

FOOD SAFETY INSIGHTS AND EMERGING RISKS – 27 JUNE 2025

The following is a digest of publicly available information of interest to the New Zealand food system. Internet sources, commentaries, news media and science publications are reviewed regularly for events or signs of change that might have a bearing on the safety of food. Items are screened and selected for their relevance and significance against the broad criteria of *health, uncertainty, future, cost* and *trust*. Neither the overall collection, nor inclusion of any specific item, indicates endorsement by New Zealand Food Safety (NZFS) or New Zealand government policy. Every effort is made to ensure content accurately reflects the information available to the 'last date of information' noted in the document footer. Please note hyperlinks in the text refer to external internet resources that are outside the control of NZFS. Readers should take advice before relying on content summarised here or at the referenced websites. This information is offered for interest of New Zealand food businesses and does not constitute legal advice or official direction. Food businesses should consider this information and apply learnings to their food management system as appropriate.

Technology vectors potentially harmful information



Marketing foods to young people has become much more sophisticated and tailored to individuals as a result of digital insights and popular social media platforms. Young people making less healthy food and beverage choices may be exacerbated as a result of profiling and engagement through social media. Digital health literacy varies amongst children and parents, challenging how policy should guide marketing practices. A recent example of tailoring social media marketing may be freeze-dried candy. Associated nutritional harms of compelling marketing may also be enduring, because these marketing methods also create an emotional bond that may influence future purchase choices.

Influencer-led, viral food moments

Separate to programmed commercial campaigns of those sort, viral independent influencer activities may promote idiosyncratic food practices. These may not clearly incorporate safe food practice messages relevant to the new behaviours they promote. Perpetual stews are an influencer-driven trend which courts dangers from spore-forming bacteria and heat-stable toxins if the temperature is not managed rigorously. Meal prepping has also gained popularity for health benefits in ingredient choices and portion sizes, and in the face of cost-of-living pressures. However, the duration of foods being stored as a consequence may stretch safe limits. NZFS has updated guidance for the public on food safety at home.

Performance foods

Potentially problematic are foods formulated for high-performance athletes being sold to people who aren't active. Even for professional athletes, specific care is involved in including supplementary foods in a balanced diet. Excessive

intake of protein supplements is observed trending upwards in urban India, driven by societal body image pressures. A study in that market last year demonstrated mislabelling and deceptive marketing, including adulterated proteins and unwanted chemical residues. Direct marketing of food via social media channels overseas has also been associated with incomplete labelling, for example without allergen warnings, creating a profound risk to consumers.

Safer, smarter kitchens

Not all social media exposure of food information is harmful, and examples of deeply engaging and positive health and cultural narratives with food can be found. Indeed, smart kitchen technology is another beneficial application of more direct technology support to safe food practices in the home. A current review of the last five years of published studies on smart kitchens shows improvement in storage and preparation of food, with reduced food waste and improved nutrition. Internet of Things (IoT) has relatively weak penetration in New Zealand, including in domestic kitchens, with privacy a concern alongside cost and lack of awareness. The digital economy is nevertheless expected to grow and telecommunications providers are planning for this uptake. This Bulletin outlined aspects of 2D matrix barcode food labels recently. Beyond support of a digital register for foods, the smart kitchen and smart home integration will rely on interoperable machine-to-machine communications and should anticipate progress in artificial intelligence (AI) and means to connect to AI agents.

Unknown implications of ocean darkening



A significant concern for food safety under progressive climate change will be increases in harmful algal blooms. A study this month shows warming and freshening of coastal waters above 60°N will result in expanding niches for toxic algae. This overall trend is complicated by algae with different tolerance of salt or fresh conditions. The forecast modelled for Norway in the new paper suggests a greater exposure in the future to the alga *Dinophysis acuta* which produces a toxin causing diarrhetic shellfish poisoning. On the other hand, algae in the *Alexandrium tamarense* species complex will be less favoured, so a lower incidence of paralytic shellfish poisoning is anticipated there. The most recent study of harmful algal blooms for New Zealand shows increases across a range of toxic algae, including some that currently do not form blooms but may in the future with changing conditions.

A different study of satellite data over the past 20 years found one fifth of the global oceans affected by darkening, where light penetrates less distance below the surface. The study proposes that organic material and sediments and global ocean circulation have resulted in changes in ocean productivity both around coasts as well as in large parts of the open ocean. While the photic zone normally penetrates on average to 200m depth, reduction will have implications for global fish stocks, but the potential for impacts on frequencies of harmful algal blooms is not considered. The change is not uniform, and a smaller proportion of areas show an increase in the depth of the photic zone.

Vaccine hesitancy and global typhoid pressure



Typhoid fever, or typhoid, is a human disease caused by the bacterium *Salmonella enterica* serovar Typhi. Infection is spread through water or food contaminated by faeces of an infected person. Along with the related serovar Paratyphi, the enteric fevers remain a major global public health concern especially in developing countries. Measures focusing on improving access to potable water are gaining some success reducing the problem. However, vaccination is judged by global public health experts to hold the most promise to achieve rapid progress. Vaccine hesitancy, if it affects uptake in vulnerable communities, would be a concern.

Infection results in fever, gastrointestinal illness and in some situations, deaths, but a carrier state is also possible where the person harbours the bacteria in the liver with no signs of illness. In this way, asymptomatic carriers can pose an unknowing risk, for example if involved in foodservice or catering. Health New Zealand publicly notified a single case of typhoid fever in Christchurch in the first week of May this year. Typhoid is relatively rare in New Zealand, and outbreaks are usually associated with overseas travel. As it is a notifiable disease, public health screening and treatments are readily available here. Previous outbreaks have been contained and potential public health or food safety concerns managed rapidly.

Optimising physical dynamics of cleaning pipes



Food processing plant cleaning protocols are well established but continuing research underway aims to refine and optimise processes, for example where new plant materials or new production pressures are encountered, such as sustainability. A new paper discusses swirl cleaning and ultrasonic monitoring. This work highlights that providing assurance about the cleaning end-point – in this instance by using an ultrasonic probe – the duration of cleaning is optimised, reducing potential time and waste.

Progress in theoretical modelling and experimental tools also provides insights, including computational approaches improving older fluid dynamics models, or newer test fouling substrates. In addition to dairy production cleaning, recent lessons can be drawn from winemaking, brewing, low-moisture foods, and pharmaceuticals manufacturing. Relevant general guidelines and approaches to hygiene and cleaning have been set out by the Codex Alimentarius Commission, Food Standards Australia New Zealand, and NZFS.



CURRENT FOOD SAFETY ISSUES – 27 JUNE 2025

This note records summaries of selected food safety notifications, recalls, incidents and related events seen in regular scanning of information available to the Food Risk Management Directorate at New Zealand Food Safety (NZFS). The scanning process includes steps to determine if the affected food product is in New Zealand. If it is, the affected food is managed at the time of reporting by Food Compliance Services with the associated importer, distributor and retailer and may include recall action. This summary is also informed by lessons learned from recent activities by Food Compliance Services and food businesses they have worked with. These summaries may include events that are under active management by the regulator or industry. Although New Zealand may not be implicated in an event, food businesses are encouraged to consider lessons this information may hold for their own plans, practices or products.

Undeclared egg and milk in confectionery from Iran



In May 2025, a consumer-level recall was undertaken in Germany of Soohan Khodkar, a confectionery from Iran, as the presence of egg and milk allergens was labelled incorrectly. While the recalled confectionery has not been imported into New Zealand, importers of similar confectioneries should check that the products they have imported are labelled with correct and complete allergen information in English. Food businesses should contact NZFS immediately if they identify any undeclared allergens in food.

Allergens were the leading reason for consumer-level recalls in New Zealand between 2022 and 2024. More than one third of these recalls were due to undeclared or incorrectly labelled allergens in imported food. New Zealand imports food from more than 200 countries, and this food has the same requirements to be safe and suitable and meet labelling requirements as food produced domestically. NZFS offers support to food importers if they have questions about how to meet these requirements.

Listeria outbreaks in the United States of America and Denmark



Foodborne illness outbreak tracing is enhanced by laboratory investigation techniques, including Whole Genome Sequencing (WGS). WGS compares genetic sequences of bacteria from clinical cases and potential sources of foodborne illness, and is widely applied in countries with comparable food safety systems, including New Zealand. Nevertheless, investigations of *Listeria* outbreaks may take longer than investigations of some other microbial causes of gastrointestinal illness. Because pathogens are identified by their genetic sequence, WGS can also identify new linkages in historical foodborne illness

outbreaks. So, in May 2025, the United States Centers for Disease Control and Prevention and the United States Food and Drug Administration (FDA) linked a multi-state outbreak of *Listeria* between December 2023 and September 2024. FDA identified the outbreak strain from 10 people who fell sick at the local manufacturer, Fresh & Ready Foods LLC, which was linked to the event through the tracing investigation. Similarly in Denmark in May 2025, the Danish competent authorities confirmed a *Listeria* outbreak where seven people fell sick between 2018 and 2024 after consuming ready-to-eat fish products. The implicated fish products were produced by a local manufacturer, Polar Salmon Hjerting Laks A/S. This manufacturer had also been implicated in a separate multi-country outbreak of a different sequence type of *Listeria* in 2024.

While the foods implicated in these outbreaks have not been imported into New Zealand, NZFS reminds food businesses producing and handling ready-to-eat foods of guidelines on managing the risks of *Listeria*. Inadequate measures may result in product contamination, posing serious health risks to vulnerable members of the community who are most at risk. NZFS has recently updated information for consumers specific to managing risks of *Listeria*, as well as more general guidance on food safety at home.

Salmonella outbreak in Germany and Austria



An outbreak of *Salmonella* Infantis, mainly among children up to 4 years of age in Germany and Austria, has involved 65 cases as of 6 June. Epidemiological evidence pointed to the source as DM Bio brand Cashew Butter with Raspberries, identified in interviews with parents of the youngest cases. The implicated cashew butter was subsequently recalled in Europe. Competent authorities in Germany have since isolated *Salmonella* from the implicated cashew butter, which has triggered the business DM-Drogerie Markt to carry out additional recall actions. The recalled cashew butter from Germany, distributed widely in Europe, has not been imported into New Zealand.

Salmonella Infantis is regularly identified as a cause of foodborne illness in people and is the most commonly identified serovar identified in broiler chickens Europe-wide, however this cashew butter contains no egg. The high fat and low moisture contents of nut and seed butters protects *Salmonella* from the growing and processing environment and reduces the effectiveness of heat treatment in eliminating potentially pathogenic microorganisms. Nut and seed butters, which include peanut butter and tahini, have been implicated in foodborne illness outbreaks in New Zealand and overseas. Although not all varieties of nut and seed butters are required to undergo food safety clearance upon import, food importers should ensure they have measures in place to assess the safety of nut and seed butters they import and only import from trusted suppliers.

Mycotoxin in baby foods



In April of 2025, multiple consumer-level recalls were undertaken in Europe of various brands of bottled baby foods as they may contain elevated levels of Ochratoxin A exceeding the European Union regulatory limit. Dried garlic pellets from Spain in the recalled baby foods were found to contain elevated levels of Ochratoxin A. The recalled baby food has not been imported into New Zealand.

Mycotoxins, including Ochratoxin A, are produced by fungi growing under warm and humid conditions. Crops may be contaminated growing in the field or as processed dry goods in storage. Different mycotoxins may pose food safety risks ranging from intoxications to risks of cancer or birth defects. Mycotoxin monitoring is well established internationally, and past reports of the New Zealand Mycotoxin Surveillance Programme indicate generally low levels of concern in the New Zealand diet. As part of their risk-based approach, food businesses should be managing mycotoxin risk through the whole supply chain from import through storage. Food importers should verify that their overseas suppliers are adhering to Good Agricultural Practice and Good Hygiene Practice, which helps to minimise mycotoxin contamination. Food importers should ask for evidence, such as test results and product specifications, to assess and confirm the risk is being managed, especially for those foods that are susceptible to mycotoxin contamination.

Glass in wine from France



In May 2025, a consumer-level recall was undertaken in France of Cellier des Dauphins brand Côtes du Rhône Prestige 2023 as it may contain glass foreign matter. A manufacturing defect during production caused glass shards to fall into the wine, requiring recall action across Europe. The recalled vintage and variety of Cellier des Dauphins brand red wine has not been imported into New Zealand.

Bottling wine in glass for long term protection preserves its sensory profiles. Compromised or contaminated bottles, incorrect bottling, or damage may result in a physical hazard as in the current event. Small cracks may not be visible, so close visual inspection or other methods, including X-ray, may be used to detect damage.

New Zealand winemakers follow the principles of Hazard Analysis and Critical Control Point, and manage this as part of their Risk Based Measure. Winemakers should have recall procedures in place if something goes wrong, including damage through transport operators and retailers.

THE REPORT REFLECTS OBSERVATIONS ACROSS THE PHASES OF THE FOOD SYSTEM DEPICTED BY THE ICONS TO THE RIGHT. THESE PHASES FOLLOW A MODIFIED VERSION OF THE FUTURE OF FOOD, NOTING NOT ALL FOOD CONSUMED PASSES THROUGH RETAIL CHAINS. THIS INFORMATION IS OFFERED FOR INTEREST AND DOES NOT CONSTITUTE LEGAL ADVICE OR OFFICIAL DIRECTION.



PRODUCTION



PROCESSING



DISTRIBUTION



ACCESS



CONSUMPTION



WASTE

