

STANDARD 4.2.4
PRIMARY PRODUCTION AND PROCESSING STANDARD FOR
DAIRY PRODUCTS

(Australia only)

Purpose and commentary

This Standard sets out a number of food safety requirements, including the implementation of documented food safety programs for dairy primary production, collection, transportation and processing. However, this Standard does not apply to retail sale activities. Chapter 3 of this Code covers retail sale activities.

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Clauses

Division 1 – Preliminary

1 Interpretation

(1) Unless the contrary intention appears, the definitions in Chapters 2 and 3 of this Code apply to this Standard.

(2) In this Standard –

Authority means the State, Territory or Commonwealth government agency or agencies having the legal authority to implement and enforce this Standard.

control measure means a measure that prevents, eliminates or reduces to an acceptable level, a food safety hazard.

dairy primary production means the production of milk or colostrum for further processing for human consumption and includes the keeping, grazing, feeding and milking of animals and the storage of milk on the premises at which the animals were milked.

dairy primary production business means a business, enterprise or activity that involves dairy primary production.

dairy processing includes the manufacture of dairy products.

dairy processing business means a business, enterprise or activity that involves dairy processing.

dairy products include –

- (a) milk; and
- (b) colostrum; and
- (c) liquid milk products; and
- (d) cream and thickened cream; and
- (e) butter, butter concentrate, buttermilk, concentrated buttermilk, dairy blend, ghee, and anhydrous milk fat (butter oil); and
- (f) casein, caseinate, and cheese; and
- (g) whey, whey cream and concentrated whey cream; and
- (h) cultured milk and yoghurt; and
- (i) ice-cream and ice-cream mix; and
- (j) buttermilk powder, lactose powder, milk sugar, powdered milk, skim milk powder, whey powder, milk protein powder and other milk concentrates.

dairy transport business means a business, enterprise or activity involving the collection and transport of milk from the dairy primary production business to the processing business or the transport of bulk milk or dairy products between dairy processors.

inputs includes any feed, water and chemicals, including agricultural and veterinary chemicals, used in connection with the primary production of milk or colostrum.

2 Application

- (1) Deleted
- (2) This Standard does not apply in New Zealand.
- (3) This Standard does not apply to retail sale activities.

Division 2 – Dairy primary production requirements

3 Controlling food safety hazards

A dairy primary production business must control its potential food safety hazards by implementing a documented food safety program.

4 Specific requirements

- (1) For clause 3, the control measures must manage the hazards arising from –
 - (a) inputs; and
 - (b) the design, construction, maintenance and operation of premises and equipment; and
 - (c) milking animals; and

- (d) persons involved in milking; and
- (e) milking practices.

(2) For clause 3, the control measures must also –

- (a) include support programs that ensure that premises and equipment are clean and sanitary and that pests are controlled; and
- (b) ensure that milk is cooled and stored at a temperature that prevents or reduces the growth of microbiological hazards in the milk; and
- (c) ensure that milk for human consumption is only sourced from healthy animals.

5 Tracing

As part of the documented food safety program in clause 3, a dairy primary production business must have a system that enables the tracing of –

- (a) inputs; and
- (b) animals to be milked; and
- (c) the milk produced.

6 Skills and knowledge

A dairy primary production business must ensure that persons undertaking primary production activities have skills and knowledge of food safety and hygiene matters commensurate with their work activities.

Division 3 – Dairy collection and transportation

7 Controlling food safety hazards

A dairy transport business must control its potential food safety hazards by implementing a documented food safety program.

8 Specific requirements

For clause 7, the control measures must manage hazards arising from –

- (a) transport vehicles, equipment and containers used in the collection and transport of the milk or dairy product; and
- (b) persons engaged in the dairy transport business;

and must include a support program that ensures that the food contact surfaces of transport vehicles, and equipment and containers used in collecting and transporting of the dairy products are clean and sanitary.

9 Product tracing

As part of the documented food safety program in clause 7, a dairy transport business must have a system to identify the immediate supplier and immediate recipient of the dairy product.

10 Time and temperature controls

A dairy transport business must transport dairy products using time and temperature controls that prevent or reduce the growth of microbiological hazards in the product.

11 Skills and knowledge

A dairy transport business must ensure that persons undertaking milk or dairy product collection and transport activities have skills and knowledge of food safety and hygiene matters commensurate with their work activities.

Division 4 – Dairy processing

12 Application

To avoid doubt, Standards 3.2.2 and 3.2.3 apply to the processing of dairy products.

13 Controlling food safety hazards

A dairy processing business must control its potential food safety hazards by implementing a documented food safety program.

14 Product tracing

As part of the documented food safety program in clause 13, a dairy processing business must have a system to identify the immediate supplier of dairy products and ingredients and the immediate recipient of the dairy products.

15 Processing of milk and dairy products

- (1) Milk must be pasteurised by –
- (a) heating to a temperature of no less than 72°C and retaining at such temperature for no less than 15 seconds; or
 - (b) heating, using any other time and temperature combination of equivalent or greater lethal effect on any pathogenic microorganisms in the milk; or
 - (c) using any other process that provides an equivalent or greater lethal effect on any pathogenic microorganisms;

unless an applicable law of a State or Territory otherwise expressly provides.

Editorial note:

For paragraph 15(1)(c), any other process used would need to be validated by the business and verified by the Authority.

The provision concerning an applicable law of a State or Territory is a temporary one and will be reviewed by FSANZ under another proposal.

- (2) Milk processed under paragraph 15(1)(a) must be cooled immediately in a way that ensures that the growth of microbiological hazards in the milk is prevented or reduced.
- (3) Dairy products, other than cheese and cheese products, must be processed using –
- (a) a heat treatment that uses a combination of time and temperature of equal or greater lethal effect on any pathogenic microorganisms in the milk product achieved by paragraphs 15(1)(a) or 15(1)(b); or
 - (b) using any other process that provides an equivalent or greater lethal effect on any pathogenic microorganisms.

Editorial note:

For paragraph 15(3)(b), any other process used would need to be validated by the business and verified by the Authority.

(4) Dairy products processed under paragraph 15(3)(a) must be cooled immediately in a way that ensures that the growth of microbiological hazards in the product is prevented or reduced.

(5) To avoid doubt, subclause 15(3) does not apply to the processing of dairy products that have been made using milk already processed in accordance with subclause 15(1).

Editorial note:

Dairy products may have a greater fat or solids content compared to milk and therefore require a greater time and temperature treatment to achieve an equivalent level of bacterial reduction. Information on equivalent heat treatments to pasteurisation for these products is provided in the 'Interpretive Guide' to this Standard.

16 Processing of dairy products to make cheese and cheese products

- (1) Milk used to make cheese or cheese products must be processed –
- (a) in accordance with subclause 15(1); or
 - (b) by being held at a temperature of no less than 64.5°C for a period of no less than 16 seconds, and the cheese or cheese product stored at a temperature of no less than 7°C for a period of no less than 90 days from the date of processing.
- (2) Dairy products used to make cheese or cheese products must be processed –
- (a) in accordance with subclause 15(3); or
 - (b) using a heat treatment that uses a combination of time and temperature of equal or greater lethal effect on any pathogenic micro-organisms in the dairy product achieved by paragraph 16(1)(b).
- (3) However, milk or dairy products used to make cheese or cheese products do not need to be processed in accordance with subclauses 16(1) and 16(2) if the cheese or cheese product is processed –
- (a) such that –
 - (i) the curd is heated to a temperature of no less than 48°C; and
 - (ii) the cheese or cheese product has a moisture content of less than 39%, after being stored at a temperature of no less than 10°C for a period of no less than 120 days from the date of processing; or
 - (b) in accordance with clause 1 of Standard 4.2.4A.

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