



# Requirements for Food Control Plans and National Programmes

- Self-supply water
- Significant amendments to food control plans
- Requirements for preparing and manufacturing low-acid canned foods
- Processing and handling requirements for national programme operators

25 May 2017

## **TITLE**

Food Notice: Requirements for Food Control Plans and National Programmes

## **COMMENCEMENT**

This Food Notice comes into force on 1 July 2017.

## **REVOCATION**

This Food Notice revokes and replaces the Food Notice: Food Control Plans and National Programmes issued on 15 December 2015.

## **ISSUING AUTHORITY**

This Food Notice is issued under sections 405(3), 406(1)e), 406(1)h), 406(1)i), 406(1)j), and 406(1)m) of the Food Act 2014 having undertaken consultation in accordance with section 380 of the Food Act 2014.

Dated at Wellington this 25<sup>th</sup> day of May 2017.

[signed and dated]

Peter Thomson  
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(acting under delegated authority of the Director-General)

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<b>Contents</b>	<b>Page</b>
<b>Introduction</b>	<b>3</b>
<b>Part 1: Preliminary</b>	<b>5</b>
1.1 Application	5
1.2 Definitions	5
1.3 Transitional provisions	6
1.4 Expiry	6
<b>Part 2: Requirements for self-supply water at places used for food</b>	<b>7</b>
2.1 Requirements for water used in the processing and handling of food	7
2.2 Design and installation of water systems	7
2.3 Requirements for operators using self-supplied water	7
<b>Part 3: Requirements for businesses operating under a food control plan</b>	<b>9</b>
3.1 What constitutes a significant amendment to a food control plan	9
3.2 Requirements for preparing or manufacturing low-acid canned foods	10
<b>Part 4: Requirements for national programme businesses</b>	<b>12</b>
4.1 Receiving, storing or displaying, preparing, or transporting potentially hazardous food	12
4.2 Requirements for national programme businesses carrying out specified processes	15
4.3 Other processes	17
<b>Schedule 1: Other processes</b>	<b>18</b>

## Introduction

This introduction is not part of the notice, but is intended to indicate its general effect.

## Purpose

The purpose of this Notice is to set requirements for businesses required to operate under a food control plan or national programme; and give effect to, or amplify the requirements that have been set in the Food Act 2014 (the Act) and Food Regulations 2015 (the Regulations).

**Part 1** outlines who this Notice applies to, contains a list of definitions for terms used in this Notice, and sets out transition and expiry provisions.

**Part 2** outlines the requirements for all businesses using self-supplied water.

**Part 3** outlines the requirements for businesses:

- operating under a food control plan when making a significant amendment to a food control plan;
- preparing or manufacturing low-acid canned food to make it shelf-stable.

**Part 4 (and Schedule 1 for operators of other processes)** outlines the requirements for operators of businesses under a **national programme** when:

- receiving, storing or displaying, preparing or transporting potentially hazardous food;
- pasteurising, acidifying, fermenting, concentrating and drying products;
- operating other processes.

## Background

The Food Act 2014 sets requirements to achieve the safety and suitability of food for sale, maintain and improve confidence in New Zealand's food safety regime and provide for risk-based measures that minimise and manage risks to public health.

The Act applies to all food business operators trading in food. Most businesses are required to operate under food control plan or a national programme (levels 1, 2 or 3).

## Who should read this Notice?

The following persons should read this Notice:

- food business operators using self-supplied water;
- food businesses operating under a food control plan who want to make a change to their plan;
- food business operators preparing or manufacturing of low-acid canned foods;
- food businesses operating under a national programme who store, display, prepare or transport potentially hazardous foods;
- food businesses operating under a national programme who pasteurise, acidify, ferment, concentrate and dry products;
- food businesses that carry out cold plasma processing, electromagnetic processing; high pressure processing, hydrodynamic processing, ultrasonification;
- Territorial Authorities;
- verifiers;
- evaluators of food control plans.

## Why is this important?

Operators of food businesses are responsible for keeping food safe and suitable, and meeting the requirements set by the Act, Regulations and relevant Food Notices.

It is an offence under the Act for business operators to fail to comply with the relevant parts of this Notice. Failure to comply could result in suspension or cancellation of the registration of the operator's food business.

## Other information

Businesses operating under the Act may also be subject to other relevant requirements under the:

- Animal Products Act 1999, and the relevant Animal Products Act Notices; and
- Wine Act 2003, and the relevant Wine Act Notices.

## Part 1: Preliminary

### 1.1 Application

- (1) Part 2, applies to operators of registered food control plans and operators of food businesses subject to a national programme who use self-supply water for the purpose of processing and handling of food.
- (2) Part 3, clause 3.1 applies to operators of registered food control plans.
- (3) Part 3, clause 3.2 applies to food businesses that prepare or manufacture low acid canned foods.
- (4) Part 4 applies to operators of food businesses subject to national programmes. Specifically:
  - a) clause 4.1 applies to operators of food businesses that are subject to national programmes and that receive, store or display, prepare or transport potentially hazardous food, including operators of vending machines that contain and supply potentially hazardous food;
  - b) clause 4.1.4 only applies to food businesses providing food service to pre-school children (including children under 5 years of age) in a centre based service setting operating under a national programme level 2;
  - c) clause 4.2 applies to operators of food businesses who operate under national programmes and who carry out pasteurisation, acidification or fermentation, concentration or drying; or
  - d) clause 4.3 applies to all operators of food businesses who carry out cold plasma processing, electromagnetic processing; high pressure processing, hydrodynamic processing, or ultrasonification.

### 1.2 Definitions

- (1) In this Notice:

**clean water** means water that meets the criteria set out in Table 1 in Part 2 of this Notice

**finished food product** means a food, whether packaged or not, in the form in which it is intended to be sold

**ISO/IEC 17025** means the international standard AS/NZS ISO/IEC 17025:2005 water - General Requirements for the Competence of Testing and Calibration Laboratories as amended from time to time

**low acid canned food** means any food other than an alcoholic beverage that:

- a) has both a pH value greater than 4.6 and less than 7.0 after heat processing and a water activity greater than 0.85; and
- b) is processed by heat to ensure preservation, whether before or after being sealed in a container

**MPI** means the Ministry for Primary Industries which is the Ministry responsible for administering the Food Act 2014

**operator** means the operator of a food business

**potentially hazardous food** means:

- a) food that meets one of the following criteria:
  - i) the food may contain and will support the growth of harmful microbes; or
  - ii) food that must be kept under temperature control to prevent toxins forming due to microbial growth; or

- b) food that meets one of the criteria in (a) as a result of it being modified or altered or exposed to air (for example, dry custard powder is not potentially hazardous, but becomes potentially hazardous when mixed with milk or water. Or, a can of beef stew is not potentially hazardous, but becomes potentially hazardous after opening)

**ready-to-eat food** means food that can be eaten in the form in which it is sold and that it does not require further preparation, such as washing or rinsing, by the consumer before consumption

**Regulations** means the Food Regulations 2015

**scope of the plan** includes (without limitation):

- a) the type of food to which it applies; and  
b) the nature of the food business or businesses covered by the plan; and  
c) the trading operations under the plan

**self-supply water** means water obtained directly by the operator from sources such as bore water, rainwater, surface water, or ground water. This is distinct from water supplied by a registered drinking water supplier

**thermal processing** means applying the combination of temperature and time required to eliminate a desired number of microorganisms from a food product; and thermally processed has a corresponding meaning

- (2) All terms used in this Part of this Notice and that are defined in the Food Act 2014 (the Act) or Food Regulations 2015, but not defined in this Part of this Notice, have the same meaning as in that Act or Regulations.

### 1.3 Transitional provisions

- (1) An operator subject to a national programme that is registered under section 88 of the Food Act 2014 by 1 July 2017 does not need to comply with the requirements in clause 4.2 or 4.3 of Part 4 until 1 March 2018.

### 1.4 Expiry

- (1) Clause 3.2.2 of Part 3 expires at the end of 30 June 2018.

#### Guidance

- The notice commences on 1 July 2017. However, operators of food businesses that are subject to a national programme and who are registered before 1 July 2017 do not need to comply with clause 4.2 or 4.3 until 1 March 2018.

## Part 2: Requirements for self-supply water at places used for food

### 2.1 Requirements for water used in the processing and handling of food

- (1) The operator must ensure that only clean water is used for the purpose of processing and handling of food, including all the following purposes:
- a) adding to, or use as, food;
  - b) personal hygiene;
  - c) cleaning of surfaces.

### 2.2 Design and installation of water systems

- (1) The operator must ensure that:
- a) the system for carrying water through the place of food business is designed, installed and operated to prevent:
    - i) dead ends (where water does not circulate but remains static), unused pipes and back flow; and
    - ii) contamination of water and cross-connections with water that is not clean water;
  - b) hot water is available, where necessary, to facilitate cleaning and personal hygiene.

### 2.3 Requirements for operators using self-supplied water

- (1) An operator using self-supplied water must ensure that the water does not exceed the criteria specified for each test in Table 1 below.

**Table 1: Testing requirements for self-supply water**

Test	Criteria
<i>E. coli</i>	Less than 1 in any 100ml sample
Turbidity	Must not exceed 5 Nephelometric Turbidity Units (NTU)
Chlorine (when chlorinated)	Minimum of 0.2 mg/l (ppm) free available chlorine with a minimum of 20 minutes contact time
pH (when chlorinated)	6.5 – 8.0

#### Guidance

- Total pathogenic protozoa testing is not expected (the Ministry of Health Drinking-water Standards for New Zealand 2005 (Revised 2008)).

- (2) The operator must determine whether it is reasonably likely that there are chemical hazards in the water supply. The operator must identify and control these hazards to ensure the safety and suitability of the water supply.
- (3) An operator must carry out tests to determine that self-supplied water meets the criteria in Table 1, at the point of use to make:

- a) an initial assessment when a new business, or an existing business, does not have a record of the quality of the self-supplied water; or
  - b) a re-assessment:
    - i) whenever an operator obtains water from a new source; and
    - ii) as soon as practicable, and not later than 1 week of carrying on business operations, after the operator becomes aware of a change to the environment or activities in or around a water source that may affect the safety and suitability of water from that source.
- (4) Tests for *E. coli* must be performed at a laboratory accredited in accordance with ISO/IEC 17025, and either recognised by the Ministry of Health under the Health Act 1956 to perform tests on drinking water supplies, or approved by the Chief Executive under section 291 of the Act.
- (5) If self-supplied water does not meet the requirements set out in clause 2.3(1) – (4), the operator must stop operations that require clean water for the safety or suitability of food until clean water is available at the point of use.
- (6) The operator must keep a record of:
- a) the test results of self-supplied water; and
  - b) the action(s) taken when any test result did not meet the criteria set out in Table 1, including:
    - i) what was done to restore or otherwise provide clean water;
    - ii) the action(s) taken in relation to any food or food contact surfaces that may have become contaminated from unclean water or as a result of persons not having access to clean water.

**Guidance – self-supply and on-site water systems:**

- Information about the assessment of self-supplied water, and the provision, installation and maintenance of filtration and treatment systems is provided in guidance in the [Food Notice: Official Template Food Control Plans for Schedule 1 Food Businesses: Food Service and Food Retail](#)

## Part 3: Requirements for businesses operating under a food control plan

### 3.1 What constitutes a significant amendment to a food control plan

- (1) The following amendments to a food control plan are 'significant amendments' for the purposes of sections 45 and 46 of the Act:
- a) an amendment to the physical address or location of the food business identified in the Plan or, in the case of mobile premises, the nominated home base identified in the Plan;
  - b) any change to the scope of the Plan or the procedures identified in the Plan that may have an effect on the safety and suitability of food traded under that Plan, including:
    - i) major alterations to facilities or equipment; or
    - ii) changes to the nature of the business as a result of the merger of 2 or more food businesses or the reorganisation of one or more food business;
  - c) an amendment to the Plan that has an impact on the safety and suitability of the food, including (without limitation), the hazards and other factors that are reasonably likely to occur or arise;
  - d) adding a new place of food business to a multi-site food control plan.
- (2) Clause 3.1 (1)b) does not include changes made to the scope of the Plan by introducing a type of food or a procedure, or by changing the type of food or a procedure identified in the Plan where either of the following requirements in clause 3.1(2)a) or b) are met:
- a) either:
    - i) the change results in a type of food or procedure that is similar to an existing type of food or procedure identified in the Plan; and
    - ii) the operator has carried out, and documented, an assessment of the hazards and other factors that are reasonably likely to result from the change; and
    - iii) that assessment indicates that there is no significant impact on the safety and suitability of food traded under the Plan; or
    - iv) in the case of a food control plan based on a template issued under section 39 or section 40 of the Act, the new type of food or procedure is covered by another component of the template that can be added to the Plan; or
  - b) in the case of a food control plan based on a template issued under section 39 or section 40 of the Act, the new type of food or procedure is covered by another component of the template that can be added to the plan.

#### Guidance

From the Food Act 2014, S.45:

- If a significant amendment is made to the food control plan, the food business operator must apply to the appropriate registration authority to register the amended food control plan.
- If an amendment is made to the food control plan and it is not a significant amendment, the food business operator must notify the appropriate registration authority of the amendment but does not have to apply to register the amended Plan.

## 3.2 Requirements for preparing or manufacturing low-acid canned foods

### 3.2.1 FCP operators that prepare or manufacturer low acid canned foods

- (1) Clauses 3.2.1(2) – (4) apply to operators that prepare or manufacture low acid canned foods and who operate under a registered food control plan.
- (2) An operator's food control plan must specify that any persons responsible for the day-to-day supervision of thermal processing operations for the thermal processing of low-acid canned food must meet at least one of the following competency requirements:
  - a) Principles of Thermal Process Control, Acidification and Container Closure Evaluation, Massey University, New Zealand;
  - b) Retort supervisors certification course, DWC Food Tech Pty Ltd, Australia;
  - c) New Zealand Retort Supervisors and Process Control School, Food Processing Specialists Pty, Australia;
  - d) any other course that the Chief Executive accepts as equivalent to any one of the courses specified in clauses 3.2.1(2)a) to c).
- (3) The thermal processes for low acid canned food specified in an operator's food control plan must be in accordance with the principles detailed in the current edition of the following Codes of Practice:
  - a) Code of Hygienic Practice for Low and Acidified Low Acid Canned Foods as published by the Codex Alimentarius Commission (CAC/RCP 23-1979); and
  - b) The United States Food and Drug Administration Requirements for Thermally Processed Low-acid foods Packaged in Hermetically Sealed Containers as contained in 21 CFR Part 113, and Acidified Foods as contained in 21 CFR Part 114.
- (4) An operator must ensure that thermal processes for low-acid canned food are developed by, or under the supervision of, a qualified person who meets at least one of the following competency specifications, as appropriate to the nature of the operation:
  - a) Qualified Cannery Persons (Thermal Processing) Course, Western Sydney University (Hawkesbury), Australia;
  - b) Approved Persons Course for thermally processed low-acid foods, DWC FoodTech Pty Ltd and CSIRO, Australia;
  - c) Approved Persons Course for UHT Processing and Aseptic and Packaging, DWC FoodTech Pty Ltd, Australia;
  - d) Introduction to the Fundamentals of Thermal Process Evaluation, Massey University, Palmerston North, New Zealand;
  - e) any other course that the Chief Executive accepts as equivalent to any one of the courses specified in clauses 3.2.1(4)a) – d).

### 3.2.2 Operators transitioning to FCP that prepare or manufacturer low acid canned foods

- (1) Clauses 3.2.2(2) – (5) apply to operators that prepare or manufacture low acid canned foods and who have not transitioned to operate under a registered food control plan. (Note: All manufacturers of commercially sterilised food products must have transitioned by 30 June 2018).
- (2) The following persons involved in the manufacture of low-acid canned food must be supervised:
  - a) a person operating a processing system, retort, aseptic processing and packaging system, and product formulating system; and
  - b) a container closure inspector.
- (3) The supervisor of a person under clause 3.2.2 (2)a) and b) must have attended a school approved by a food safety officer for giving instruction appropriate to the preservation technology used in the manufacture of low-acid food, and have been identified by that school as having satisfactorily completed the prescribed course of instruction.

- (4) The supervisor must only supervise a person in respect of those activities for which the school referred to in clause 3.2.2 (3) recognises the supervisor as having satisfactorily completed training.
- (5) The thermal processes for low acid canned food must be in accordance with the principles detailed in the current edition of the following Codes of Practice referred to in clause 3.2.1(3).

**Guidance**

- Clause 3.2.2 expires at the end of 30 June 2018.

## Part 4: Requirements for national programme businesses

### 4.1 Receiving, storing or displaying, preparing, or transporting potentially hazardous food

#### 4.1.1 Receiving food

- (1) When potentially hazardous food is received by a food business, the operator must ensure all of the following:
  - a) packaging is free from damage and the food is not visibly contaminated;
  - b) the food is not past its use-by date;
  - c) frozen food is frozen solid.
- (2) The operator must not use or sell potentially hazardous food unless when the operator receives the food it is at a temperature :
  - a) of or below 5°C; or
  - b) above 60°C, or
  - c) specified by the manufacturer or supplier of the food.
- (3) The operator must keep a record of occasions when food has not been accepted because it is not at the required temperature.

#### 4.1.2 Storage and display of potentially hazardous foods

- (1) This clause does not apply to freshly cooked potentially hazardous food.

##### Guidance

- The requirements for dealing with freshly cooked potentially hazardous foods are set in clause 4.1.5.
  - a) The operator must ensure that potentially hazardous food is stored or displayed in a way that maintains it in the state specified in clause 4.1.1 (1)c) or at one of the temperatures specified in clause 4.1.1 (2)a) – c).
  - b) Potentially hazardous food that has been stored or displayed at temperatures between 5°C and 60°C for a total of more than 4 hours must not be sold, or used in the processing of food, for human consumption.
  - c) If potentially hazardous food has been stored or displayed at temperatures between 5°C and 60°C for a total 4 hours or less the operator must comply with the requirements in column 2 of the following table during the time period specified in column 1 of that table:

**Table 2: Time limits and action when potentially hazardous food is in the temperature danger**

Total time potentially hazardous food stored or displayed between 5°C and 60°C	What must be done
Less than 2 hours	Refrigerate, use, sell or dispose
Between 2 and 4 hours	Use, sell or dispose

#### 4.1.3 Vending machines

- (1) The operator must ensure that all potentially hazardous food that is to be dispensed from a vending machine is:
  - a) not able to be dispensed after its 'use-by' date; and
  - b) delivered to the vending machine, and stored within the vending machine, at a temperature:

- i) of or below 5°C or of not less than 60°C; or
- ii) at a temperature specified by the manufacturer or supplier of the food.

#### 4.1.4 Cooking and food processing

- (1) This clause only applies to food businesses providing food service to pre-school children (including children under 5 years of age) in a centre based service setting operating under a national programme level 2.
- (2) When processing and handling potentially hazardous food, the operator must ensure that:
  - a) food preparation surfaces are clean and, where necessary, sanitised before use; and
  - b) contamination of ready-to-eat and cooked foods is prevented by:
    - i) using different food contact surfaces and utensils for preparing raw, and ready-to-eat foods or cooked foods; or
    - ii) food contact surfaces and utensils used for preparing both raw, and ready-to-eat foods or cooked foods being thoroughly washed and then sanitised between use; and
  - c) when cooking potentially hazardous food, that the food is thoroughly cooked.
- (3) For poultry, poultry products and liver to be thoroughly cooked as required in clause 4.1.4 (2)c) they must be cooked either:
  - a) for the time and at the temperature specified by the manufacturer or supplier; or
  - b) the internal temperature of the poultry, poultry product or liver in all parts must meet one of the following time and temperature combinations:

**Table 3: Cooking poultry, poultry products, liver and processed meat: time-temperature combinations**

Internal Temperature	Minimum Time to maintain internal temperature
65°C	15 minutes
70°C	3 minutes
75°C	30 seconds

#### Guidance

- It is unnecessary to temperature probe diced or thinly sliced poultry (such as in a stir-fry). This is because smaller pieces are more likely to cook through to the middle more easily and it is difficult to get a representative reading.

- (4) For products made of minced or ground meat, such as meat patties or sausages, to be thoroughly cooked as required in clause 4.1.4 (2)c):
  - a) the meat must reach an internal temperature in accordance with the table in clause 4.1.4(3)b); or
  - b) the meat must reach a temperature in all parts for a time specified by the manufacturer or supplier.
- (5) The operator must keep a record of the cooking temperatures and times achieved when cooking poultry. The record must state all of the following:
  - a) the product;
  - b) the date cooked;
  - c) the temperature the product was cooked to and the time held at this temperature;
  - d) if the product is not thoroughly cooked as required by this Notice, why it happened and what was done with the food.

#### 4.1.5 Handling freshly cooked potentially hazardous food

- (1) Once cooked, potentially hazardous food must be:
  - a) used or sold immediately; or
  - b) held at or above 60°C; or
  - c) cooled in accordance with clause 4.1.5 (2).
- (2) When cooling freshly cooked potentially hazardous food, the operator must:
  - a) protect the food from contamination; and
  - b) cool the food in accordance with the following requirements:
    - i) from 60°C to 21°C within 2 hours; and
    - ii) from 20°C to 5°C within another 4 hours.

##### Guidance

- If the operator wants to use an alternative to the method in clause 4.1.5 (2), the operator must elect to operate under a food control plan. This allows the operator to choose how to manage the risks associated with cooling potentially hazardous food and have that process evaluated as part of registering the food control plan.

- (3) If freshly cooked potentially hazardous food which is being cooled has been at more than 5°C and less than 60°C for more than 6 hours the operator must ensure that it is not sold, or used for processing, for the purposes of human consumption.
- (4) The operator must keep a record of the time it took for freshly cooked potentially hazardous food to meet the temperatures specified in clause 4.1.5(2). The record must state all of the following:
  - a) the food;
  - b) the date the food is cooled;
  - c) the time that it took to cool the food to the temperatures identified in clause 4.1.5(2) above.

#### 4.1.6 Reheating potentially hazardous food

- (1) When reheating potentially hazardous food that has been cooked and cooled, the operator must ensure that the temperature reaches a temperature of at least 75°C in all parts and it is then dealt with in accordance with clause 4.1.2

##### Guidance

- If the operator wants to use an alternative to the method in clause 4.1.6 of this Notice, the operator must elect to operate under a food control plan. This allows the operator to choose how to manage the risks associated with cooling potentially hazardous food and have that process evaluated as part of registering the food control plan.

#### 4.1.7 Transporting potentially hazardous food

- (1) When potentially hazardous food is transported, it must be transported under conditions that ensure that:
  - a) it is delivered at a temperature of below 5°C or at a temperature of above 60°C; or
  - b) it remains frozen if intended to be delivered frozen.
- (2) Irrespective of clause 4.1.7(1), if potentially hazardous food is going to be used or eaten within four hours of being under temperature control it may be transported and delivered at a temperature of between 5°C and 60°C.

## 4.2 Requirements for national programme businesses carrying out specified processes

- (1) An operator who carries out a process specified in column 1 and described in column 2, must ensure that the relevant criteria and requirements in column 3 are met:

**Table 4: Specified processes**

Column 1	Column 2	Column 3
Process	Description of the process	Criteria and requirements
Pasteurisation	A partial-cooking process used for the primary purpose of killing harmful micro-organisms by using specific temperature/time combinations that compromise the desirable characteristics of the food to the least possible extent	(1) The finished food product must have been heated throughout to ensure that all parts of it have been heated: <ol style="list-style-type: none"> <li>a) to a temperature of not less than 75°C for 15 seconds; or</li> <li>b) to a temperature of not less than 72°C for 60 seconds; or</li> <li>c) to a temperature of not less than 71°C for 2 minutes; or</li> <li>d) to a temperature of not less than 69°C for 5 minutes; or</li> <li>e) in accordance with a temperature/time combination for pasteurisation approved by the Chief Executive in clause 4.2(2).</li> </ol>
Acidification or fermentation (other than for the purpose of enhancing flavour, or in relation to an alcoholic beverage or leavening)	<p><b>acidification</b> means a process used for the purpose of controlling harmful micro-organisms by increasing the acidity in a food by adding a substance to lower the pH of the food</p> <p><b>fermentation</b> means a process that increases acidity in a food through a biological action to lower the pH of the food</p>	(1) The finished food product must have: <ol style="list-style-type: none"> <li>a) a pH throughout that must have stabilised at 3.6 or less; or</li> <li>b) both:               <ol style="list-style-type: none"> <li>i) a pH throughout that must have stabilised at between 3.6 and 4.6; and</li> <li>ii) the product must have been subject to a pasteurisation process, or a thorough cooking process.</li> </ol> </li> </ol>
Concentration or drying	<p><b>concentration</b> means a process used for the purpose of controlling harmful micro-organisms by lowering the amount of unbound water in food to reduce water activity</p> <p><b>drying</b> – means an evaporative process used for the purpose of controlling harmful micro-organisms by lowering the amount of unbound water in food to reduce water activity</p>	(1) The water activity throughout the finished food product must be less than 0.85 (0.85 <sub>a<sub>w</sub></sub> .)

Column 1	Column 2	Column 3
Process	Description of the process	Criteria and requirements
Thorough cooking process	A process used for the purpose of killing harmful micro-organisms that would survive pasteurisation, by using specific temperature/time combinations.	<p>(1) The finished food product must have been heated throughout to ensure that all parts of it have been heated:</p> <ul style="list-style-type: none"> <li>a) to a temperature of not less than 75°C for 30 seconds; or</li> <li>b) to a temperature of not less than 73°C for 60; or</li> <li>c) or to a temperature of not less than 70°C for 3 minutes; or</li> <li>d) to a temperature of not less than 68°C for 5 minutes; or</li> <li>e) to a temperature of not less than 65°C for 15 minutes; or</li> <li>f) to a temperature of not less than 63°C for 31 minutes; or</li> <li>g) in accordance with a temperature/time combination for a thorough cooking process approved by the chief executive in clause 4.2(2).</li> </ul>

- (2) The Chief Executive may approve an alternative temperature/time combination for pasteurisation or a thorough cooking process, if satisfied that it achieves an equivalent level of food safety to those listed in the Table to clause 4.2(1).

#### Guidance

- The Regulations require operators to have procedures that:
  - identify where it is essential to prevent or eliminate a hazard, or reduce it to an acceptable level, and
  - set out the criteria that must be met to do this, and
  - the reason for each criteria.
- Table 4 sets out criteria and requirements for operators using specified processes to make food safe under a national programme. The operator may use any processing method, provided the criteria in column 3 of Table 4, are met. MPI also provides a list of equivalent thermal processing criteria for pasteurising at [www.mpi.govt.nz](http://www.mpi.govt.nz). Note: an operator who wants to make commercially sterilised canned, bottled, or aseptically packaged food products will need a food control plan.
- If an operator wants to use alternative criteria to those described for a process in column 3 of Table 4, the operator may elect to operate under a registered food control plan. This allows the operator to choose how to manage the risks associated with the process and have that process evaluated as part of registering the food control plan.
- For example, the manufacturer of a fermented kombucha drink decides to market a product with a pH of 4.2. The operator may either:
  - keep the pH at 4.2 and pasteurise or thoroughly cook the product; or
  - modify their process to lower the pH of the finished product to 3.6 or below; or
  - elect to operate under a food control plan and show how they make a safe product using their own criteria.

### 4.3 Other processes

- (1) An operator must not, for the purpose of controlling microbiological hazards to ensure the safety of a food, carry out a process, under a national programme, listed in the Table in Schedule 1.

**Guidance**

- An operator who wishes to carry out the restricted processes in Schedule 1 may elect to do so by operating under a registered food control plan.
- Electing to operate under a registered food control plan allows the operator to explain how they will identify and manage the risks associated with the process and have that process evaluated as part of the registration process.

## Schedule 1: Other processes

Other process	Definition
Cold plasma processing	A process that uses partially ionised cold gasses to disinfect surfaces, food and packaging.
Electromagnetic (pulsed electric field, radio frequency, ultraviolet processing etc.) processing	A process that uses non-convective non-ionising radiation sources to specifically inactivate microorganisms.
High pressure processing	A technique by which food products are subjected to a high level of isostatic pressure transmitted by water to inactivate pathogenic microorganisms.
Hydrodynamic processing	A process that uses hydrodynamic cavitation to inactivate microorganisms.
Ultrasonification	A process that uses high intensity soundwaves (ultrasound) alone, or in conjunction with thermal processing, to inactivate microorganisms.