

FOOD SAFETY SCHEMES MANUAL

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Introduction

The NSW Food Authority (the Food Authority) has prepared the NSW Food Safety Schemes Manual (the Manual) to specify certain requirements for the following Food Safety Schemes under the Food Regulation 2015:

- Dairy food safety scheme
- Egg food safety scheme
- Meat food safety scheme
- Plant products food safety scheme
- Seafood safety scheme
- Vulnerable persons food safety scheme

The Manual applies to all food businesses licensed under these schemes. The requirements referred to in the Food Regulation 2015, detailed within this document, are **mandatory**.

All licensees are required to have food safety programs and adhere to good manufacturing practices (GMP). The testing of finished products can be used in investigation, verifying corrective action, assisting in establishing benchmarks and identifying trends. Product testing alone is not sufficient to demonstrate the safety of food because it has a high probability of not identifying contaminated product even when large sample numbers are tested, but it can be used to verify the effectiveness of the control measures outlined in the business' food safety program and associated documentation.

Microbiological testing must be done in a NATA approved laboratory

Every microbiological analysis of finished products and water specified in this Manual must be carried out in a laboratory accredited by the National Association of Testing Authorities, Australia (NATA) for the particular type of analysis to be undertaken. A list of NATA accredited laboratories can be found on the NATA website at www.nata.com.au

Through the NATA's 'Mutual Recognition Arrangement (MRA)', laboratories accredited by the International Laboratory Accreditation Cooperation (ILAC) signatories are considered acceptable. A list of ILAC signatories can be found at <http://ilac.org/signatory-search/>

Some tests can be done in-house

Some tests can be done in-house using a validated method, as indicated in this Manual. The only permitted tests that can be conducted in-house without holding NATA accreditation:

- antimicrobial drug residues,
- pH, and
- environmental swabbing for *Listeria*.

It is recommended that in-house laboratories take part in an Inter-laboratory comparison (ILC) program to demonstrate proficiency for the testing being undertaken. If you take part in the inter-laboratory comparison, records of the ILC program must be kept for audit purposes.

Frequency of testing

The tables in this Manual outline the minimum testing frequencies for licensed businesses. The type of tests and their frequency are influenced by the risk status of the food and based on past experience, and the possibility of the analytes being present in that particular food determined by the risk rating of the food and scientific data.

The testing frequency specified is based on the number of batches produced by the food business. A batch is defined as product made using the same process and/or packaged under the same conditions within a 24-hour period.

In the case where a product category is specified (e.g. fresh cut), if the business produces more than one variety of this product category, then the business must select a different product line for sampling each time to ensure that, over time, every product line manufactured is included in the sampling plan.

Testing must commence with the first batch tested and testing is then conducted at the specified frequency.

If a business wishes to implement an alternative sampling plan to that outlined in this Manual, the business must submit the proposed variation in writing to the Food Authority for approval by completing the *Application to vary ready-to-eat product testing* form which can be found on the Food Authority's website at www.foodauthority.nsw.gov.au. For more details on how to do microbiological testing, see Appendix 1.

Reporting of failures

The Food Authority **must** be notified if any sample analysed fails to meet the standard set out in this Manual:

- verbally within 24 hours after the licence holder becomes aware of the results of the analysis (e.g. by phone),
and
- in writing within 7 days after becoming aware of the result of analysis using the *Notification of pathogen detection form* on the Food Authority's website.

Definition

Batch: Product made using the same process or packaged under the same conditions within a 24-hour period, i.e. products must undergo the same process steps and have the same general characteristics (e.g. additives, pH and water activity).

For example, a cooked roast beef uses different ingredients and undergoes a different process compared to a smoked cured ham, so they must be considered as different batches.

Listericidal process: A process that reduces the *Listeria monocytogenes* microorganism to a safe level.

Non-reticulated water: Any water supply not piped into a business by either a water utility or local council. It includes rainwater, ground water (e.g. bore water) and surface water (e.g. dam).

Ready-to-eat (RTE) food: A food product that is in a form that does not require additional preparation prior to consumption.

Standard Plate Count (SPC), also referred to as Aerobic Plate Count (APC) or Total Viable Count (TVC): A number of viable bacteria in a food product obtained by enumeration of colonies on an agar plate after a certain period of incubation at certain temperature with the presence of oxygen.

Treated non-reticulated water: non-reticulated water that has been treated with chlorine or another suitable method to make it safe for food preparation and human consumption.

For more information on how to treat a non-reticulated water supply refer to the *Guidelines for the use of non-potable water in food businesses* on the Food Authority's website.

Validated method: a method that has been confirmed – by trials and objective evidence – to be able to detect its intended target analytes in a particular type of food.

Water activity: the unbound water present in a food that can be used by microorganisms for growth.

Acronyms

cfu	Colony forming units
CPU	Central Processing Unit
MAP	Modified Atmosphere Packaging
RTE	Ready-to-eat
SPC	Standard Plate Count
TVC	Total Viable Count
UCFM	Uncooked comminuted fermented meat

Chapter 1 – Dairy food safety scheme

Dairy processing

Clause 59 of the Food Regulation 2015 defines dairy processing as the packaging, treating, cutting or manufacturing of dairy products, and the packing and storing of those products on the premises where they are packaged, treated, cut or manufactured, but does not include dairy primary production¹. Dairy processing business means a food business that involves dairy processing.

Dairy products include colostrum, milk and any food that contains at least 50% milk or any substance produced from milk (by weight measurement). Examples of dairy products (but not limited to): butter, cream, cheese, ice cream, ghee, milk, mousse, dairy-based dips and yoghurt.

Antibiotic notification

A dairy processing business that detects antibiotics in raw milk must notify the Food Authority verbally within 24 hours **and** in writing within 7 days using the *Notify a residue detection form* on the Food Authority's website.

Sampling and analysis

Licensed dairy processing businesses must comply with the sampling and analysis provisions of the *Dairy food safety scheme* (clause 70) of the Food Regulation 2015.

Table 1.1 Water testing² for dairy processing businesses

Product to be tested		Test to be conducted, the limit and frequency
		<i>E. coli</i>
		Not detected or less than 1 cfu in 100 mL
Non-reticulated water used in connection with the production and processing of dairy products	Treated	Every 6 months

Table 1.2 Chemical testing for dairy processing businesses

Product to be tested	Test to be conducted	Limit	Frequency
UNPASTEURISED MILK			
Unpasteurised milk for further processing including the production of raw milk cheese	Antimicrobial drug residues ³	Level must be within the maximum permitted level as per Schedule 20 of the Food Standards Code (the Code)	Every load of milk from farm on arrival at the processing facility

¹ Dairy primary production means the production of milk or colostrum for further processing for human consumption, including (a) the keeping, grazing, feeding and milking of animals, and (b) the storage of milk on the premises at which the animals were milked (Clause 59 of the Food Regulation 2015).

² Export registered facilities may have different water testing requirements.

³ Testing can be undertaken in-house using a validated method.

Table 1.3 Microbiological testing for dairy processing businesses

Product to be tested	Test to be conducted, the limit and frequency			
	<i>Campylobacter</i>	<i>E. coli</i>	<i>L. monocytogenes</i>	<i>Salmonella</i>
	Not detected in 25 mL	Not exceeding 3 cfu/mL	Not detected in 25 mL	Not detected in 25 mL
Unpasteurised goat's milk for human consumption ⁴	Every 20 batches	Every 20 batches	Every 20 batches	Every 20 batches

Product to be tested	Test to be conducted, the limit and frequency			
	Coagulase positive staphylococci ⁵	<i>E. coli</i>	<i>L. monocytogenes</i>	<i>Salmonella</i>
	Not exceeding 100 cfu/g	Not exceeding 10 cfu/g	Not detected in 25 g	Not detected in 25 g
Cheese made from raw milk ^{4,6}	Every batch	Every batch	Every batch	Every batch

⁴ The Food Authority has assumed these products will support the growth of *L. monocytogenes* (see Appendix 2)

⁵ The Code requires that raw milk cheese is free of staphylococcal enterotoxins. This test is not readily available, so testing for coagulase positive staphylococci (CPS) is mandated instead. Staphylococcal enterotoxin testing must be done if CPS exceeds 10³ cfu/g at the end of moulding stage.

⁶ Manufacturers of cheese made from raw milk must submit a production process pro forma to the Food Authority, which describes all the steps used to make a particular product.

Product to be tested (in alphabetical order)		Test to be conducted, the limit and frequency						
		Coagulase positive staphylococci	<i>E. coli</i>		<i>L. monocytogenes</i> ⁷		<i>Salmonella</i>	<i>Cronobacter</i>
		Not exceeding 100 cfu/g	Not exceeding 1 cfu/mL	Not exceeding 10 cfu/g	Not detected in 25 g or mL ⁸	Not exceeding 100 cfu/g ⁹	Not detected in 25 g	Not detected in 10 g
BUTTER	Butter & ghee (salted or unsalted)	-	-	Every 20 batches	-	-	-	-
	Butter & ghee with post pasteurisation ingredients added	-	-	Every 20 batches	-	-	Every 20 batches	-
CHEESE	Cheese	-	-	Every 20 batches	-	-	-	-
	Cheese with post pasteurisation ingredients added	-	-	Every 20 batches	Every 10 batches	Every 10 batches	Every 10 batches	-
	Soft and semi-soft cheese (moisture content greater than 39% and pH greater than 5.0)	-	-	Every 10 batches	Every 10 batches	Every 10 batches	Every 10 batches	-
CREAM	Pasteurised cream products ¹⁰	-	Every 20 batches	-	Every 20 batches	-	-	-

⁷ See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

⁸ For products that can support the growth of *L. monocytogenes*.

⁹ For products that cannot support the growth of *L. monocytogenes*.

¹⁰ The Food Authority has assumed these products will support the growth of *L. monocytogenes* (see Appendix 2).

Product to be tested (in alphabetical order)		Test to be conducted, the limit and frequency						
		Coagulase positive staphylococci	<i>E. coli</i>		<i>L. monocytogenes</i> ¹¹		<i>Salmonella</i>	<i>Cronobacter</i>
		Not exceeding 100 cfu/g	Not exceeding 1 cfu/mL	Not exceeding 10 cfu/g	Not detected in 25 g or mL ¹²	Not exceeding 100 cfu/g ¹³	Not detected in 25 g	Not detected in 10 g
DAIRY-BASED DESSERTS & DIPS	Dairy-based desserts & dips with pH exceeding 4.5 (e.g. custard, mousse, kashta)	Every 10 batches	-	Every 10 batches	Every 10 batches	Every 10 batches	-	-
	Dairy-based desserts & dips with post pasteurisation ingredients added and pH exceeding 4.5	Every 10 batches	-	Every 10 batches	Every 10 batches	Every 10 batches	Every 10 batches	-
DRIED MILK POWDER	Dried milk powder	-	-	-	-	-	Every 10 batches	-

¹¹ See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

¹² For products that can support the growth of *L. monocytogenes*.

¹³ For products that cannot support the growth of *L. monocytogenes*.

Product to be tested (in alphabetical order)		Test to be conducted, the limit and frequency						
		Coagulase positive staphylococci	<i>E. coli</i>		<i>L. monocytogenes</i> ¹⁴		<i>Salmonella</i>	<i>Cronobacter</i>
		Not exceeding 100 cfu/g	Not exceeding 1 cfu/mL	Not exceeding 10 cfu/g	Not detected in 25 g or mL ¹⁵	Not exceeding 100 cfu/g ¹⁶	Not detected in 25 g	Not detected in 10 g
ICE CREAM & EDIBLE ICES	Frozen ice cream & edible ices (e.g. soft serve, gelato)	-	-	Every 20 batches	-	Every 20 batches	-	-
	Frozen ice cream & edible ices with post pasteurisation ingredients	-	-	Every 20 batches	-	Every 20 batches	Every 10 batches	-
	Refrigerated ice cream mixes ¹⁰ (e.g. soft serve mix)	-	-	Every 10 batches	Every 10 batches	-	-	-
MILK	Pasteurised liquid milk products – plain, flavoured, modified ¹⁰	-	Every 10 batches ¹⁷	-	Every 10 batches	-	-	-

¹⁴ See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

¹⁵ For products that can support the growth of *L. monocytogenes*.

¹⁶ For products that cannot support the growth of *L. monocytogenes*.

¹⁷ The Food Authority may accept an alternative testing arrangement as follows: every batch of pasteurised liquid milk product is tested for coliforms and it should not exceed 10 cfu/mL. If this limit is exceeded, then the batch must be tested for *E. coli* and it should not exceed 1 cfu/mL.

Product to be tested (in alphabetical order)		Test to be conducted, the limit and frequency						
		Coagulase positive staphylococci	<i>E. coli</i>		<i>L. monocytogenes</i> ¹⁸		<i>Salmonella</i>	<i>Cronobacter</i>
		Not exceeding 100 cfu/g	Not exceeding 1 cfu/mL	Not exceeding 10 cfu/g	Not detected in 25 g or mL ¹⁹	Not exceeding 100 cfu/g ²⁰	Not detected in 25 g	Not detected in 10 g
POWDERED INFANT FORMULA	Powdered infant formula ²¹ other than powdered follow-on formula	-	-	-	-	-	Every 10 batches	Every 10 batches
	Powdered follow-on formula ²²	-	-	-	-	-	Every 10 batches	-

¹⁸ See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

¹⁹ For products that can support the growth of *L. monocytogenes*.

²⁰ For products that cannot support the growth of *L. monocytogenes*.

²¹ Infant formula means an infant formula product that satisfies by itself the nutritional requirements of infants under the age of 4 to 6 months.

²² Follow-on formula means an infant formula product that is suitable for infants from the age of 6 months.

Chapter 2 – Egg food safety scheme

Sampling and analysis

Licensed egg businesses must comply with the sampling and analysis provisions of the *Egg food safety scheme* (clause 179) of the Food Regulation 2015.

Table 2.1 Water testing for egg businesses

Product to be tested		Test to be conducted, the limit and frequency
		<i>E. coli</i>
		Not detected or less than 1 cfu in 100 mL
Non-reticulated water used in connection with the production of eggs, processing of eggs, egg products, or blended egg product mixtures	Not treated	Every month
	Treated	Every 6 months

Table 2.2 Microbiological testing for egg products and blended egg product mixture (a product with at least 80% by weight of egg white or yolk or both)

Product to be tested	Test to be conducted, the limit and frequency
	<i>Salmonella</i>
	Not detected in 25 g
Pasteurised egg products (e.g. pulp, peeled boiled eggs)	Every 10 batches
Pasteurised blended egg product mixture	Every 10 batches
Dried egg products	Every 20 batches

Chapter 3 – Meat food safety scheme

Abattoirs

Clause 76 of the Food Regulation 2015 defines red meat abattoirs as premises used for or in connection with the slaughtering of abattoir animals for human consumption. Red meat includes meat from bovine (cow, ox, buffalo), bubaline (antelope), camelidae (camel), caprinae (goat), cervidae (deer), ovine (sheep), porcine (pig) and soliped (horse) species.

Clause 76 also defines non-red meat abattoirs as premises used for or in connection with the slaughtering of rabbit, crocodile or any bird for human consumption.

Sampling and analysis

Licensed abattoirs must comply with the sampling and analysis provisions of the *Meat food safety scheme* (clause 116) of the Food Regulation 2015.

Table 3.1 Water testing²³ for red meat and non-red meat abattoirs

Product to be tested		Test to be conducted, the limit and frequency
		<i>E. coli</i>
		Not detected or less than 1 cfu in 100 mL
Non-reticulated water used in connection with the slaughtering of abattoir animals	Treated	Every 6 months

Meat and poultry meat processing plants

Clause 76 of the Food Regulation 2015 defines meat and poultry meat processing plants as premises where meat (including game meat) for human consumption is stored, packed, packaged, processed, treated, boned or cut up; or processed meat is produced. This includes raw meat and the production of RTE and uncooked comminuted fermented meat (UCFM) products.

Sampling and analysis

Licensed meat and poultry meat processing plants must comply with the sampling and analysis provisions of the *Meat food safety scheme* (clause 116) of the Food Regulation 2015 – see Table 3.2

²³ Export registered facilities may have different water testing requirements.

Table 3.2 Microbiological testing for meat processing plants producing RTE meat and poultry meat products

Product to be tested		Test to be conducted, the limit and frequency					
		<i>E. coli</i>		<i>L. monocytogenes</i> ²⁴		<i>Salmonella</i>	Environmental & work surface testing for <i>Listeria</i> spp
		Not exceeding 3 cfu/g	Not exceeding 3.6 cfu/g	Not detected in 25 g ²⁵	Not exceeding 100 cfu/g ²⁶	Not detected in 25 g	No positive detection
RTE meat and poultry meat product (excluding UCFM and dried meat)	RTE meat and poultry meat product	Every 10 batches	-	Every 10 batches	Every 10 batches	Every 10 batches	-
	Sliced or whole packaged RTE meat and poultry meat products (vacuum packed or MAP)	Every 10 batches	-	Every 10 batches	Every 10 batches	Every 10 batches	Every month (5 samples collected pre and post operations)
	Whole packaged RTE meat and poultry meat products that receive a validated post pack pasteurisation step ²⁷	Every 20 batches	-	Every 20 batches	Every 20 batches	Every 20 batches	-

²⁴ See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

²⁵ For products that can support the growth of *L. monocytogenes*.

²⁶ For products that cannot support the growth of *L. monocytogenes*.

²⁷ A validated post pack pasteurisation step means that the business has demonstrated to the Food Authority that the time and temperature used (or an equivalent process) provides a minimum of 6-log reduction (99%) of *L. monocytogenes*. Please refer to Appendix 5 for more information.

Product to be tested		Test to be conducted, the limit and frequency					
		<i>E. coli</i>		<i>L. monocytogenes</i> ²⁸		<i>Salmonella</i>	Environmental & work surface testing for <i>Listeria</i> spp
		Not exceeding 3 cfu/g	Not exceeding 3.6 cfu/g	Not detected in 25 g ²⁹	Not exceeding 100 cfu/g ³⁰	Not detected in 25 g	No positive detection
Uncooked comminuted fermented meat (UCFM) ³¹	Finished product	-	Every batch	-	-	-	-

²⁸ See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

²⁹ For products that can support the growth of *L. monocytogenes*.

³⁰ For products that cannot support the growth of *L. monocytogenes*.

³¹ Manufacturers of UCFM must submit a production process pro forma to the Food Authority, which describes all the steps used to make a particular product.

Meat retail premises

Clause 76 of the Food Regulation 2015 defines meat retail premises as premises where meat is sold by retail and on which raw meat carcasses or parts of raw meat carcasses are processed in some way (such as boning, slicing or cutting), or on which processed meat is produced or further processed.

Sampling and analysis

Licensed meat retail premises must comply with the sampling and analysis provisions of the Meat food safety scheme (clause 116) of the Food Regulation 2015.

Table 3.3 Microbiological testing for retail meat premises producing RTE meat and poultry meat products

Product to be tested		Test to be conducted, the limit and frequency			
		<i>E. coli</i>	<i>L. monocytogenes</i> ³²		Environmental & work surface testing for <i>Listeria</i> spp
		Not exceeding 3.6 cfu/g	Not detected in 25 g ³³	Not exceeding 100 cfu/g ³⁴	No positive detection
RTE meat and poultry meat product (excluding UCFM and dried meat)	Sliced or whole packaged RTE meat and poultry meat products (vacuum packed or MAP)	-	Every 10 batches	Every 10 batches	Every month (5 samples collected pre and post operations)
	Whole packaged RTE meat and poultry meat products that receive a validated post pack pasteurisation step ³⁵	-	Every 20 batches	Every 20 batches	-
Uncooked comminuted fermented meat (UCFM) ³⁶	Finished product	Every batch	-	-	-

³² See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

³³ For products that can support the growth of *L. monocytogenes*.

³⁴ For products that cannot support the growth of *L. monocytogenes*.

³⁵ A validated post pack pasteurisation step means that the business has demonstrated to the Food Authority that the time and temperature used (or an equivalent process) provides a minimum of 6-log reduction (99%) of *L. monocytogenes*. Please refer to Appendix 5 for more information.

³⁶ Manufacturers of UCFM must submit a production process pro forma to the Food Authority, which describes all the steps used to make a particular product.

Rendering plant

Clause 76 of the Food Regulation 2015 defines rendering plants as premises where animal by-products are rendered or boiled down. It does not include an abattoir or a knackery.

Sampling and analysis

Licensed rendering plants must comply with the sampling and analysis provisions of the *Meat food safety scheme* (clause 116) of the Food Regulation 2015.

Table 3.4 Microbiological testing for rendering plant

Product to be tested	Test to be conducted, the limit and frequency	
	<i>Salmonella</i>	<i>Clostridium perfringens</i>
	Not detected in 25 g	Not exceeding 10 cfu/g
Rendered animal by-product	<p>Every week</p> <p>From composite sub samples totalling to 250g.</p> <p>The sub samples should be collected on every production day.</p>	<p>Every 12 months or when there is a significant change to process or equipment</p> <p>Each cooker or cooking process must be tested separately.</p> <p>Samples are taken over 10 consecutive days after rendering as specified in the AS5008-2007³⁷</p>

³⁷ AS5008-2007: Hygienic rendering of animal products

Chapter 4 - Plant Products food safety scheme

Clause 120 of the Food Regulation 2015 defines plant product as fresh cut fruit, fresh cut vegetables, vegetables in oil, unpasteurised juice or seed sprouts³⁸.

Clause 124 defines a plant products business as a business involved in the handling of plant products, but only if any of the following activities are carried out:

- the extraction of juice from vegetables or fruits without pasteurising the juice,
- the processing of seed sprouts, fruits or vegetables to produce plant products, including (but not limited to) cutting, peeling, preserving and cooking,
- the storage of plant products,
- the transportation of plant products, or
- the packaging of plant products.

Sampling and analysis

Licensed plant product businesses must comply with the sampling and analysis provisions of the *Plant products food safety scheme* (clause 125) of the Food Regulation 2015.

Table 4.1 Water testing for plant products businesses

Product to be tested		Test to be conducted, the limit and frequency
		<i>E. coli</i>
		Not detected or less than 1 cfu in 100 mL
Non-reticulated water used in connection with the production and processing of plant products	Treated	Every 6 months

³⁸ Definition of seed sprouts: a germinated form of seeds and beans and typically consumed as an entire plant (root, seed and shoot). For example: alfalfa sprouts, onion sprouts, radish sprouts and mung bean sprouts. It does not include plants grown on soil, harvested at the first true leaf stage above the soil line and sold with the stem and leaf (e.g. wheatgrass, snow pea sprouts).

Table 4.2 Microbiological testing for plant products businesses

Product to be tested		Test to be conducted, the limit and frequency				Sampling procedure
		<i>E. coli</i>	<i>L. monocytogenes</i> ³⁹	<i>Salmonella</i>		
		Not exceeding 100 cfu/g	Not detected in 25 g	Not detected in 25 g	Not detected in 100 mL	
SEED SPROUTS	Seed used for sprouting (pre-screening test)	-	-	-	Every delivery batch of seeds	For each shipment, collect a minimum of 25g sample from each bag to make up 3 kg sample. Grow the seed as per normal procedure. After a minimum of 48 hours of seed being grown, collect a total of 1L of irrigation water from all sprouting containers and test it.
	Spent irrigation water used for seed sprouting	-	-	-	Every 10 batches	After a minimum of 48 hours of seed being grown, collect a total of 1L of irrigation water from all sprouting containers and test it.
	Seed sprouts (finished product)	Every 10 batches	-	-	-	Collect 100g sample of any finished single sprout-type from each process line and test it

³⁹ See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

Product to be tested		Test to be conducted, the limit and frequency				Sampling procedure
		<i>E. coli</i>	<i>L. monocytogenes</i> ³⁹	<i>Salmonella</i>		
		Not exceeding 100 cfu/g	Not detected in 25 g	Not detected in 25 g	Not detected in 100 mL	
FRESH CUTS	Fresh cut fruits ⁴⁰	-	Every 10 batches	Every 10 batches	-	-
	Fresh cut vegetables ⁴⁰	-	Every 10 batches	Every 10 batches	-	-
UNPASTEURISED JUICE	Unpasteurised fruit & vegetable juice	-	-	Every 10 batches	-	-

⁴⁰ The Food Authority has assumed these products will support the growth of *L. monocytogenes* (see Appendix 2).

Chapter 5 – Seafood safety scheme

Clause 134 of the Food Regulation 2015 defines seafood business as a business involving in the handling of seafood, including (but not limited to) the carrying on of any of the following activities:

- the cultivating, harvesting or collecting of shellfish,
- the depuration of shellfish,
- the cultivating of spat,
- the processing of seafood, including (but not limited to) skinning, gilling and gutting, filleting, shucking, cooking, smoking, preserving and canning,
- the packaging of seafood,
- the storage of seafood,
- the transportation of seafood, except the transportation of seafood from retail premises to the consumer or in a vehicle from which the seafood will be sold by retail, or
- the wholesaling of seafood.

Sampling and analysis

Licensed seafood businesses must comply with the sampling and analysis provisions of the *Seafood food safety scheme* (clause 139) of the Food Regulation 2015.

Table 5.1 Water testing for seafood processing businesses

Product to be tested		Test to be conducted, the limit and frequency
		<i>E. coli</i>
		Not detected or less than 1 cfu in 100 mL
Non-reticulated water used in connection with the production and processing of seafood	Treated	Every 6 months

Table 5.2 Microbiological testing for seafood processing businesses producing, handling or re-packing RTE products

Product to be tested	Test to be conducted, the limit and frequency			Sampling Procedure
	<i>E. coli</i>	<i>L. monocytogenes</i> ⁴¹		
	Not exceeding 2.3 cfu/g	Not detected in 25 g ⁴²	Not exceeding 100 cfu/g ⁴³	
Opened oysters	Every 20 batches	-	-	Without contaminating it (as per normal opening procedure), transfer the oyster meat into a sterile container (e.g. clean ziplock bag) and send it to the lab.
Packaged oysters (oyster meat packaged in food grade containers with water/brine or vacuum-packed)	Every 20 batches	-	-	Send the finished packaged product.
Sliced or whole packaged cooked and/or smoked seafood (vacuum packed or MAP)	-	Every 10 batches	Every 10 batches	Send the finished packaged product.

Specific requirements

NSW Shellfish Industry Manual

Shellfish businesses should refer to the *NSW Shellfish Industry Manual* for testing requirements for harvested product and environmental testing. The manual is available from the Food Authority's website.

⁴¹ See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

⁴² For products that can support the growth of *L. monocytogenes*.

⁴³ For products that cannot support the growth of *L. monocytogenes*.

Chapter 6 – Vulnerable persons food safety scheme

NSW businesses that serve food to vulnerable persons must meet specific additional food standards set out in the Food Regulation 2015 *Vulnerable persons food safety scheme*. These businesses include hospitals, aged care facilities, same-day aged care services, respite services and certain delivered meal organisations.

Sampling and analysis

Licensed vulnerable persons businesses must comply with the sampling and analysis provisions of the *Vulnerable persons food safety scheme* (clause 161) of the Food Regulation 2015.

Table 6.1 Water testing for vulnerable persons businesses

Product to be tested		Test to be conducted, the limit and frequency
		<i>E. coli</i>
		Not detected or less than 1 cfu in 100 mL
Non-reticulated water used in connection with the production and processing of food for vulnerable persons	Treated	Every 6 months

Specific requirements

Guidelines for food service to vulnerable persons

Further recommendations for licensed vulnerable persons businesses are contained in the *Guidelines for food service to vulnerable persons* available from the Food Authority's website.

Central Processing Unit

A Central Processing Unit (CPU) is an off-site facility where the food business conducts processing of food for service in a vulnerable persons facility listed within Standard 3.3.1. There may or may not be a transport step.

The mandatory microbiological testing for CPU can be found in Table 6.2.

Table 6.2 Microbiological testing for CPU

Product to be tested	Test to be conducted, the limit and frequency				
	Standard Plate Count ⁴⁴	<i>E. coli</i>	<i>L. monocytogenes</i> ⁴⁵		<i>Salmonella</i>
	Not exceeding 10 ⁵ cfu/g	Not exceeding 3 cfu/g	Not detected in 25 g ⁴⁶	Not exceeding 100 cfu/g ⁴⁷	Not detected in 25g
Sliced or whole packaged RTE meat products for consumption without further heat treatment (vacuum packed or MAP products)	-	Every 20 batches	Every 20 batches	Every 20 batches	Every 20 batches
Texture modified foods (post cooking)	-	Every 20 batches	Every 20 batches	Every 20 batches	Every 20 batches
Extended shelf life cook chill foods - tested at the end of the cooking process ⁴⁸ (e.g. cooked using cook tank, oven, kettle cooking, brat pan)	Every 20 batches	-	-	-	-

⁴⁴ Category B for Standard Plate Count applies to ready-to-eat foods that are fully cooked with further handling or processing before consumption (NSW Food Authority's '*Microbiological quality guide for ready-to-eat foods*'). However, the limit in this Manual is more stringent due to the vulnerability of the intended consumers of the food.

⁴⁵ See Appendix 2 for characteristics of food and its ability to support the growth of *L. monocytogenes*.

⁴⁶ For products that can support the growth of *L. monocytogenes*.

⁴⁷ For products that cannot support the growth of *L. monocytogenes*.

⁴⁸ Extended shelf life products are products that have more than 10 days shelf life. They must receive a heat treatment to deliver a minimum of 6 log reduction in non-proteolytic *Clostridium botulinum* (eg. 90°C for 10 minutes or equivalent) and be packaged aseptically. Refer to page 23 of the *Guidelines for food service to vulnerable persons* for further information (http://www.foodauthority.nsw.gov.au/Documents/industry/guidelines_vulnerable_persons.pdf)

