source of these things. It’s extremely important to me to consume the best quality milk with the highest and most easily assimilated quantities of these vitamins. In my case I choose raw milk as the source because scientific research shows that it is more nutritious than pasteurised milk. I don’t digest pasteurised milk well, it makes me feel bloated, but I have no problems digesting raw milk. I don’t care if pasteurised milk or meat or fish is also a source of vitamins, my chosen source is raw milk. Why should anyone else make that choice for me?

Conclusion

It’s clear that raw milk and its’ products are being demanded by some Australian consumers – and this demand will not go away. At one stage in our history it made sense to pasteurise all of our milk, but now that we are in the 21st century we have the science and technology and the modern production processes and understanding to consistently and safely produce healthy, pathogen free raw milk for human consumption. I believe that the sensible approach to legislation is to allow Option 4 products (Category 1,2,3) to be legally produced and sold in Australia, while ensuring that the adequate processes and labeling requirements are in place to support this. One example would be to follow the lead of www.rawusa.org and www.organicpastures.com. There are also many other examples where raw milk is being safely commercially produced and consumed in other European countries (eg France, Italy etc). I look forward to common sense prevailing and the introduction of legislation supporting the free choice of consumers by allowing Option 4 (Category 1,2,3) products to be legally sold in Australia.

Appendix

<http://rawusa.org/standards.html>

RAW USA STANDARDS

Quality, Purity, and Ethics in Raw Milk Production

Raw Milk Production Standards for Human Consumption

Only raw milk produced and sold under the following 20 conditions and standards may bear the RAW USA Raw Milk Certification:

1. No antibiotics may be used on a cow or other mammal from which milk is drawn within one year of producing raw milk intended for human consumption.
2. No growth or milk stimulating hormones may have been used at any time within one year of RAW USA certification.
3. No pesticides may be used on a raw milk cow or in her environment unless OMRI listed or USDA NOP compliant.
4. All USDA NOP standards apply as binding guidelines to the pasture environment care and conditions. All dairy pastures shall be USDA certified organic or USDA certified transitional.
5. All lactating animals that are producing raw milk for human consumption must be allowed access to pasture 150 days per year at a minimum and 100% of the time when possible.
6. Lactating animals must be provided a clean place to lie down and rest. All bedding areas should preferably be natural pasture or be something that the cow would find in a natural environment. Sawdust, straw, rice hulls and sand are examples that meet this requirement. Rubber and concrete do not meet this requirement.
7. No free stalls or loafing stalls are allowed.
8. Lactating animals must not be kept in crowded conditions and must be allowed to range freely, seek solitude and undisturbed rest.
9. There must be ample clean fresh water available and at no time may there be crowding occurring for competition to water access.
10. There must be adequate space available for the animal to experience all natural behaviors including: birthing, breeding etc.
11. All natural feeds shall be fed to the lactating animal. That includes only feeds that the animal would naturally eat in nature. This includes natural corn, barley, wheat or forages but not soy or cottonseed or other unnatural processed feeds. RAW USA standards emphasize green pasture as a major part of the ration and dried alfalfa and or dried grass forages as supplements. Some haylage made from available pastures or forages are permitted. Feed should be raised and certified organic if possible and if available. All feeds shall be of natural origins and part of the natural diet eaten by cows. For example, organic donuts,

- organic soybean meal and organic potato chips are not permitted.
12. Bacteria standards for RAW USA certified milk includes monthly testing for pathogens including the presence of Salmonella, Ecoli 0157 H-7, Listeria Monocytogenes. If the local regulatory agency performs these tests then no additional tests are required.
 13. Bacteria standards for raw milk includes testing for SPCs which shall be less than 15,000 SPC on a three out of five samples basis. Tests shall be completed one time per month. Any time a test is higher than the standard then tests will be increased in frequency to one time per week until tests show compliance with standards.
 14. If the test sequence fails the standards then raw milk will not be sold to the public for human consumption until a test shows compliance with standards. Testing results must be kept for a minimum of three years
 15. There are no Coliform, LPC or Somatic Cell Count (SCC) test standards for raw milk under these standards. All RAW USA standards meet or exceed the same standards as Grade A Raw Milk for human consumption in California under CDFA.
 16. All animals in the herd must test negative for TB and Brucellosis on initial test and then once every two years. Any new additions to the herd must be tested prior to being added to the herd. All positives must be removed from the herd immediately.
 17. All raw milk must be chilled to below 40 degrees within one hour after milk is drawn from animals. Immediate Flash or heat exchanger chilling is recommended. No RAW USA raw dairy product will ever be exposed to heat above 102 degrees F at any time, assuring that enzymes and bacteria are undamaged, alive, active and healthy.
 18. All stored or packaged raw milk to be kept at or below 40 degrees until consumer sale (34-36 degrees is preferred).
 19. All milking parlors and equipment, milk houses, milk handling and bottling equipment shall be kept clean according to the standards required by the local county or state milk sanitation standards for Grade A milk production. No sterilizers may be used including quaternary ammonias. All hot water washes and cleaning of equipment and tanks shall be documented on a daily records log. If possible, a recording chart should be used to document temperatures and cleaning procedures.
 20. All operations shall be rooted in social and environmental awareness. Fair wages and benefits, support of family and community life, investing in employee skills, and developing pride of artisanship are encouraged. RAW USA dairies should

engage in environmental stewardship through ongoing development of sustainable, petroleum-independent farming methods, and strive to pioneer positive solutions specific to the bioregional needs and resources of the local community.

References

www.organicpastures.com

www.rawusa.org

<http://www.miffs.org/Mlfuwmmilk/benefitsvalues.htm>

"A Risk Profile of dairy Products in Australia", FSANZ 2006

Schmidt, Ron, "The Untold Story of Milk", 2003, New Trends Publishing, Washington DC