



Assessment of the effectiveness of the Raw Milk for Sale to Consumers Regulations 2015

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Evaluation of the Regulations

Raw drinking milk is untreated milk intended for human consumption, which typically comes from cows, goats or sheep. It may contain pathogens that cause severe illness and in rare cases, death. Despite the potential risk it is estimated that up to 6% of New Zealanders drink raw milk.

The Raw Milk for Sale to Consumers Regulations 2015 (the Regulations) seek to allow consumer choice to be exercised, while using stringent controls, consumer education, and increased monitoring to better protect public health. Under the Regulations, raw drinking milk can only be sold directly to the final consumer at the farm or via home delivery to a New Zealand residential address. It cannot be exported.

The Regulations came fully into force on 1 November 2016 after a six month transitional period. The Ministry for Primary Industries (MPI) began its evaluation in November 2018 following two full years of operation and has assessed the effectiveness of the Regulations by considering whether the policy objectives have been met, namely: 'was consumer choice enabled?', and 'were the health risks managed?'.

To assess the effectiveness of the Regulations, raw milk suppliers and consumers were surveyed. Surveys consisted of:

- a. a Colmar Brunton Consumer Survey of 600 people from the general populace to update perceptions of raw drinking milk;
- b. a survey of self-identified raw milk consumers (1,178 responses); and
- c. a survey of raw milk suppliers (26 responses received, including some unregistered suppliers or who have ceased supply).

The aim of the surveys was to understand the level of consumer understanding of the risks associated with raw drinking milk, whether the Regulations enable consumer choice by making raw milk available for purchase, and to gain insight into the experience of suppliers of raw drinking milk.

These surveys provide insight into the experiences of a small sample group, and may not be representative of all raw milk consumers and producers in New Zealand.

This report summarises the findings of the consumer and supplier surveys. In some cases, the findings were compared to a survey¹ conducted in 2014 to inform the development of the Regulations.

Based on the information collected from the surveys and our ongoing monitoring, MPI concludes that the Regulations are protecting public health and no changes are proposed at this stage. However, MPI will keep a watching brief on the ongoing effectiveness of the Regulations and will prepare advice to the Minister if it is

¹ The Sale of Raw Milk to Consumers. MPI Public Consultation Paper no.2014/22

considered that they should be reviewed in the future. Cabinet would need to agree to any such review.

If Cabinet makes the decision to review the policy objectives of the Regulations, there will be a formal consultation process which will provide stakeholders and interested parties with the opportunity to comment and provide feedback on any amendments that are proposed. The findings from the consumer and supplier surveys may be used to inform this process.

MPI monitors compliance with the Regulations and takes enforcement action, where appropriate.

The Regulations

Most animal milk in New Zealand is pasteurised before it is sold to consumers. Pasteurisation of milk makes it safe for human consumption by reducing the number of harmful bacteria that are present in the milk.

Raw milk is untreated. It is a high risk product, which may contain pathogens that can cause severe illness and in rare cases, death. Despite these risks, a small proportion of the population want to be able to consume raw milk.

The Regulations are designed to allow people who want to consume raw milk to do so while seeking to manage public health risks associated with the product by putting food safety controls and obligations on suppliers. Suppliers are required to maintain clean conditions, keep accurate records, regularly test raw milk and identify the health risks on labels and notices.

Raw drinking milk can only be sold directly to the final consumer at the farm or via home delivery to a New Zealand residential address. It cannot be exported.

Suppliers of raw drinking milk are required to operate under a regulated control scheme.

The scheme applies to:

- a. farm dairy operators who produce and process raw drinking milk;
- b. depot operators and transport operators who store or transport raw drinking milk on behalf of dairy farm operators; and
- c. people and agencies who carry out specialist functions in relation to raw drinking milk such as samplers, recognised persons, and animal products officers.

The purpose of the scheme is to identify, monitor, evaluate, and manage the risks associated with the production and processing of raw drinking milk and other related activities affecting the fitness of raw milk for human consumption.

As of January 2020 there are 26 farm dairy operators registered with MPI, who produce and process raw drinking milk operating under the regulated control scheme. No depot operators have applied to be registered.

MPI surveyed raw milk drinkers and registered suppliers of the product as part of its assessment of the Regulations. A total of 1,178 raw milk consumers responded to the consumer survey. Twenty-six raw milk suppliers, including some who are unregistered or have ceased to supply, responded to the supplier survey. A summary of the findings of the surveys follows.

Findings from the Colmar Brunton general populace survey

Colmar Brunton was commissioned to undertake a telephone omnibus survey using Random Digit Dialling (RDD). The survey was conducted in February 2019.

Households were stratified into 23 telephone directory regions. The number of people 18 years or over was determined by cross-referencing the telephone directory regions with 2013 Census data. The desired quotas were then specified as to the proportion of the sample that must fall in each region. Additional quotas were included to control for age and sex.

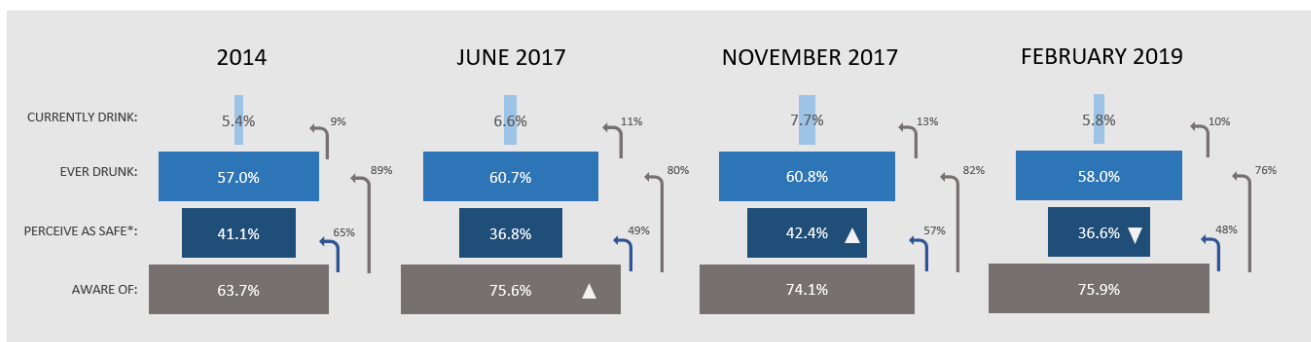
The data has also been post-weighted by age, gender, region and ethnicity to ensure that the overall results represent the population on these key variables.

The research was conducted with a sample size of n=600 and has a margin of error for a 50% result at the 95% confidence level of +/-4.0%.

Findings

Only a small proportion of the population currently drinks raw milk. The research found that 6 percent of New Zealanders drink raw milk (down from 8 percent in 2017), while 58 percent of the population have tried it (Figure 1).

New Zealanders are less likely to perceive raw milk as 'safe'* to drink than in November 2017.



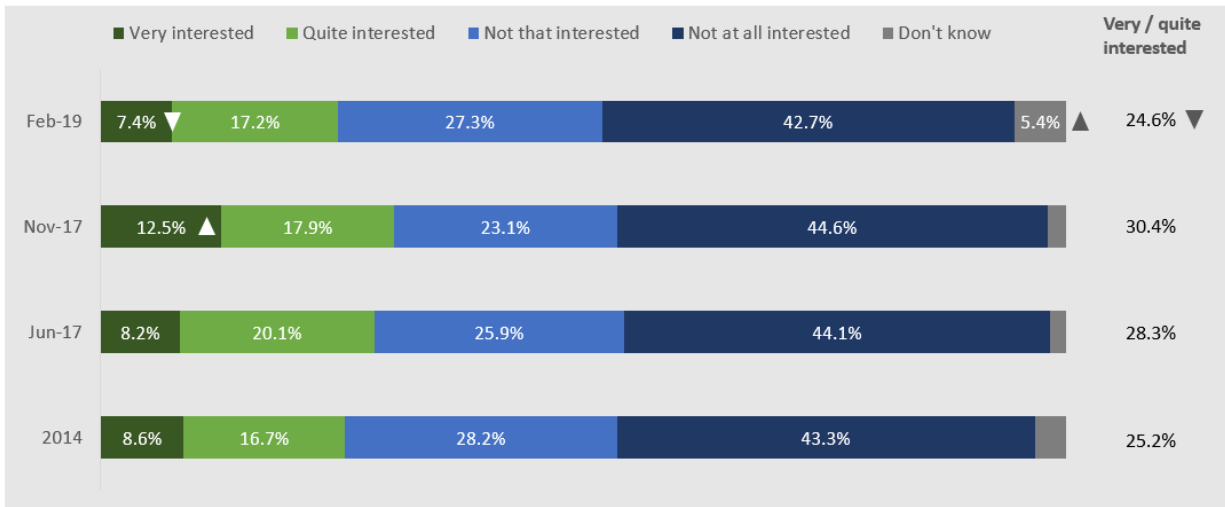
*Defined as rating drinking raw milk as 7 to 10 out of 10, where 10 is 'extremely safe' ▲ Significantly higher or lower than previous results (at the 95% level of significance).

COLMAR BRUNTON
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Colmar Brunton 2019

Figure 1: Proportion of New Zealanders drinking raw milk, perceptions of safety and awareness.

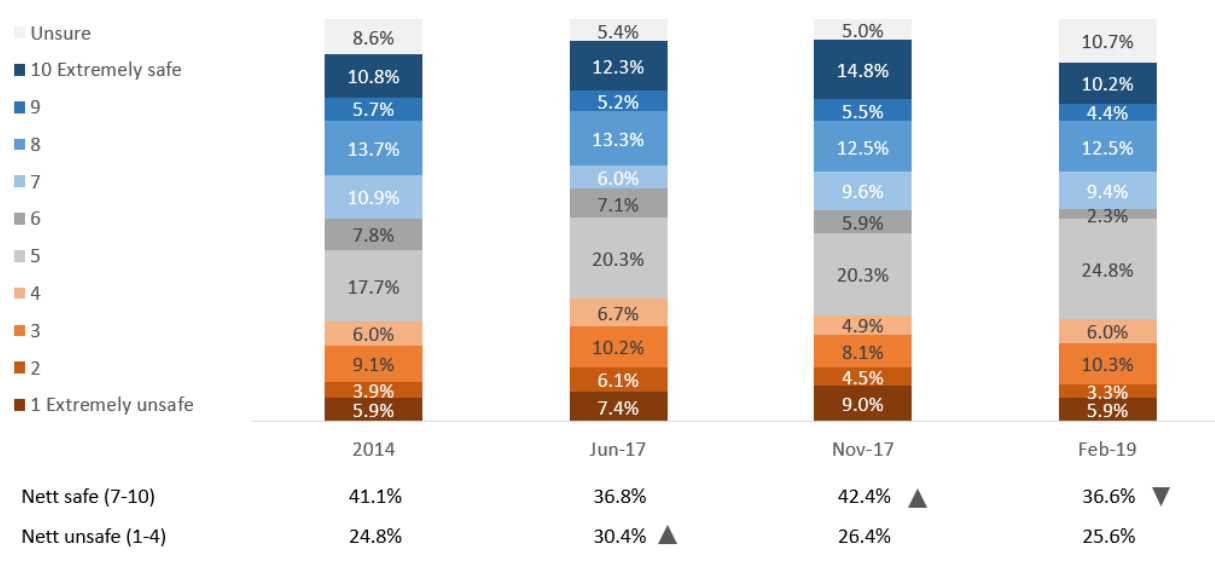
Interest in drinking raw milk has declined with only one in four people who don't currently drink the product expressing an interest in doing so (Figure 2).



▲ Significantly higher or lower than previous results (at the 95% level of significance).
 ▼ Significantly higher or lower than previous results (at the 95% level of significance).
 Source: Q5 – How interested, if at all, are you in drinking raw milk?
 Base: All New Zealanders who don't currently drink raw milk.

Figure 2: Interest in drinking raw milk.

There also appears to be growing uncertainty about whether drinking raw milk is a safe option or not. The Colmar Brunton research found that fewer New Zealanders perceive raw milk to be safe than in 2014 (Figure 3).



▲ Significantly higher or lower than previous results (at the 95% level of significance).
 ▼ Significantly higher or lower than previous results (at the 95% level of significance).
 NOTE significance testing only shown for netts.
 Source: Q6 – How safe do you think it is to drink raw milk?
 Base: All New Zealanders who don't currently drink raw milk.

Figure 3: Perceptions of the safety of raw milk

Findings from the MPI raw milk drinkers survey

In April 2019 MPI conducted a survey with consumers who self-identified as raw milk drinkers during the 2014 regulatory consultation process. MPI received 1,178 consumer responses. The findings from the survey (Figure 4) showed that although the volume of raw milk that can be purchased is no longer limited to five litres, as it was under previous legislation, the average amount that is purchased by consumers per week has not increased since the Regulations came into force.

On average, how many litres of raw milk do you and your household drink per week?

Answered: 1,142 Skipped:12

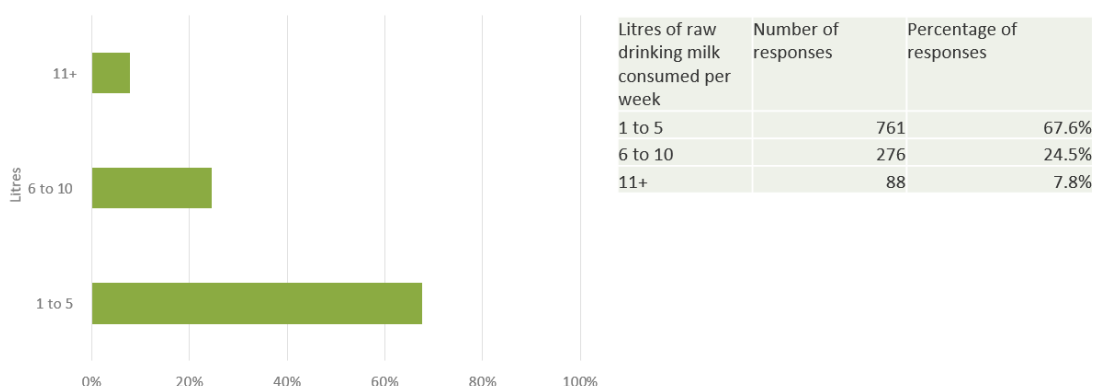


Figure 4: Volume of raw milk consumed.

Over two-thirds (67.6 percent) of respondents stated that they and their household drank between one to five litres of raw milk per week. Nearly a quarter (24.5 percent) of the respondents drank between six to ten litres of raw milk per week. Approximately eight percent indicated that they drank 11 or more litres of raw milk per week. Responses that stated 'zero litre' were removed from the calculation. Although the survey question specifically referred to how much raw milk was drunk by the household, some of these respondents may have included the amount of raw milk that they use for purposes other than drinking (e.g. baking, cheese making).

The Regulations came fully into force in 2016. Respondents were asked whether they bought or obtained raw drinking milk before 2016. Sixty-one percent of consumers (Figure 5) had bought or obtained raw drinking milk before the rules changed.

Did you buy or get raw drinking milk before 2016, when the rules changed?

Answered: 1,098 Skipped: 49

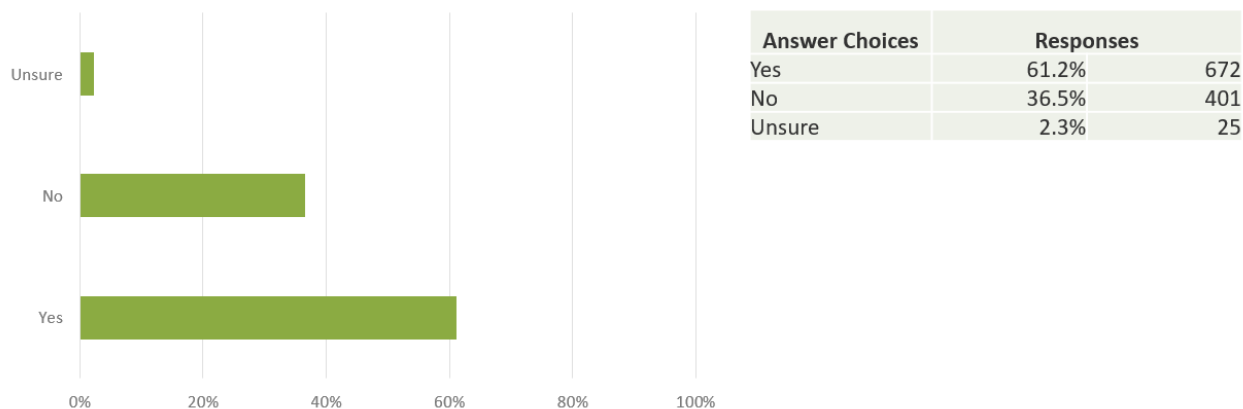


Figure 5: Changes in purchasing

If 'yes', to what extent have the rules changed the following for you?

Answered: 662 Skipped: 10

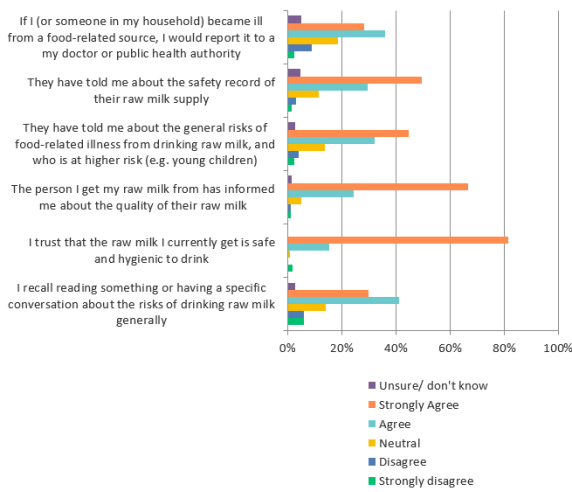


Figure 6: Assessment of the impact of the changes.

Almost all (97 percent) of the respondents trusted that the raw milk that they got was safe to drink (Figure 7).

How much do you agree or disagree about the safety and benefits of the specific raw milk that you and your household drink?

Answered: 1,169 Skipped: 9



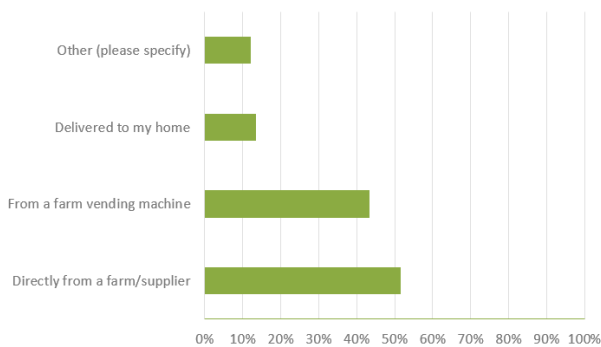
How much do you agree or disagree	Agreement (agree + strongly agree)
I recall reading something or having a specific conversation about the risks of drinking raw milk generally	71.2%
I trust that the raw milk I currently get is safe and hygienic to drink	96.8%
The person I get my raw milk from has informed me about the quality of their raw milk	90.9%
They have told me about the general risks of food-related illness from drinking raw milk, and who is at higher risk (e.g. young children)	76.8%
They have told me about the safety record of their raw milk supply	79.1%
If I (or someone in my household) became ill from a food-related source, I would report it to a my doctor or public health authority	64.6%

Figure 7: Assessment of the perceived safety and benefits of raw milk.

Under the Regulations, raw drinking milk can only be sold directly to the final consumer at the farm or via home delivery to a New Zealand residential address. Most of the respondents purchased raw drinking milk from a farm/supplier or farm vending machine (Figure 8).

Where do you get your raw milk from

Answered: 1,049 Skipped: 129



Answer Choices	Responses
Directly from a farm/supplier	51.6% 541
From a farm vending machine	43.5% 456
Delivered to my home	13.5% 142
Other (please specify)	12.1% 127

Figure 8: Source of raw milk.

Raw milk is a high risk product. The Regulations require that suppliers of raw milk provide their customers with information about the risks associated with drinking this product so that they can make an informed choice. Suppliers are also required to provide information on how raw milk should be stored.

Forty-three percent of respondents indicated that the raw drinking milk that they purchased was labelled with information about the health risks associated with the product and how it should be stored. Thirteen percent of respondents received raw drinking milk from suppliers which wasn't labelled (Figure 9).

Most of the milk that is sold in this country is pasteurised so it is safe for human consumption. Raw drinking milk is not pasteurised and as such is a high risk product. Responses to the consumer survey, however, suggested that not all respondents understood that raw milk is unpasteurised. Most respondents indicated they purchased raw milk because they wanted to access local, organic, farm fresh, non-homogenised milk from suppliers with ethical farming practices.

How is the raw milk that you drink labelled?

Answered: 1,166 Skipped: 12

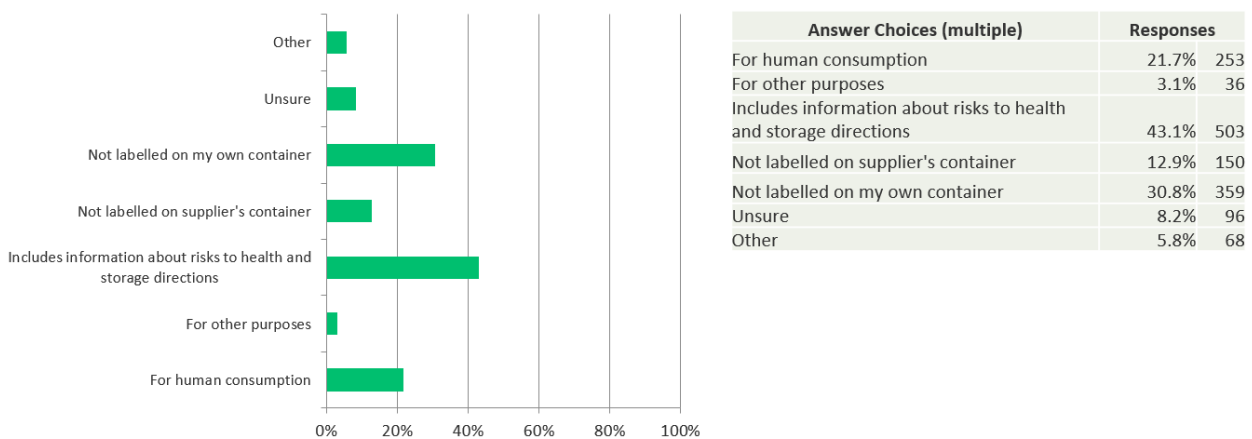


Figure 9: Labelling of raw milk.

Of the people in your household who drink raw milk, how many are . . . ?

Answered: 1,143 Skipped: 33

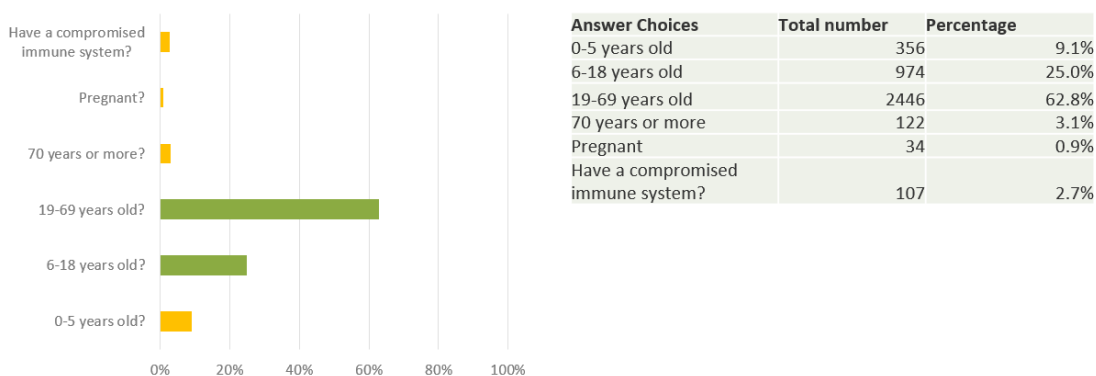


Figure 10: Assessment of the demographics of raw milk drinkers.

In May 2015, the Prime Minister’s Chief Science Advisor stated there was no compelling evidence of any unique health benefits associated with raw drinking milk that would outweigh the food safety risks² associated with consuming the product. Most respondents to the consumer survey (Figure 11) thought that the benefits of consuming raw drinking milk outweighed the risks (90 percent compared with 83 percent in 2014) and that the chance of getting an illness from drinking it is low (92 percent compared with 88 percent in 2014). A large number of respondents commented that the risks associated with raw drinking milk are low if proper procedures are followed, that the risks are overblown, and that freedom of choice is important.

What are your views about the 'big picture' around raw milk?

Answered: 1,173 Skipped: 5

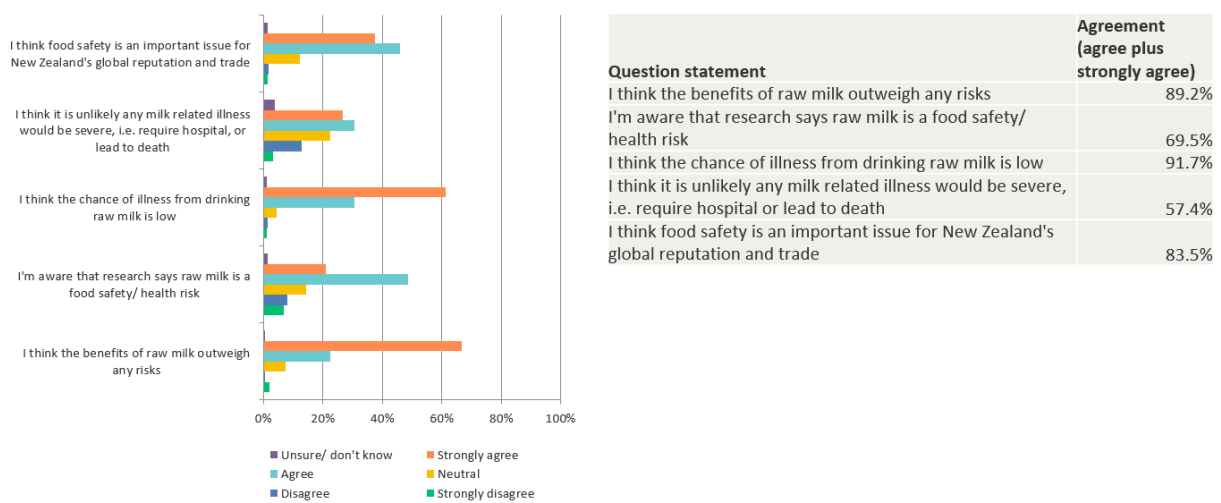


Figure 11: Consumer views on the safety of raw milk.

² Office of the Prime Minister’s Chief Science Advisor (13 May 2015) Review of Evidence for Health Benefits of Raw Milk Consumption.

Is the raw drinking milk you buy or get from a farmer or supplier who...?

Answered: 1,117 Skipped: 61

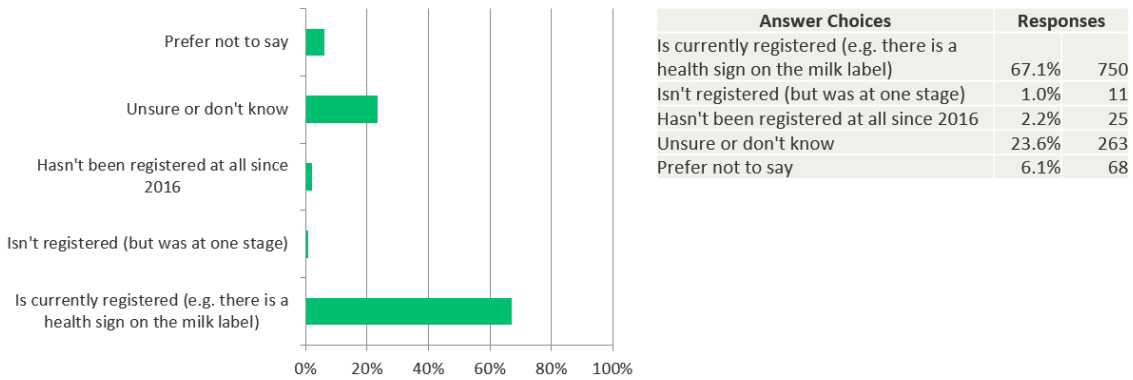


Figure 12: Registration status of suppliers

Findings from the supplier survey

The Regulations require farmers or suppliers of raw drinking milk to be registered. Twenty-six raw drinking milk suppliers, including some who are unregistered or have ceased to supply, responded to MPI's supplier survey.

Registered suppliers sell a combined total of 26,950 litres of raw milk per week with each supplier selling an average of 175 litres per day. In 2014 it was estimated that there was a national supply of 20,000 litres of raw milk per week. Almost half the respondents to the survey were not supplying raw milk prior to 2016 when the regulations came fully into force. In 2014 the average price for raw milk was estimated at \$2.50 per litre. Based on the 2019 consumer survey, the average price for raw milk is estimated at \$3.10 per litre.

Suppliers of raw drinking milk were primarily concerned with the challenges of operating a small business and understanding the Regulations. Compliance costs for suppliers under the Regulations are made up of the levy, and registration, verification and microbiological testing fees. These compliance costs are said to be between \$10,000 and \$20,000 or one fifth of profits, according to some respondents.

Survey respondents expressed concerns about unregistered suppliers who are not complying with the Regulations seemingly without any consequences. MPI is aware of these concerns and is working to encourage the sector to comply with the new Regulations. Resources have also been dedicated to support and conclude ongoing investigations.

Concluding remarks

MPI appreciates the time consumers and suppliers took to complete the surveys to share their experiences and opinions. By subscribing to [MPI updates](#) or following MPI on social media, interested people can stay informed, should any further work regarding the Regulations be undertaken.