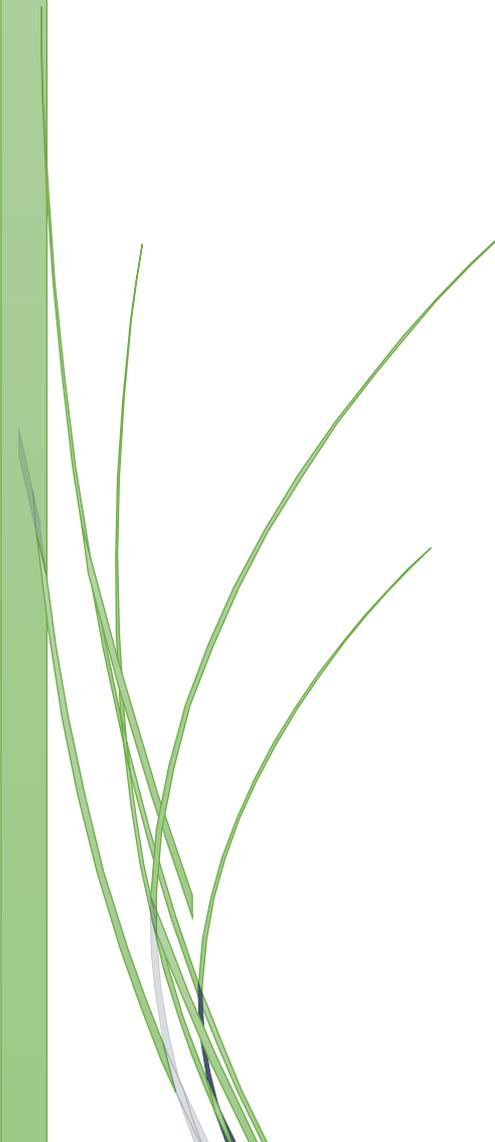


June 2018

Raw Drinking Milk Consumer research



John Golton-Davis
FOOD SOLUTIONS 9TH JUNE 2018

Report on the results of independent research survey carried out for the Raw Drinking Milk Producers Association by Food Solutions to:

- ❖ Establish why the drinking of raw drinking milk (unpasteurised) is becoming more popular.
- ❖ Establish if consumers are aware of perceived risk associated with raw milk.
- ❖ Establish to what extent consumers believe that there are health benefits in drinking raw drinking milk.



9th June 2018

Preamble

During the Food Standards Agency Board meeting held on 14 March 2018 the future of raw drinking milk (RDM) was discussed.

The discussion primarily focussed on raw cows drinking milk, although milk from other species (e.g. sheep and goats) has been considered as part of the risk assessment and customer insight work.

In June 2018, a further paper will be submitted to the FSA Board with proposed changes to improve the assurance of RDM Milk production. The paper will present the latest findings and conclusions on RDM and will seek approval on recommendations to improve the existing controls for raw milk.

1. The paper presented to the Board at their March meeting stated that:
Following on from the extensive consumer work carried out as part of the 2012-2015 Review, the FSA has, in 2018, repeated an online consumer survey to research if there are changes to consumer perception of RDM since the last Review. The findings from the consumer research will feed into the recommendations for discussion in June.
2. Some officials at the March Board meeting stated that the reason people buy RDM is because they believe it offers health benefits. They went on to say that they believed the risks associated with RDM outweigh any benefits.
3. The meeting was also told that over the last 18 months, there has been a noticeable increase in the number of producers who sell Raw Drinking Milk (RDM) and a possible rise in the number of outbreaks of human illness thought to be attributable to the consumption of the product. This claimed rise is not confirmed in the Public Health England figures quoted on page 40.

Working with, but independently of, the newly formed Raw Milk Producers Association, Food Solutions conducted in depth research and on-line survey addressing three issues.

Issue 1. The FSA's research appears to be vague and not well targeted. Consumers who actually buy RDM were asked a range of questions using an on-line survey.

Issues 2 and 3. Information in the public domain was researched to establish the facts.

This to ensure that Board members are in possession of all the facts and also the views of consumers who buy RDM.

Food Solutions aims are to:

- Help food businesses **comply with the food regulations** simply and cost effectively
- Ensure **practical food regulations** so food businesses can comply simply and effectively
- Keep food businesses **informed** about regulations
- Provide a **voice for small Food Businesses** to authorities in the UK and Europe (Food Solutions is the only UK member of [UEAPME Food Forum](#))



Food Solutions modus operandi

There are approximately 168 licensed raw milk producers in England, Wales and Northern Ireland. Food Solutions has been able to identify 162.

As the result of a meeting on 3 May 2018 an association was formed to represent RDM producers. Since that date members of this association have been encouraged to ask their customers to take part in the research.

The report needs to be available prior to the Food Standards Agency Board meeting scheduled for 20 June 2018.

Because of time constraints

- It was not possible to involve all of the RDM producers. Approximately 25% took part producing over 2700 responses.

A flyer (see appendix 2) was handed to consumers outlining the background of the research with details of how they could take part.

The survey was also promoted via social media

The survey questions appear in Appendix 3

Those wishing to take part logged on to www.food-solutions.org to access the survey.

No personal details were asked for.

This report is based on the independent answers given by respondents and has been written independently.

Contents

Summary	6
Chapter 1 - Licenced RDM producers	8
Chapter 2 - Respondents background	9
Question 1 – In which Region or Country do you live?	9
Question 2 – In which age range do you fall?	10
Question 3 – Do you have children?	10
Question 4 – If yes do they also drink raw milk?.....	10
Chapter 3 - The Assumed risk	11
Question 5 – Are you aware that drinking raw milk might be harmful to your health?.....	11
Question 6 – Additional comments made by respondents?.....	11
Not a risk to health/scaremongering	12
Good farm hygiene.....	15
Benefits outweigh the risks.....	17
Choice.....	18
Pasteurisation.....	19
Question 7 – Are you aware that all producers of raw milk must be licensed by the Food Standards Agency before they can sell raw milk?.....	20
Question 8 - If yes – Do you know where to find the list of licensed producers?	20
Chapter 4 - The buying habits of respondents	20
Question 9 – How do you use the raw milk that you buy?	21
Question 10 - Do you have other uses for raw milk?	21
Question 11 – How do you usually purchase your raw milk?	22
Question 12 – Do you purchase raw milk in other ways?	22
Question 13 – How often do you buy raw milk?.....	24
Question 14 – On average how much do you buy each time?	24
Question 15 – What other raw milk products do you buy?.....	25
Question 16 – Do you buy other products not listed in question 15? (If so please state).	25
Question 17 – do you buy raw milk produced by any of these animals?	26



Chapter 5 - Personal feedback.....	26
Question 18 – Drinking raw (unpasteurised) milk is becoming more popular. To help us understand why this is happening any additional comments you would like to make would be useful.	26
Natural.....	27
Taste	28
Health	29
Support for local farmers	30
Allergens/specific health issues	31
Choice.....	31
Animal welfare	32
Difficult to source	32
Hygiene.....	33
Chapter 6 - Interview with a RDM producer.....	34
Appendix 1 - other background information	38
Public Health England	38
The situation in the USA.....	40
Appendix 2 – flyer as given to customers asking for comments	41
Appendix 3 – questions	42

Summary

This research was of people who buy raw milk. Some 2710 submitted answers between 3rd and 31st May 2018 which included written comments.

Since the survey closed a further 103 responses have been received. These have not been included in the analysis.

These comments were written by consumers, many from medically and other qualified persons, indicate that they have found health benefits from raw milk over processed milk both for themselves and their families. This evidence contradicts the official view that the risks outweigh any benefits. A selection of these comments is included verbatim in this report. **Comments from persons claiming qualifications are in bold.** The complete list of comments can be seen on the website www.food-solutions.org.

In order to complete the consultation process we would insist that the FSA Board members are made aware of these findings before their meeting on 20th June.

The survey was anonymous and no identification details were asked for. Questions included indications of age and geography, awareness of risks, source of purchase and an opportunity to explain why they bought and used raw milk. These generated over 130,000 words. This high number of responses and the fact that sometimes in depth comments were made demonstrates the passion felt by people who purchase raw milk.

The overall consensus is that consumers want to opportunity to buy unpasteurised milk, that there should be strict controls including a licence for sellers and that individuals' rights to their perceived and demonstrable benefits should not be curtailed.

The quality of responses shows that RDM consumers:

- Are knowledgeable on the subject.
- Want natural products.
- Believe that the opposite is true in that most pasteurised milk is highly processed and offers less health benefit to those who drink it.
- It tastes better.

There are conflicting views on the effects of unpasteurised versus pasteurised. There is a danger that the results can be biased depending on which side of the argument the writers of this research fall. This can be very confusing for the public.



There is also an increasing problem with other health issues.

Recent studies have suggested that humans need to be exposed to certain bacteria.

<https://www.ctvnews.ca/health/early-exposure-to-infection-may-prevent-childhood-leukemia-study-1.3941760>

The survey results show powerful support by consumers for the continued sale of raw milk. Numerous respondents stated that they had experienced beneficial changes to certain health conditions – eczema, asthma and allergic reactions etc. These are the claims, and further research can be done. If RDM offers positive outcomes, its use should be supported.

Many RDM producers are leading the way environmentally by using reusable bottles etc. This should be encouraged. A common comment from respondents is their confidence in the hygiene put in place by RDM producers. They also praised the animal husbandry of these farmers.

There are approximately 168 licensed raw milk producers in England, Wales and Northern Ireland. Anecdotal evidence would suggest that there is an unquantified number of unregistered, unlicensed farms operating throughout the UK. This group could pose a threat to public health and should be identified as a matter of urgency. The trend is for central registration, but local knowledge is the far more certain way of identifying unlisted producers.

From responses it can be concluded that RDM consumers want in place;

- Good hygiene practices at the point of production.
- High quality animal welfare.
- Choice to be able to buy RDM.

A solution needs to be developed to satisfy the concerns of both the FSA and the consumers.

A simple answer is to develop a national HACCP based management control system. Reports from producers say little help and advice exists at present on the practicalities of how to set up a HACCP system for this sector.

- Farmers are not necessarily familiar with this concept. Therefore there needs to be available:
 - Educational information about HACCP written in plain English.
 - Because each farm is unique - a series of practical templates to help farms comply in a uniform way.
- The official requirements are for officials to be fully trained in and *au fait* with the operations they inspect - this is particularly true for RDM producers.
- All farms wishing to supply RDM must have the national HACCP in place before a licence is issued.
- Severe penalties for farms operating without a licence.

Chapter 1 - Licenced RDM producers

Food Solutions was able to identify the location of 162 out of the total of 168 licenced raw milk producers in the three Countries.

Region	Producers	% of total
South West	27	16.67%
South East	27	16.67%
East of England	24	14.81%
West Midlands	12	7.41%
East Midlands	21	12.96%
Yorks. & Humberside	8	4.94%
North West	33	20.37%
North East	1	0.62%
Wales	6	3.70%
Northern Ireland	3	1.85%
Total	162	

There is not an even spread throughout the regions. **A caveat is the fact that producers also vary in size.**

There are very few licensed producers in some parts of the UK. Why? Comment made by respondents reflects this position. All comments are quoted verbatim and are shown in italics.

Raw milk should be made available widely and cheaply the health benefits far outweigh the risks. People should be free to choose raw milk should they want to. Cheese made with raw milk can fight bad bacterial better than cheese made with pasteurised milk.

Raw milk should be more freely available to purchase as long as people are made aware of the risks I don't see the problem natural untampered milk the way nature intended it to be.

Chapter 2 - Respondents background

The first part of the research aimed to establish:

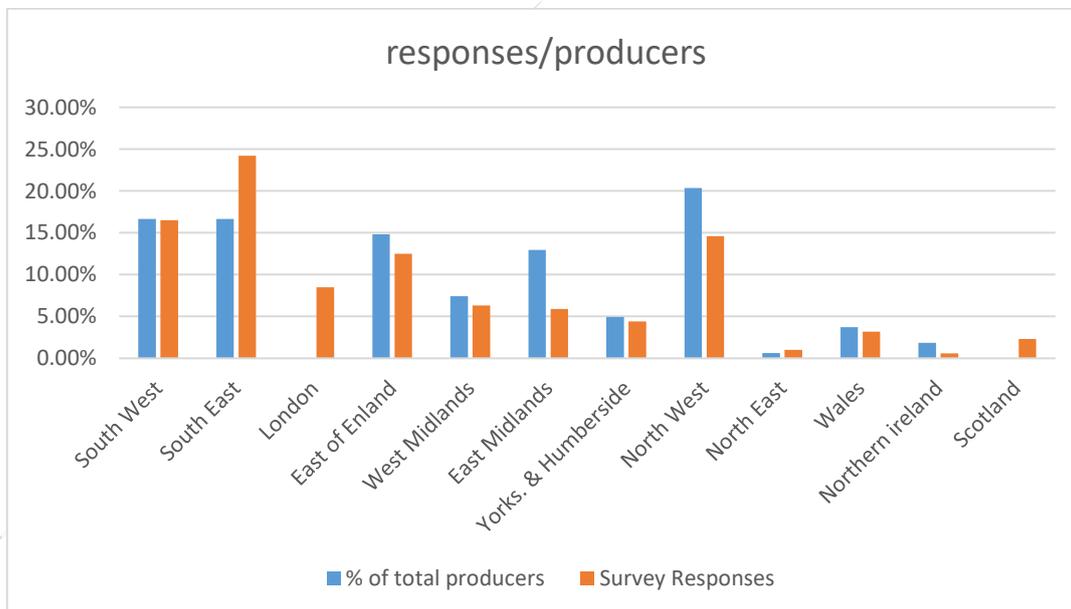
- The Region or Country of residence. Scotland was also included to establish if residents from that Country actually bought the product.
- The age range of the respondents.
- Whether or not those with children allowed them to drink RDM.
- The respondent's awareness of the assumed risk to health.
- The respondent's awareness of the need for RDM producers to be licensed to sell the product.

Question 1 – In which Region or Country do you live?

2710 respondents answered this question (100% of the total respondents).

South West	16.5%	Yorks. & Humberside	4.4%
South East	24.2%	North East	1.0%
London	8.5%	North West	14.6%
East of England	12.5%	Wales	3.2%
East Midlands	5.9%	Northern Ireland	0.6%
West Midlands	6.3%	Scotland	2.3%

The correlation between residence and RDM producers.

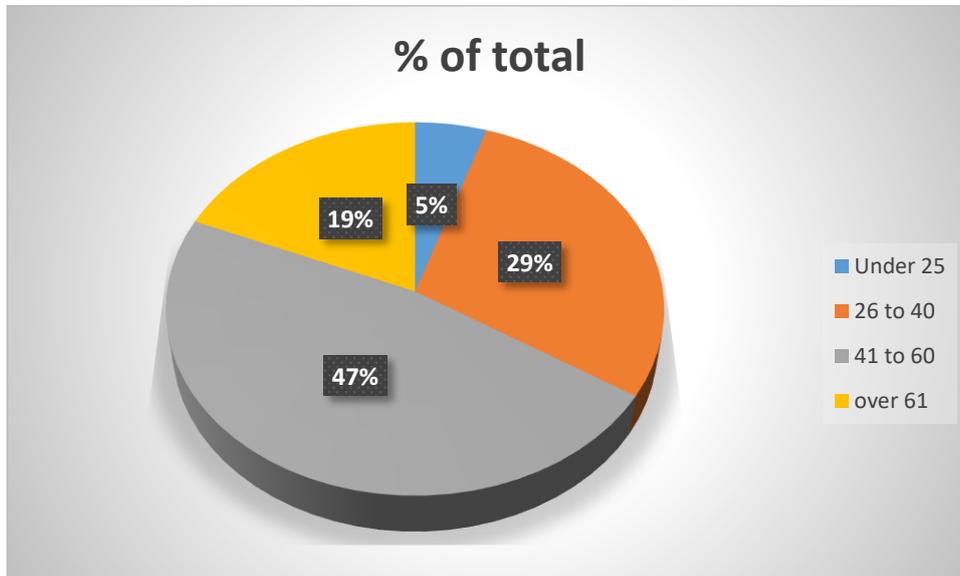


This information demonstrates that the respondents reside across the whole of the target area. Because producers have different customer numbers a direct correlation cannot be made.

London produced 229 responses. Scotland produced 62 responses.

Question 2 – In which age range do you fall?

2701 respondents answered this question (99.7% of the total respondents).



Question 3 – Do you have children?

2693 respondents answered this question (99.4% of the total respondents).

Yes	62.7%
No	37.3%

Question 4 – If yes do they also drink raw milk?

1692 respondents answered this question (62.4% of the total respondents).

Yes	78.5%
No	21.5%

Comments from respondents

“My child gets catarrh and asthma when consuming ordinary milk products. Raw biodynamic milk he can tolerate and when it was the only thing I changed in his diet, actually stopped all symptoms.”

“For my babies as well as breast milk.”

Chapter 3 - The Assumed risk

This section addressed the assumed health risk associated with RDM. Strong feelings were expressed by respondents. One question asked for written comments that respondents would like to make about the assumed risk to health. 1940 (71.6%) added a comment. A selection of responses is included in the report. The remainder can be accessed by going to www.food-solutions.org.

The FSA requires a label on RDM sold that says:

This milk has not been heat-treated and may therefore contain organisms harmful to health

To ascertain if people buying RDM are aware about this assumed risk they were asked; are you:

- Aware of the FSA warning
- Aware that RDM producers have to be registered
- Know where to check to see if a producer were registered

The report also contains details of other research that has been carried out that the consumption of RDM is a serious threat to health. These are to be found in appendix 1. The author is not qualified to comment on this research.

Survey responses

Question 5 – Are you aware that drinking raw milk might be harmful to your health?

2678 respondents answered this question (98.8% of the total respondents).

Yes	88.9%
No	11.1%

The result shows that the people who buy the RDM are fully aware about the perceived risk. This comment challenging this and is reiterated by other respondents.

Quite the opposite really, none of us have had any illnesses at all since starting on raw milk. I think it is one of the most wholesome food sources I can feed my family with.

Question 6 – Additional comments made by respondents?

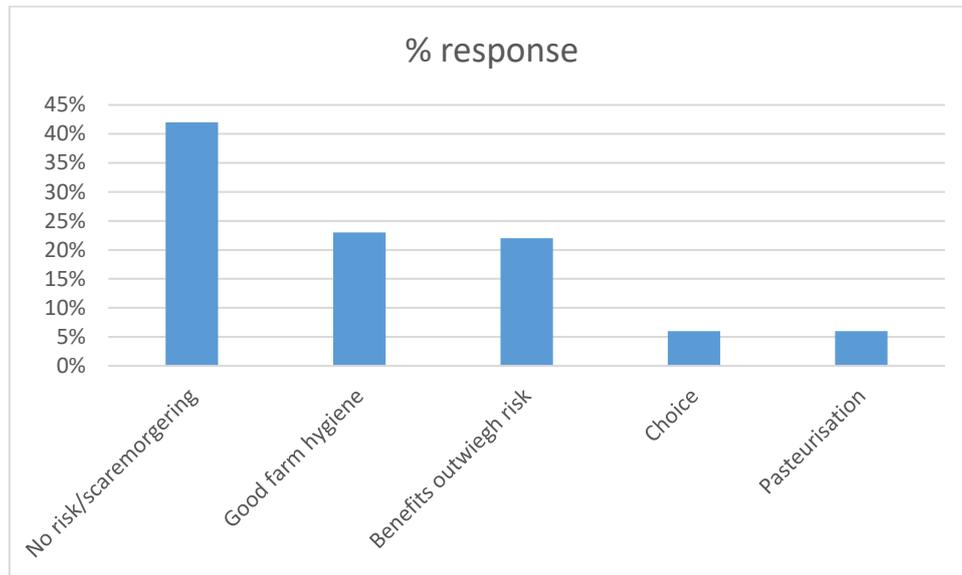
Respondents were offered the opportunity to comment in the implication of question 5

1940 respondents entered a comment to this question (71.6% of the total respondents).

The important fact to note is that respondents had to physically type in any comments. They did this and the answers comprised over 50,000 words.

The complete list of the responses can be accessed by going to www.food-solutions.org

Comments made by respondents were both informative and in some cases forceful. A selection of respondents comments are listed below. They have been listed under five categories which reflect the most common views expressed by respondents. Responses to question 5 acknowledge that there may be a risk from drinking RDM. When asked to quantify this the results showed this is less of a concern.



A selection of comments from the five main headings

Not a risk to health/scaremongering

1. *All my children were brought up on raw milk. They have no allergies or health issues. I've had it for the majority of my life and have no health issues or allergies either.*
2. ***Are you aware that raw milk is utilised by Doctors in Southern Germany to treat and reverse allergies? The health benefits vastly outweigh the risks in my opinion and we never had any adverse health reaction in over 30 years of drinking raw milk and using raw milk products.***
3. ***As a professional athlete I have found this to be untrue. Due to testing I drink approximately 8litres of raw milk as part of my post training recovery.***
4. *Drinking raw milk has done nothing but good for me health wise. For years I'd suffered from nasal and sinus congestion, had lost my sense of smell and started to have difficulty with breathing, was referred to hospital and even underwent surgery - all to no avail. Ditching homogenised milk and using raw milk instead was the best decision I could have made. No longer have any nasal or sinus congestion, have a good sense of smell, and no breathing issues. The cause of occasional flare ups always coincides with having to use homogenised milk when I'm away from home. Convinced that raw milk is healthier than homogenised milk, you bet I am. And it tastes so much better too.*

5. *I have never heard such rubbish in all my life. My family have been drinking raw milk for years and my grandparents before that. Raw milk contains the best bacteria for warding off sickness and disease. The FSA must be in need of a serious nutrition update. Raw milk has helped hundreds of thousands of people to overcome illnesses that drugs could not help. People who drink raw milk are far healthier than those who do not, ask the farmers who produce it as well as those who drink it. Not been ill in years and years. Cannot be harmful to human health then can it?*
6. *But no more harmful than many other foodstuffs.... raw milk is far more beneficial health wise!! Be very careful about scaremongering!!*
7. *Drinking anything now a days can be harmful to your health. Every week something new is bad for you. But look at how many OAPs there are and they lived on raw milk.*
8. *Eating highly processed food and drinking alcohol are proven to be harmful to health, but these are still sold all over the country with very few warnings on them. Why is raw milk given such special treatment?*
9. *FSA should present a balanced view of everything and issue similar warnings about the processed food on sale in supermarkets especially the 'chemical processing' like homogenisation, other artificial chemicals/preservatives/fillers etc. added to the food, which should not be there in the first place!*
10. ***Harmful to health is a joke. The raw milk we buy keeps for a week in the fridge, pasteurised only 2 days. You are trying to tell me there are more bacteria in raw milk. Really?? My father is a doctor and believes raw milk is far healthier. The vitamin C is not destroyed by pasteurisation in raw milk, children who drink it suffer less allergies. The lecithin is not destroyed. There is less digestive upset as it is not homogenised. I think food that has been processed is far more dangerous to health. One is far more likely to develop a stomach upset from cooked meat than raw milk.***
11. *Harmful to health? What an odd question. Like any whole or unprocessed food, if it is farmed and packed hygienically then there's no reason it should be harmful to health, no more so than eggs, vegetables or fruit. Furthermore there are plenty of foods available which are detrimental to health, foods which contain Glyphosate for example (wheat which has been sprayed contains oodles of the stuff which is then scoffed by the general public). This is to name but one example. Raw milk is not only not harmful to health, it is ironically very good for health. I've drunk the stuff for 4 years now and haven't had a cold or flu since (or any other health concern). Further to this point, but pasteurised and homogenised milk has no health benefits whatsoever since all the goodness is removed through the pasteurisation process, and then it is rendered positively dangerous to our health through the homogenisation process. Fats are broken up so small they are able to enter cells in the body where they shouldn't be causing all kinds of havoc.*
12. *How much research is there on the numbers who have been taken ill as a result of drinking raw milk and how good is the research?*

13. *I believe I am as likely to become ill from eating a bag of infected salad leaves or shellfish as I am a pint of raw milk.*
14. *I believe that nature will always look after us therefore I have no qualms that my and my family's health are going to be fine! The old adage if it doesn't need fixing don't fix it! Leave it natural*
15. *I do not believe that drinking raw milk is harmful to health and I believe that the FSA thinking on the subject is flawed and its warnings are unnecessary...*
16. *I don't perceive the risk of drinking raw milk to be any more dangerous than eating salad from a salad bar.*
17. *I find it difficult to understand why raw milk has a health warning. Other 'high risk' foods don't carry such warnings. And there is no mention of the possible health benefits.*
18. ***As a medical professional, I understand the risks that raw milk may pose to health. However, these risks must be contextualised. If the milk is from a healthy cow which is hygienically milked, and the milk is handled appropriately, then raw milk poses no harm to human health. On the contrary, modern medicine is finding out day by day the immense benefit humans derive from the regular consumption of beneficial bacteria, which raw milk provides plenty. Not to mention the countless other vitamins and minerals which are also to be found in raw milk in bioavailable amounts, which might otherwise be altered during the heating process.***
19. *There a far greater risks from raw chicken*
20. *There are many more food products out there and authorised by the FSA that pose a far greater risk than raw milk, e.g. Chicken (Campylobacter), and millions more people are consuming this each and every day.*
21. *We only ever hear one side of the story in the UK. The other side being how unethical and dirty the dairy industry is and how pasteurisation is necessary to kill the germs that are Present because the way the industry operates. Have been drinking raw milk for over 3 years now. My parents and grandparents grew up on raw milk and never had any problems. It's time they did a proper fact based study instead of caving into the milk lobby.*

Good farm hygiene

- 1. Accountability, responsibility and the reasons why anyone makes something are important. I buy raw milk from producers who do their job because they enjoy and believe in it and as result are responsible producers. My view is that the risks associated with buying raw milk from such a producer is controlled and I have more faith in the quality and safety of the product than I do in buying a more processed product from a large scale commercial producer.*
- 2. I think there have been so many food scares from food deemed "safe", but in fact contaminated with horseflesh intended for dog food, or pesticide residues that cause us to be told carrot skin is no longer safe, and they should be peeled, that we no longer trust big business agriculture. It is not just that raw milk is raw. It is also that it comes from a single farm, where cows are free-range and feed as nature intended; that the farm is accountable for all its dairy products (not possible if a dairy factor buys and mixes milk from many farms); that you can see the cows that produce your milk, and they are happy, healthy animals; that you can meet the dairy workers, who tend to be passionate about their cheese or yoghurt or whatever, rather than just doing a 9 to 5; that the milk tastes different with the ebb and flow of the seasons, so there is a direct connection between the diet of the cows and the seasoning of the milk; that farms providing raw milk have to be passionate about what they do, or they wouldn't bother, given how many more obstacles are placed in their way, and this passion tends to spill over into caring profoundly for their animals and their welfare; and that they are willing and able to share that passion with their customers. As well as the health benefits of raw milks, and avoiding the negative qualities of other milks, I am therefore buying into a way of life where people and animals come before economies of scale, where creating a fine cheese come before making a bigger profit, and where my eating is influenced by the cycle of the seasons. I actually think that the legislation is the wrong way round. I think raw milk should be called "milk" and treated milk should be called "processed milk".*
- 3. As may drinking a 2litre bottle of coke might be harmful to your health. I believe that there is more evidence to show that the coke is contributing to the deaths to many more people than the drinking of raw milk that has been responsibly and carefully collected, bottled and sold*
- 4. Biodynamic raw milk is really safe, cows are not drugged up or sick with lots of antibiotics, sick making drugs so the final product is super high and stable... Best Michelin star restaurant in the world use raw butter, raw milk and raw cheeses and raw food growing big as a trend! Maybe they should talk to Prince Charles best friend Patrick Holden about the facts...so maybe the FSA should get a life and should stop lying to consumers about the real facts! I bet the Queen of England drink raw milk! THANK YOU.*
- 5. Consumption of many products classed as foods could be "harmful to human health". However, foods that have been consumed naturally by humans for countless years, if produced properly and hygienically, under appropriate and properly monitored regulations should be considered better than foods that have been technically altered in ways that over the long term may not be beneficial to human health - or whose effects are not yet fully understood.*

6. *Define harmful; I would say that raw milk is a much more natural way to drink milk compared to the pasteurisation process. You also know exactly what you are getting with raw milk - where it comes from, how the cows are looked after etc. Milk in the supermarket can be from anywhere, and with horrible conditions for livestock.*
7. *Eating and drinking anything may be harmful to health. To produce milk that is safe to drink and passes all the relevant tests when raw has to be more difficult and require better and more meticulous husbandry than sending your product off to be pasteurised. I'd rather rely on the person caring for the animal that produces my food to provide a safe and wholesome product than rely on a food factory to sanitise the result of industrial bulk farming.*
8. ***I am a food scientist with a specialism in microbiology and fully understand the potential for pathogens to be present. I also believe that our local supplier is aware and takes precautions to limit cross contamination during milking and handling.***
9. *I am aware of this stance from the FSA, but fundamentally disagree with the statement. The care given to the cows and the milk means I can trust that the raw milk we consume is of the highest quality and in no way harmful for my family's Health! We have read the extant scientific literature on the subject which proves the risks mentioned above are insignificant when correct farming practices are adhered to. We have often watched the cows come in from the field for milking. It is an absolute delight to be able to witness the daily milking and talk to the dairy farmer.*
10. *I am fully aware that farmers are legally required to inform the public raw milk may be harmful to health. However, my entire family and wide circle of relatives and friends (Over 500 people) all consider the live bacteria content to be one of the superior elements of raw milk, in addition to the wealth of vitamins and minerals which are all indeed superior for one's health. We all have been consuming raw milk for generations. We have all consumed milk from a number of different dairies and we have all found the dairy farmers to have an outstanding level of hygiene and we have always found that the farmers take excellent care of their animals with exceptional ethical standards. Living ethically has always been an important value in my family and among our friends, thus we fully support the consumption of raw milk. Consequentially, we have all benefited from having superior health and very strong bones due to the enhanced calcium content.*

Benefits outweigh the risks

1. *Also aware of the very high standards to which raw milk producers operate. I regard the 'risk' as no different to poor domestic kitchen hygiene.*
2. *Answering question 5 is problematic - with a PhD in microbiology, of course I'm aware that there is the potential for any 'unsterilized' food product to contain potentially pathogenic microorganisms - though indeed post-sterilisation contamination is also possible. But I believe the benefits of whole, raw milk - and what remains intact within it from the absence of heat treatment - from reliable producers with excellent husbandry and care for their processes and livestock far outweigh the very unlikely presence of pathogenic microorganisms.*
3. *Benefits outweigh the risk. The risk is very little, health benefits higher. I have drank raw milk for 11 years, never had any ill effects only positive ones. You should be allowed to make this choice.*
4. *Benefits WAY outweigh any risks and the farms that sell raw milk to the general public are FAR MORE careful with cleanliness and hygiene than those just offloading onto milk containers where they know that other companies will be responsible for the quality and hygiene of the milk. Homogenizing heats milk till it kills of EVERYTHING including the good stuff anyway!!!! I believe that warnings should be given to supermarket produce, like "products bought here have been so altered that you may not recognize them, and the chemicals therein may be harmful to your health"*
5. *Decision taken after weighing the pros and cons of raw milk. I personally do not think it is any more dangerous than a lot other f sold in supermarket (e.g. salad with risk of salmonella etc...)*
6. *Drinking pasteurised milk has had more of a detrimental effect on our health and so we are prepared to take the chance and use raw milk as our health has only benefitted this far.*
7. *Having done lots of research I understand the bacterial risk. But I think the benefits to natural milk out way the risk.*

Choice

1. *As a consenting adult, I reserve the right to make my own choices. I do not drink alcohol or smoke cigarettes, both of which are definitely harmful to health, but perfectly legal - and rightly so - for consenting adults. Raw milk has warnings on the labels. That's all that's needed, as well as the already-in-place strict regulations to monitor the safety of the milk parlour and production methods.*
2. *Given the careful monitoring of milk producers, I feel the benefits we as a family experience from drinking raw milk far outweigh any risk. We (and many other people, indeed nations) eat unpasteurised cheese, shellfish, pates and rare meat. As with all our food, I look for quality suppliers and take care during meat and fish preparation; I consider a supermarket chicken a far greater risk of salmonella than raw milk. I would never risk purchasing a cheap pre-packed sandwich from a garage fridge as I suspect the controls over their production, shipping and storage are nowhere near as highly enforced as those within the raw milk industry. It is our choice as a family to consume raw milk and to deny us that choice would be overly restrictive on the part of the state.*
3. *I am aware and able to assess risks adequately so as long as I have enough information to make an informed choice I am content and satisfied that my needs are met without restrictions or further legislation*
4. *I am aware but drank it for the first 14 years of my life without problems. It's illegal in Scotland now so we don't have a choice sadly.*
5. *I am aware that it is CLAIMED to be harmful to my health and to that of others. I have NOT encountered any issues or have any concerns about consuming raw milk, I like raw milk and believe that as cows are ALL TB tested there is little to be concerned about. However, it is my choice and I wish to have that choice not be regulated to death by boredom through lack of choice, leave raw milk for those who chose to have it.*
6. *I believe it's important that, given full disclosure of production methods and adherence to standards, an individual may have free choice over the produce they purchase for consumption.*

Pasteurisation

One issue that has been constantly raised by respondents is that of pasteurisation. Many people choose to drink raw milk because it is natural. Included are examples to emphasise the depth of feeling. The recurring theme from respondents is the fear that highly processed food, that is how they perceive pasteurised and homogenised milk, is detrimental to health. The increasing levels of allergic reactions, asthma etc. might suggest that their fears might have some credence and should not be dismissed out of hand.

What are the health benefits of homogenised milk?

- 1. I am aware that pasteurised milk can be harmful to health. If my digestive system is working to a good standard the level of microorganisms found in raw cow's milk is not only beneficial to my gut microbiome but also sets up a unique challenge to my immune system maintaining its strength and capacity to deal with hostile invasions should it be necessary.
A Spanish study shows raw milk is and anti-hypertensive:
<https://www.sciencedirect.com/science/article/pii/S095869460500021X>.
Anyway pasteurised milk still has the micro-organisms and pus it's just been killed, so a significant part of the pasteurised milk is dead organisms, something my digestive system would also have to deal with and may still set up an IgG or IgE response to the proteins or microorganisms proteins dead or alive.*
- 2. I don't believe that drinking raw milk is harmful to health. I have looked for the evidence and I can't find any evidence suggesting that it is (I'm a psychotherapist and nutritional therapist in training, so I know how to read scientific papers). I also noticed, accessing the papers that were available, that actually drinking raw milk brought with it **HEALTH BENEFITS** in physical and emotional terms. I think that drinking pasteurised and skimmed dairy is far more harmful to health as the nutrition in milk is either killed and denatured by the heat or removed by skimming the fat. When we look at the history, the culture we have of pasteurising milk has got nothing to do with Louis Pasteur - he pasteurised beer and wine. This practice began due to the dirty containers used in storing and moving milk around. Now that cleaning practices are much improved, the need to pasteurise all dairy is much reduced.*
- 3. This is an outdated concern based on previous history of cattle with diseases which were passed on through the milk. Healthy cattle which are reared properly and grass fed with no use of antibiotics produce raw milk which is highly beneficial to adults and children. It is incredibly safe and nutritious, providing numerous beneficial enzymes and bacteria. Pasteurised milk kills off this beneficial bacteria and depletes the nutritional value significantly.*



Question 7 – Are you aware that all producers of raw milk must be licensed by the Food Standards Agency before they can sell raw milk?

2695 respondents answered this question (99.4% of the total respondents).

Yes	88.9%
No	11.1%

Question 8 - If yes – Do you know where to find the list of licensed producers?

2464 respondents answered this question (90.9% of the total respondents).

Yes	48.2%
No	51.8%

This should be of concern to the FSA, the fact that less than half know where to access this information.

Chapter 4 - The buying habits of respondents

Some officials are of the opinion that the reason people buy RDM is because they believe it offers health benefits. They also believe that the risks associated with RDM outweigh any benefits.

Because the survey targeted consumers that actually purchase RDM it is possible to gain an insight to the rationale behind their buying decision.

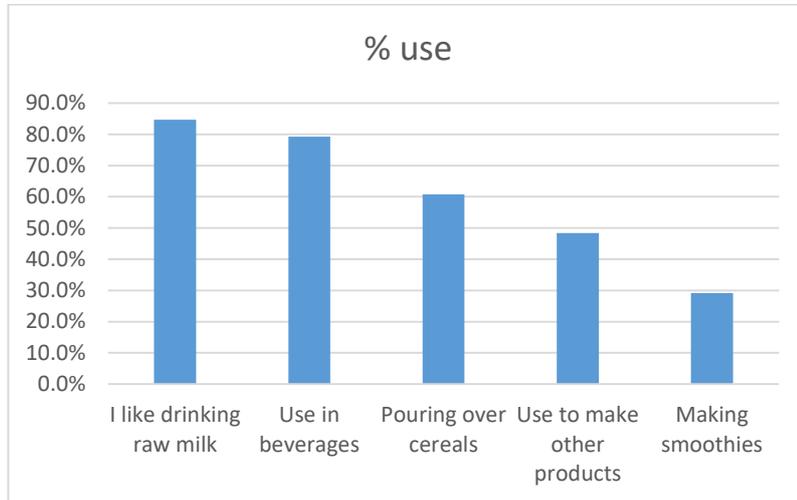
The next series of questions revealed some interesting facts. It also enabled identification of:

- How they used the product
- What other raw milk products they purchase

Questions 9 and 10 addressed the uses respondents have for raw milk.

Question 9 – How do you use the raw milk that you buy?

2675 respondents answered this question (98.7% of the total respondents). This was a multi-choice question



There is a need to get a full picture of how people use raw milk. Respondents were offered five options.

The most popular use for RDM is simply drinking it closely followed by use in beverages. The abiding theme from respondents was that of “*taste*” this is a typical response

For me the taste is extremely superior. The fresh flavour is delightful and I only wish it was more readily available.

Question 10 - Do you have other uses for raw milk?

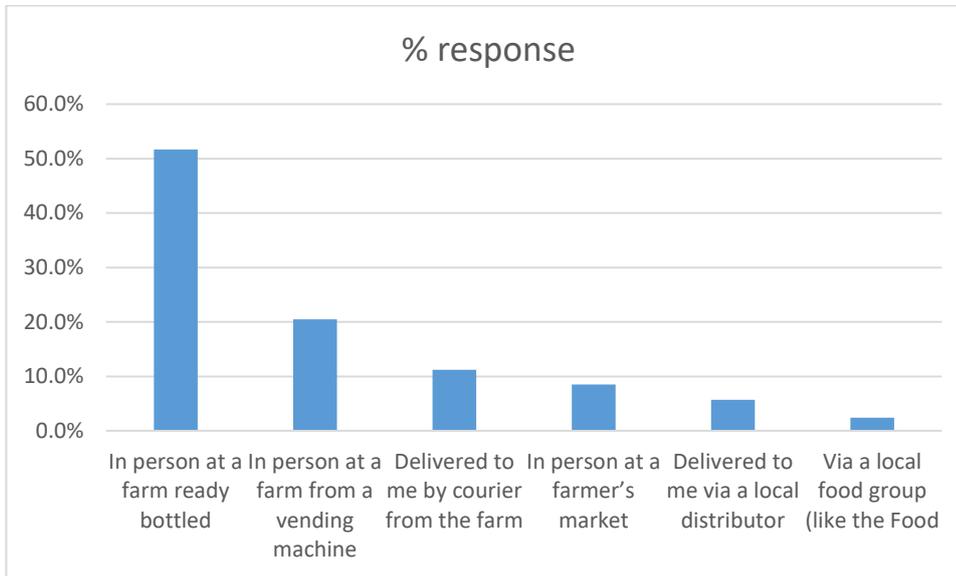
In addition to the answers in question 9 the respondents used raw milk for:

- Cooking
- Baking
- Rice puddings
- Other puddings
- Sauces
- Porridge
- Feeding pets
- Ice cream

In addition some interesting uses were listed included; medical, cosmetic, custard, baby feed, bathing, and cakes.

Question 11 – How do you usually purchase your raw milk?

2710 respondents answered this question (100% of the total respondents).



There is an assumption that most purchases of raw milk is via vending machines. This question aimed to establish how in fact purchases are made.

Only 21% of the respondents said that they obtained their RDM from vending machines. **Caveat. This might be misleading because not all RDM producers were involved.**

Many preferred going to the farm to collect their milk.

I like seeing the cows the milk comes from and their welfare is very important. Raw milk tastes different and has only been beneficial health wise to our family

Question 12 – Do you purchase raw milk in other ways?

Raw milk is not widely available in in England Wales and Northern Ireland, and illegal in Scotland. This supplementary question's aim is to identify other channels for the purchase of RDM. The question also produced some interesting comments.

The most common ways given were:

1. Mail order
2. Local shops
3. Bootleg from England (this because RDM is illegal in Scotland)
4. Food fairs

This question resulted in several general remarks. To ensure that officials clearly understand the deep felt feelings of respondents the author has included these remarks in the report.

Comments from respondents:-

Go to a farm with my own 2l stainless steel milk can Get some raw goats milk whenever I visit my sister with a smallholding in Switzerland. Or where ever I can access it

I also purchase from farmers' markets occasionally but this is not something I choose to do in warm weather. If milk was available in third party shops, where it's chilled storage and display conditions are controlled, that would be a great benefit. Buying direct for the farm, whilst relatively easy, impacts ecologically in terms of transport, packaging, etc.

I am unable to buy raw milk except when I'm on holiday, as I live in Scotland where it is not yet legal. This is a ridiculous state of affairs, and I look forward to the day when I can buy this wholesome, unprocessed food, direct from the farm with minimal food miles. Currently, the milk available in my area has to be transported hundreds of miles for processing and back for selling. Unsustainable, and I don't want to drink homogenised OR pasteurised milk, so I don't buy it, therefore depriving local farmers of potential income.

I buy it from a vending machine. I have purchase 2 large glass 3 litre bottles (jugs) and that way do not need to use any plastic bottles - saving the farmer some pennies (as our farmer doesn't charge for plastic bottles) . On top of that, I also use raw milk to make butter, cheese, use the cream for cooking etc. all this I would have to buy from a supermarket and it would come wrapped in plastic. So thanks to raw milk from our farmer we're saving the planet too!

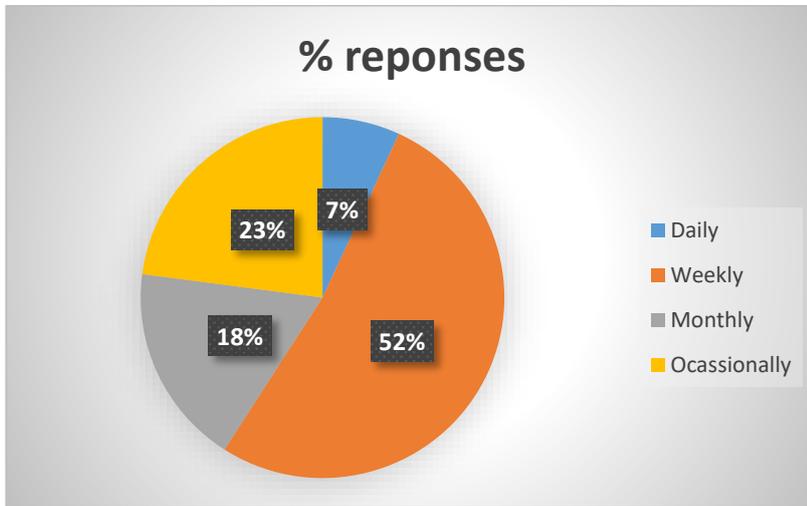
I'm never quite sure why I can but raw milk only directly from the producer, yet I can buy raw cheese in the supermarket

I now have a cow. NO purchase necessary

No sadly there is nowhere local that is operating Calf to Foot methods - the main three being firstly that the happy cows are completely unrestrained during milking and they are happy because the Dairy is Cow and Calf Friendly - the calves are not separated from their mothers! Secondly the cows are truly and purely pasture-fed and do not have any grain at all. No grain, no cereal, no soya, no GMOs' – just grass. No routine use of antibiotics, wormers or chemicals - the cows are truly Purely Pasture Fed. Thirdly the milk is unpasteurised, unhomogenised and completely unadulterated. It comes out of the cow, it's bottled chilled down and delivered to me, having been produced through a meticulously clean process that has consistently received a 'GOOD' from the FSA and awarded the top mark - '5' - by the Waveney District Council's Environmental Health Officer.

Question 13 – How often do you buy raw milk?

2676 respondents answered this question (98.7% of the total respondents).



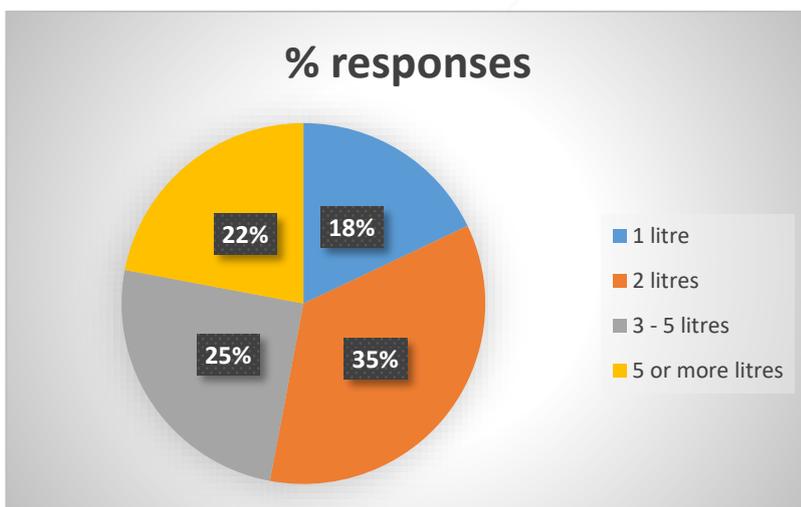
Four options were offered. Weekly is by far the most frequent way consumers buy the product.

Buying RDM on a weekly basis is by far the most popular. If RDM was more readily available would daily sales increase?

I would buy ONLY this milk if it was close to where I live - sadly it is nearly an hour's drive away.

Question 14 – On average how much do you buy each time?

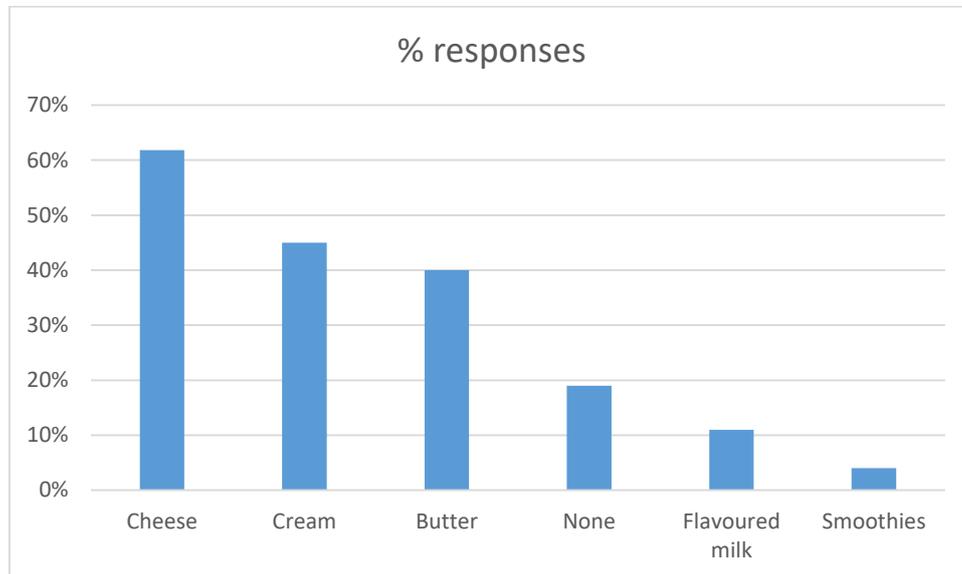
2676 respondents answered this question (98.6% of the total respondents).



2 litres is the most common amount. Once again if the product were more readily available would the smaller purchase volumes increase?

Question 15 – What other raw milk products do you buy?

2287 respondents answered this question (84.4% of the total respondents). This was a multi-choice question.



Raw milk cheese is freely available in other EU Member States. From comments made to question 16 it would appear that more people would buy raw products if they were more widely available in the UK.

Question 16 – Do you buy other products not listed in question 15? (If so please state).

In addition to the products listed in question 15 the most frequently bought items are:

- Yoghurt
- Kefir
- Ice cream

These are by far the most popular. Other products mentioned included; soap, buttermilk, ghee, cottage cheese, desserts and drinks.

The question also prompted other comments. Once again the author thinks that it is important to include these in the report. A common complaint is that of the difficulty in sourcing raw milk products.

Comments from respondents:-

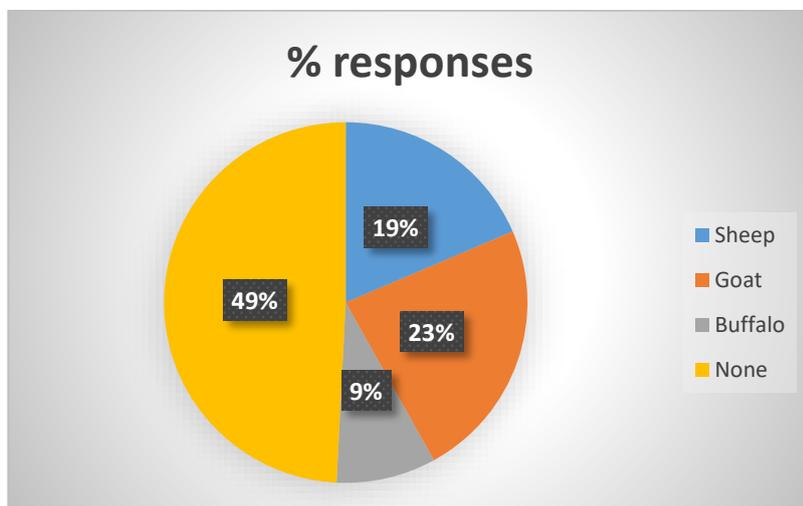
I do not buy the other products or any others simply because I do not know where to purchase them.

The raw dairy farmer, often very health conscious is a great source for pasture raised beef, not necessarily listed as organic (regulations too expensive to achieve for the smaller raw dairy farmer) but organic in practice. I also buy additional meats like pork, chicken etc. as these animals are raised with similar health ethic in mind on the same farm yards.

These questions on buying raw milk are only relevant for those who live somewhere you can buy it.

Question 17 – do you buy raw milk produced by any of these animals?

105 respondents answered this question (75.2% of the total respondents).



The responses show that raw drinking milk sourced from cows is the choice of the majority.

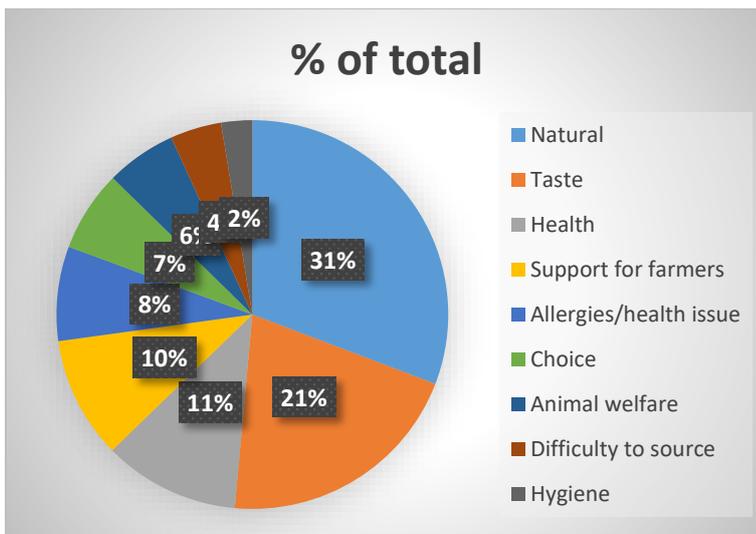
Chapter 5 - Personal feedback

This survey was aimed at people who actually buy RDM. This final question sought to get unprompted personal responses. This to help us better understand what triggers the buying decision. This produced some 'interesting answers.' The depth of feeling was expressed by the volume of responses to this question. 1775 respondents answered this question (65.5% of the total respondents).

Question 18 – Drinking raw (unpasteurised) milk is becoming more popular. To help us understand why this is happening any additional comments you would like to make would be useful.

The important fact to note is that respondents had to physically type in any comments. They did this and the answers comprised over 55,000 words.

The complete list of the responses can be accessed by going to www.food-solutions.org



Quality research seeks out the true views of respondents. This last question was open ended and allowed ***genuine*** consumers to express their views on the subject.

A selection of comments sorted into nine main headings

Natural

1. *I would buy raw milk products from sheep / goat and buffalo and have done but I don't tend to do it often as we have an excellent cow farm near us that I use for a lot of our dairy. Raw milk is nutritionally FAR superior to pasteurised milk. Many vital nutrients are heat sensitive, for example B6 and taurine, but there are many others. When milk is pasteurised it reduces a lot of these nutrients, meaning that milk is a lot less useful for our bodies. It also destroys all the beneficial bacteria present in milk and the enzymes that come in the milk to aid in the digestion of milk and food eaten alongside. It also alters the proteins, making them into smaller fractions that a large population of people mount an immune response to as allergy / intolerance. Many people cannot tolerate pasteurised milk due to the lack of these enzymes and the altered proteins. Raw milk is milk as it should be. When we drink milk any other way we are drinking an altered substance with just a fraction of the benefits and a risk of reactions. For me and many others who have educated themselves here raw milk is the best choice for them and their family. Dr. Victoria Casey (née Culley) MA Hons (Cantab), MBBS, MRCPCH*
2. *Raw milk is an ethical and natural way to consume dairy products. We enjoy the taste and buy very regularly. We enjoy the taste, we feel there are health benefits and love the natural benefits. It is also supporting local farmers and it gives me as a consumer choice. I choose to buy raw products and I feel I am entitled to that choice.*
3. *Because we want less processed foods and drink - returning to what is natural and better for us. Our bodies are built to handle and cope with all that's natural - interference with our food is the cause of the body's dysfunction and inept management of handling the processed/chemical/sugar/additive state of our food now. I personally would like a choice - People are kept away from their right to take responsibility for their actions, choices, feelings and emotions - this is having a detrimental effect on us all and the 'controls' on us are more and more*

4. *I believe that we over process too many of our food products which alters or removes a lot of the nutrients and that is partly why the NHS is under such strain. As a nation we are becoming less and less healthy. That is why I look for products that are as close to their natural state as I can ('Farm to Table') and I always cook from scratch.*
5. *I don't mind paying more for raw milk because obviously it's much more difficult to do. Pasteurisations means production equipment doesn't have to be so spotlessly clean. Looking at the problems arising from continuous use of antibiotics makes me think that our "kill everything" approach is old fashioned: more care for our food, and care for a healthy symbiosis between the human and the food production methods seems the way forward. Industrial food production and conservation methods were born out of post war fears and necessities. It only made sense once: after the Chernobyl fallout...!*
6. *I think there has been a change in consumer behaviour & people wanting to know where their food comes from. Also the farmers (due to poor milk prices in the past) are making efforts to cut out the middle man and diversifying in order to take back control and not be held by the dairy companies.*

Taste

1. *It tastes better. It is patently obvious that letting the food industry mess about with things is causing more harm to public health than any minor risk of contamination of raw milk. We drank raw products direct from the farm for years and it was only when big business and profit margins became involved that problems started to occur. I drank raw milk throughout my childhood supplied by local producers and don't remember there ever being a problem.*
2. *It tastes amazing and you can guarantee that no additives have been put in. How can you trust 'fresh' supermarket milk that has use by dates lasting 2-3weeks?? It's like buying bacon with a 4week use by date... Why would you buy these things when you can go direct to the farmer/butcher and know that the produce you are buying is as fresh as if you'd produced it yourself?*
3. ***Grew up on a farming estate with dairy cows where my father was employed. Always drank raw milk. Tastes so much better. Never had any skin problems growing up. Never had any health issues drinking raw milk. Now 62 and drive 35 miles each way to purchase raw milk. Before I retired my profession was as a Ruminant Nutritionist.***
4. *It tastes better and I believe it is healthier. For too long our food has been messed with and the result is an explosion of allergies! Milk has been mass produced & brought from outside the UK at the expense of farmers & people's health. Taking good fats out of products hasn't improved people's health it's encouraged them to eat more rubbish. Sorry rant over.*

Health

- 1. I use raw dairy produce because it is the only dairy I can digest. I have had IBS for 6 years now. I became intolerant to dairy and switched to lactose free milk. After using lactose free milk for 2 years I became intolerant to that also. I avoided dairy altogether after that. Just over a year ago I read that many with dairy intolerance are not intolerant to raw dairy. I tried raw kefir and found I could digest it without any side effects. I then tried the milk straight and had no side effects. I tried taking normal homogenised pasteurized milk from the supermarket to see if my dairy intolerance had gone away, and had diarrhoea within hours. I stopped taking the supermarket milk and went back to the raw dairy products and still take them today. I wish to take dairy as part of my diet as I think it brings health benefits. Since taking raw milk I have been able to reintroduce dairy into my diet again. I am not against pasteurisation. If local shops and supermarkets sold organic milk that is pasteurised and not homogenised, cattle were mainly fed on a grass diet and not routinely given anti-biotics, and farmers were given a good deal on their milk, then I would be happy to buy this kind of pasteurised milk.*
- 2. Health issues are becoming the norm these days. By changing our ways in which we eat can only be a good shift in our habits and therefore impact on health. We shouldn't see ALL bacteria as being evil and harmful....it's destroying what our bodies know!! Our genetic make-up is SUPPOSE to correct naturals occurring issues but because "we" as humans think we know best, we change how foods should be!!!! I also drink goat kefir which has done far more for me in a short amount of time than medication over years!!! I seldom have ibs symptoms and feel "better" in myself!!!*
- 3. I consider the benefits to my health from drinking raw milk from an FSA licensed supplier far outweigh the health risks. N.B. Skimmed milk from supermarkets contains titanium dioxide - this is the main ingredient for white emulsion paint. I would rather the FSA look into this issue. E171 Titanium dioxide. According to <http://www.ukfoodguide.net/e171.htm> this food additive has been banned in Germany.*
- 4. I work in food regulation and see first-hand how pasteurised homogenised milk is treated and is far from the original product. Also aware of the effect of our microbiome has huge effects on us, and raw milk helping to strengthen me.***
- 5. In raw milk all the beneficial enzymes, good bacteria and things like phosphate which allow the absorption of calcium are present. As soon as pasteurization occurs all this is lost - including the ability to absorb calcium. So what in fact is the point of drinking pasteurised milk?*

Support for local farmers

- 1. It comes direct from the local farmer ensuring they get all the money for it instead of a small cut from supermarkets. The farm we buy from provide results of all their safety tests so we know there are no harmful bacteria etc. which enables me to buy with confidence. We use glass bottles thus reducing plastic waste. The milk tastes much better and feels more organic. My children love meeting the cows their milk comes from.*
- 2. Big Dairy boycott here. I believe in happy, healthy, grass-fed cows when choosing milk and beef or veal. The quality difference is substantial. Raw milk simply makes me feel better and I don't get mucus response as I did with horrible commercial milk. I also believe in supporting local farmers if I could get sheep's milk cheese raw I would. If I could get pasture-fed eggs that would be great too. Some of us spend more money on products and eat less. Affordability will not be the problem, it's the fact that we have to travel due to laws and restrictions. The simple farmer has no lobbying power in politics and therefore the Big Dairy suppliers will hold territory until policies change.*
- 3. Consuming whole foods is extremely important for health and raw milk is an extremely nutritious drink. Most modern health problems come from consuming processed foods and modern milk is no exception. Animal fats are essential to vibrant human health and it's about time we embraced this again. Furthermore, I much prefer to support a local farmer, who is producing a top quality product he is proud of than purchasing milk from large scale, industrial style farms where animal welfare is often second place.*
- 4. Currently buying raw milk in England can be difficult. Unless you live close by a farm licenced to sell raw milk, you can end up travelling long distances or are forced to buy milk frozen and delivered at premium prices, simply for the right to make a choice. I buy raw milk not only for the health benefits, which are numerous, but also because I think the dairy farmers deserve to be paid better than what the dairy industry pays for milk. Raw milk farms treat their animals better, with more concern, less antibiotics and more species appropriate living conditions. At least my local farm does. If there was an opportunity to buy milk from vending machines at select stores anywhere, more farmers might be willing to a) change the way they produce milk, to a healthier and more animal oriented way and b) more people might be able to exercise this choice in a way that would not be a financial strain. Thank you.*

Allergens/specific health issues

- 1. I believe over-processed food, pasteurisation and over-use of antibiotics and anti-bac sprays (to name but a few) has led to a growing increase in auto-immune conditions, food intolerances, asthma and eczema. Scientific research shows we need a certain amount of good bacteria in the gut in order to have a strong and healthy immune system. I believe raw milk is beneficial to health, helping us to increase the good bacteria in our guts. We need to stop worrying about bugs and bacteria and re-educate people to help them eat a healthy diet that is more natural and doesn't rely on over-processed foods.*
- 2. I began drinking raw milk because I was intolerant to pasteurised milk. Not only was I able to digest it well, it has actually cured me of my dairy intolerance. It is incredibly nourishing and I see my children thriving on it. I also drink it during pregnancy when I have nausea and can't drink anything else. I see the benefit of consuming milk in a form that requires it to be high quality and the animals producing it to have excellent living conditions. I am also happy to pay more for a better quality product.*
- 3. In 2010 I became intolerant to dairy plus most food & veg after taking a course of antiviral medication for Bell's palsy. After 4 years of regular food reactions & immune system problems an NHS specialist dietician recommended a low FODMAP diet, including lacto free milk. Out of interest I tried raw milk and found I can drink up to 500ml a day with no reaction (100ml of pasteurised milk makes me ill),*

Choice

- 1. I believe that people should be able to make an informed choice whether or not to consume raw milk. There are risks involved with many things in life and it would be a real shame to take away people's right to choose this nutritious option.*
- 2. Provenance of our food is really important to us. We love that we are able to buy milk from a farmer who is so passionate about his soil and his animals and we know we are getting an excellent product. It seems a shame that it is so difficult to actually buy raw milk; we are lucky our farmer is 20 minutes away and make the commitment to go weekly, however I know many other people who would be keen to buy if it were more easily available locally. People should be able to make their own choices about what they consume, therefore it should be easier to buy it. It is so important that we support farmers to farm in the more sustainable, ethical way which produces good quality raw milk.*
- 3. Seriously this should be a non-event. It's free choice, the label states the supposed risk, now allow free choice to reign. Raw milk is a healthy, nutritious whole food. Pasteurised and homogenised 'milk', is a dead white liquid that causes inflammation. It's easy to make in bulk, allows animals to have a really crap life and makes a whole lot of people a whole lot of money. Raw milk is a no brainer, better lives for the animals, less intensive farming, less medications, healthy. Simple!*
- 4. I think it is wrong to restrict free choice by all means have warnings about the risks. But I am believe it's wrong to ban or heavily restrict basic naturally supplied foods which have nourished people for a. Very long time.*

- 5. I have drunk and given my family raw milk for 30 years with only positive health benefits. I am not an idiot as I run a major company and have a MBA. I believe the nanny state should respect my choice to continue to want raw milk. Frankly the government's track record on all sorts of health issues like Diesel engines, BSE, bank regulation, animal data etc. is appalling. I think they need to learn from this track record of disaster and not make supplying raw milk to those that chose it.*

Animal welfare

- 1. It tastes nicer, it is full fat, children like it more, tastes better on cereal, has good probiotics, good for some our children's stomachs and doesn't cause any reactions, Guernsey milk also has a different bacterial makeup than Friesian and finally we know the farm; so we know that the cows are treated well, the farm is organic, the farmer is particular and pays attention to his work, he is relatively local so we are helping a local business.*
- 2.*
- 3. Where I buy the cows graze freely on organically treated meadows, are kept immaculately clean and treated with respect. I find that convincing with regards to the high quality of the milk.*

Difficult to source

- 1. I would buy RM more often but my closest farm selling it is 40 mins drive away and not a direction I would normally travel. If there were more farms selling RM I would buy it regularly. I rarely buy pasteurised milk for myself as I don't see it as a healthy food and would mainly use it for diluting beverages. I would certainly not drink it or add it to smoothies or cereals as I react with an increase in mucus within minutes. I do not get this with RM. Some of the microorganisms found in RM are sold as supplements why not take it direct?*
- 2. If it were easier for me to access it I would use raw milk every day rather than just when I can get to the farm. It's a 50 minute round trip from home but we have gone specifically to buy milk a number of times.*
- 3. It is ethically sourced from grass fed happy cows that you can meet and interact with It tastes better than heat treated milk as it's highly processed Yes it's more expensive but it's worth it to know that it came from happy cows and the farmers are being paid properly It should be down to personal choice if people want to drink raw milk and should be more readily available.*
- 4. My primary concern is animal welfare closely followed by a feeling that less processed food is the best for health. I feel the raw milk producers I buy from supply products that score high in both these areas. I would buy more raw products if they were available nearer to me or by mail order and more choice was available. I have not been able to find raw butter or raw buffalo or sheep products for example.*

Hygiene

- 1. Part of the attraction is that the good bacteria also remains if not processed. Also that it is not homogenised appeals. After various food scandals (sisters chicken factory, horse meat) I have more and more mistrust for big supply chain processed items. But most of all - it tastes better.*
- 2. I would not drink milk if I couldn't buy raw products, from a clean farm. The farm I use is very clean, very well run, very willing to answer any questions. I've toured the farm, observed their procedures, and have much more confidence in them than in the large milk producers.*
- 3. With raw milk due to the regulations one knows its source. Bulk milk is now very concerning since produce of a number of farms is aggregated. The levels of hygiene and testing are inferior, the taste is inferior and much of its goodness has been removed. I don't particularly want to drink loads of pathogens even if they are dead. I did try and find the list of approved producers but failed on the FSA website. Not very impressive!*
- 4. Having done extensive research into the production of food I've come to a decision that if I'm going to drink milk I want to control the process the product has been exposed to as much as possible. I also believe that pasteurised milk is a key contributor to health issues as many vitamins and minerals advertised are denatured and void. My final point would be that raw milk sold direct from a farm provides a more suitable return to the farmers who care for the cattle otherwise they are simply at the mercy of the big dairy's and their pricing structure which is totally unsustainable.*

Chapter 6 - Interview with a RDM producer

Park Farm, known as 'Meggy Moo's' is a family run farm situated in North Dorset.

Alan and Rachael Perrett run a herd of 160 milking cows producing about 5000 litres of milk per day. Two years ago they looked at various options to diversify. They took the decision to allocate a proportion of their milk for the production of RDM. The decision was then taken to add gently pasteurised unhomogenised whole and semi-skimmed milk to their product list.

200 out of the 5000 litres produced each day is retained by the farm with RDM accounting for 55% of the farm gate sales. The milk is either collected from the farm or in the case of pasteurised only, delivered to local restaurants and shops. It is anticipated that sales this year will double last years.

Rachael has a background in retail and has a good understanding of the HACCP principle. This knowledge has been used to put in place a robust management system. Added to this the Local Authority and Food Standards Agency make regular visits to the farm.

The operation is completely transparent with viewing windows to various parts of the operation. The farm also holds open days.

Controls

The farm

- Park Farm lies in a TB hotspot. This has been identified as a hazard and the milking herd is kept well away from any badger sets. In addition regular TB tests are carried out on the herd. There have not been any incidents of TB on the farm.
- Samples are sent to the National Milk Laboratory weekly.
- The shop area has a level 5 rating under the Food Hygiene Rating Scheme – this is reviewed annually.

In addition the farm informs its customers about RDM, the leaflets can be viewed on subsequent pages.

Rachael also advises new customers to gradually introduce RDM to their diet to reduce the risk of adverse reactions. She spoke about one incident. A new customer purchased a litre of RDM and immediately drank it all down exclaiming "This is like drinking ice cream, it's wonderful". Rachael was horrified and explained to the customer that he should gradually introduce his body to this natural product.

- 🚩 **Point to ponder! How many 'illnesses' attributed to RDM are in fact simply a reaction to the product?**

External checks

- Pattermores is used by Park Farm to process the bulk of their production. They carry out weekly tests on the milk they collect.
- The Local Authority Food Safety Officer (FSO) make quarterly visits to collect and analyse samples (no charge made for this).
- The Food Hygiene Inspector from the Food Standards Agency (FSA) make six monthly unannounced visits to check hygiene standards and take milk samples (a charge is made for this).

Some concerns were voiced by Rachael during our interview.

During the very severe weather conditions earlier this year the roads in many areas became impassable and as a result, supermarkets and shops sold out of milk. Rachael noticed on social media that farmers were selling RDM direct from the backs of vehicles, from outside stores such as Co-Op and One-Stop. There were no labels etc. to inform customers that the milk was unpasteurised. Rachael is concerned that there could be a significant number of unregistered, unlicensed suppliers operating, this could lead to a food safety incident that would reflect badly of the industry.

Because of Rachael's background she was able to develop a good HACCP based management control system. This is unlikely to be the case for many farmers.

Options for a possible solution.

A national standard based on HACCP. Farmers are not necessarily familiar with this concept. This means that there needs to be available:

- Educational information about HACCP written in plain English.
- Because each farm is unique - a series of practical templates to help farms comply in a uniform way.

Local officials need to be trained to have a full understanding of RDM production.

All farms wishing to supply RDM must have the national HACCP in place before a license is issued.

Severe penalties for farms operating without a license.

Content of the Meggy Moo's leaflets

Which Milk is Right for You?

Raw Milk

Raw Milk is unpasteurised and therefore maintains its' full natural complement of vitamins and digestive enzymes;

It is exactly as nature intended. It is unhomogenised, meaning the natural butterfat within the milk has not been mechanically altered in anyway. The cream will float to the top or give it a shake to mix it together.

We recommend that raw milk is consumed within 3 days.

Raw milk is not always suitable for everyone. It has many reputed health benefits however, it is not considered suitable for those with a low or compromised immune system, pregnant women or very young children.

Unhomogenised Whole Milk

Our Unhomogenised Whole Milk has been gently pasteurised at a low temperature to kill pathogens and improve shelf life, whilst maintaining as much nutritional value & flavour as possible.

It is unhomogenised, meaning the natural butterfat within the milk has not been mechanically altered in anyway. The cream will float to the top or give it a shake to mix it together.

The pasteurisation process gives the milk an extended shelf life of 7 days.

Due to the pasteurisation, our Unhomogenised Whole Milk is safe to be consumed by those who may not be able to consume raw milk.



Our Tips on How to Enjoy Raw Milk

Raw milk is a very different product to the pasteurised and homogenised milk that you would buy in a supermarket.

It is very fresh, direct from our cows with absolutely no processing – just filtered, chilled and bottled.

To really enjoy your milk, we recommend that you follow these tips:

Put the bottle of milk immediately into a fridge and keep below 4°C. Remember, raw milk has not been pasteurised and should be kept cold. Also, the flavour is at its' best when it is served ice-cold!

We recommend that you consume raw milk within 3 days of purchase, although many customers have found that the milk will last longer providing you keep it cold.

If you have more milk than you will use in the first three days after purchasing, we suggest that you freeze the surplus milk for later use.

After freezing, always thaw your milk in the fridge, never leave it out at room temperature to defrost.

Raw milk is not homogenised. Therefore, when left overnight in the fridge, the cream will naturally rise to the top.

In the morning, you will notice a cream line. The top creamy part of the bottle is fantastic on cereals or with your morning coffee.

The rest of the bottle will be similar to a semi-skimmed milk as most of the cream has risen to the top of the bottle. This is great for drinking whole, cups of tea or making milkshakes.

However, if you wish to disperse the cream evenly throughout the milk, then simply shake the bottle before use.

Follow these simple tips and we are sure that you will enjoy it

John Golton-Davis
Author

Appendix 1 - other background information

Public Health England

Recently a freedom of information request was put in to Public Health England for food poisoning outbreaks and number of cases over the past 5 years.

Questions asked:

- 1. Please state for each if the illness was medically proven or an estimate by some other means, and if so, what other means.**

Reply. *The number of laboratory confirmed cases linked to outbreaks occurring between 2012 and 2017 is provided in Table 1 below.*

- 2. Please state for each the ages of those made ill - not as an age range but the actual age of each person made ill.**

Reply. *The age of each person affected in an outbreak is not recorded in eFOSS.*

- 3. Please also state for each if anyone died as a result and, if so, the age of the person.**

Reply. *The number of deaths in cases associated with outbreaks occurring between 2012 and 2017 is provided in Table 1 above. The age of each person affected in an outbreak is not recorded in eFOSS.*

Year	Number of foodborne outbreaks	Total number of people ill (median; interquartile range)	Total number of laboratory confirmed cases	Number of deaths
2012	55	1324 (10; 5-21)	677	8
2013	76	2529 (17; 8-30)	350	13
2014	69	2041 (18; 9-31)	595	4
2015	46	1058 (15; 7-27)	339	1
2016	42	2651 (23; 16-48)	849	2
2017	25	591 (14; 7-29)	127	0
TOTAL	313	10194	2937	28

Table 1: Number of foodborne outbreaks, people affected, laboratory confirmed cases and number of deaths by year, 2012-2017

IMPLICATED FOOD VEHICLE	2012	2013	2014	2015	2016	2017
Beef	4	8	3	4	3	
Boiled rice		1				
Chicken	7	20	7	13	8	7
Crustacea		2				
Dish made with eggs	2				1	
Duck	1	2	2		2	1
Eggs	1		2	1	4	2
Ethnic dishes		1			1	1
Fruit	2					
Fruiting vegetables			1			
Heat treated drinking milk		1				
Lamb/mutton	1	3	1	3		
Leaf vegetables	2	2	4		2	
Mixed crustacea/molluscan shellfish			2			2
Mixed red+poultry meat	1		1	1		
Molluscan shellfish	4	10	4	1	1	
Other mixed vegetables			2			
Other composite/mixed foods	4	2	3	1	2	1
Other fish/fish products/dish	1					
Other mixed poultry meat		1		1		
Other mixed red meats	1		3	2	1	
Pastries + cakes					1	
Pork	6	8	2	3		2
Prepared salad dish	1	1				1
Private water supply	1	1				1
Raw drinking milk			1			3
Salmon			1			
Sandwiches			2		2	1
Tuna	1		1	1		
Turkey	1	1	1		1	
Other	3	3	2			
No food identified/none given	12	10	23	14	13	4

Table 2: Sub-category of implicated food vehicle in outbreaks reported to eFOSS by year, 2012-2017

- ✚ Point to ponder – in comparison with other foods the incidents for raw milk is small. Are the same restrictions being placed on other products?

The situation in the USA

The USA is litigious. Any opportunity to sue is eagerly pounced on by lawyers. Yet when it comes to RDM there is little appetite to seek a court solution. The author is not qualified to draw any conclusions. All I can do is reproduce an article which is relevant.

Weston A. Price foundation -

Raw Milk on the Move an extract from an interview with Pete Kennedy (15 November 2017)
How easily we forget! Raw milk has been part of the human diet for thousands of years, yet only after a century of introducing pasteurization, many people think that the only way to consume milk is to pasteurize it first. Our raw milk heritage is getting lost. But thanks to farmers and activists who believe in the value of raw milk and who are brave enough to fight against the establishment, raw milk is coming back. From being legal in only 27 states in the 1990s, raw milk is now legal in all but 7 states and more people are consuming it every day.

Issues raised by Pete included:

- how one of the biggest raw milk cases litigated in this country ended up with members of the jury signing up for the accused farmer's buying club, out of admiration for the farmer
- how the government agencies really are protecting the profits of the dairy industry with business protection laws disguised as public health laws
- how the number of raw milk consumers is going up but illnesses caused by raw milk are going down
- how the Weston A. Price Foundation is the biggest promoter of raw milk becoming legal in the US
- how Sally Fallon originally started the Farm-to-Consumer Legal Defence Fund to protect raw milk producers
- why raw milk from farms is seized and often wasted
- what makes pasteurized milk different from raw milk
- how 50 years ago there were 600,000 dairies in this country and today there are less than 50,000
- how raw milk can be one way to revive the dairy industry
- how pasteurized milk is not tested for pathogens, but raw milk is
- the affordability of organic pasteurized milk
- the definition of a herd share is and how people use it to get raw milk legally
- how a state loses money when raw milk is illegal in it
- how WAPF members can take part in bringing about change
- how the campaign for raw milk is mobilizing to target the 7 states where raw milk is still illegal
- what the future holds after raw milk is legal in all 50 states
- other products whose sale is restricted or illegal include raw cheese, yogurt, and butter

 **Point to ponder – are any of these statements applicable in the UK?**

Appendix 2 – flyer as given to customers asking for comments

The Raw Milk Producers Association (RMPA) needs your help

The Food Standards Agency (FSA) is the government department that regulates food businesses. In June 2018 the FSA Board will consider changing the regulations controlling raw drinking milk production.

This could be a pivotal moment for the future of raw milk sales

Please spare a couple of minutes to answer a few questions. Your contribution will help raw milk producers provide the FSA Board with a clear picture of their customers who choose to buy raw milk. For clarification:

- *As the FSA's primary focus is on cows' milk this survey is aimed at consumers drinking milk from this source.*
- *The FSA refer to unpasteurised drinking milk as Raw Drinking Milk (RDM). This is the term used in the survey.*

Your views are important!

To access the anonymous survey please go to

www.food-solutions.org

No personal data is collected or asked for.

Food Solutions is an independent organisation that represents the views of micro and small food enterprises.

The results and report, once written, will be available on www.food-solutions.org.

Appendix 3 – questions

Raw Drinking Milk - consumer research

Your views are important

The Food Standards Agency (FSA) is the government department that regulates food businesses. In June 2018 the FSA Board will consider changing the regulations controlling raw drinking milk production.

The FSA refer to unpasteurised drinking milk as Raw Drinking Milk (RDM). This is the term used in the survey.

Your contribution will help raw milk producers provide the FSA Board with a clear picture of their customers who choose to buy raw milk.

No.	Question	Options
Q1	In which region or country do you live?	Single choice
Q2	In which age range do you fall?	Single choice
Q3	Do you have children?	Single choice
Q4	If yes do they also drink raw milk?	Single choice
Q5	Are you aware that drinking raw milk might be harmful to your health?	Single choice
Q6	Have you any comments on Question 5?	Written comment
Q7	Are you aware that all producers of raw milk must be licensed by the Food Standards Agency before they can sell raw milk?	Single choice
Q8	<i>If Yes:</i> Do you know where to find the list of licensed producers?	Single choice
Q9	How do you use the raw milk that you buy?	Multi choice
Q10	Do you have other uses for raw milk?	Written comment
Q11	How do you usually purchase your raw milk?	Single choice
Q12	Do you purchase in other ways?	Written comment
Q13	How often do you buy raw milk?	Single choice
Q14	On average how much do you buy each time?	Single choice
Q15	What other raw milk products do you buy?	Multi choice
Q16	Do you buy any other products not listed in Q15?	Written comment
Q17	Do you buy raw milk produced by any of these animals?	Single choice
Q18	Drinking raw (unpasteurised) milk is becoming more popular. To help us understand why this is happening any additional comments you would like to make would be useful.	Written comment