

# FBPCHE5004 Produce acid and heat coagulated cheese

Release: 1

## FBPCHE5004 Produce acid and heat coagulated cheese

## **Modification History**

| Release   | Comments   |  |
|-----------|--|--|
| Release 1 | This version released with the FBP Food, Beverage and Pharmaceutical Training Package Version 2.0. |  |

## **Application**

This unit of competency describes the skills and knowledge required to produce a range of acid and heat coagulated cheeses to a commercial standard.

This unit applies to individuals employed as managers with responsibility for overseeing and developing operational procedures complying with workplace health and safety, food safety, recordkeeping and quality assurance requirements for the acid and heat coagulated cheese making process.

No occupational licensing or certification requirements apply to this unit at the time of publication. However, legislative and regulatory requirements for food processing exist, so local requirements must be checked. All work must comply with Australian food safety standards and relevant codes of practice.

## **Pre-requisite Unit**

Nil

#### **Unit Sector**

Cheese (CHE)

#### **Elements and Performance Criteria**

| Elements  | Performance Criteria   |  |
|---|--|--|
| Elements describe the essential outcomes.                     | Performance criteria describe the performance needed to demonstrate achievement of the element.  |  |
| Maintain sanitation in making acid and heat coagulated cheese | 1.1 Ensure all surfaces are clean and sanitised except for curing boards 1.2 Supervise stringent hygiene and quarantine procedures 1.3 Apply multi-phase cleaning systems to ensure sanitised surfaces and equipment |  |
|   | 1.4 Record food safety related information, including milk counts and  |  |

Approved Page 2 of 5

| Elements  | Performance Criteria  |  |  |  |
|---|---|--|--|--|
| Elements describe the essential outcomes.   | Performance criteria describe the performance needed to demonstrate achievement of the element.   |  |  |  |
|   | cheese bacterial counts   |  |  |  |
| 2. Implement procedures to prepare whey, milk/whey blends or cream for artisan acid and heat coagulated cheese making | 2.1 Measure and analyse composition and counts in raw milk samples 2.2 Implement standard procedures for preparing raw milk 2.3 Ensure the whey is heated to prevent further acidification according to recipe 2.4 Maintain raw milk in an area separate from pasteurised milk operations |  |  |  |
| 3. Promote coagulation of both curds and whey   | 3.1 Raise the temperature of dairy liquid to temperature specified in recipe 3.2 Acidify the hot liquid to coagulate both casein and whey proteins according to recipe  |  |  |  |
|   | 3.3 Hold the curd in the curd and whey mixture after coagulation  |  |  |  |
|   | 3.4 Maintain a log of pH and temperature to monitor yield   |  |  |  |
|   | 3.5 Carry out draining  |  |  |  |
| 4. Manage cooking and packaging procedures for acid and heat coagulated cheeses                                       | <ul><li>4.1 Plan the cooking schedule to ensure optimal coagulation of proteins</li><li>4.2 Implement draining procedures to ensure cheese is at required</li></ul>   |  |  |  |
|   | consistency 4.3 Apply salting treatments to ensure salt profile effects are minimised in the finished product   |  |  |  |
|   | 4.4 Cool cheeses before packing according to cooking and packaging procedures   |  |  |  |
|   | 4.5 Maintain aseptic conditions during cooling to minimise contamination with microbial contaminants  |  |  |  |
|   | 4.6 Apply packaging appropriate for acid and heat coagulated cooked cheeses   |  |  |  |
|   | 4.7 Label the product with complete and accurate information as specified by legislation  |  |  |  |
| 5. Monitor and adjust process control to produce cheese with consistent taste and quality                             | 5.1 Establish the process objectives of acid and heat coagulated cooked cheese making   |  |  |  |
|   | 5.2 Control the texture of the cheese by regulating pH and fat  |  |  |  |
|   | 5.3 Control cheese flavour through choice of ingredients, such as whey, milk, cream, acidulant and salt   |  |  |  |

Approved Page 3 of 5

| Elements   | Performance Criteria  |  |  |
|--|---|--|--|
| Elements describe the essential outcomes.  | Performance criteria describe the performance needed to demonstrate achievement of the element.   |  |  |
|  | 5.4 Establish process control parameters to optimise yield  |  |  |
| 6. Carry out sensory<br>analysis and grading of<br>acid and heat coagulated<br>cheeses | 6.1 Assess cheeses for evenness of texture, colour, finish and flavour 6.2 Grade cheeses according to texture, colour, finish and flavour 6.3 Analyse organoleptic properties of acid and heat coagulated cooked cheese to identify possible changes to process controls  |  |  |
| 7. Meet workplace requirements for food safety, quality and environmental management   | <ul> <li>7.1 Record food safety related information</li> <li>7.2 Maintain records of cheese manufacture</li> <li>7.3 Implement workplace health and safety and environmental protection procedures through a risk management approach</li> <li>7.4 Implement food safety standards</li> <li>7.5 Dispose of waste and review environmental impacts of the cheese making operation</li> </ul> |  |  |

### **Foundation Skills**

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

| Skill                      | Description  |  |
|----------------------------|--|--|
| Reading                    | Interpret recipes and specifications from a variety of sources to consolidate information for cheese production  |  |
| Numeracy                   | <ul> <li>Weigh and measure ingredients for cheese making</li> <li>Test cheese to analyse pH, moisture and salts</li> <li>Accurately weigh and measure ingredients for cheese making</li> </ul> |  |
| Navigate the world of work | Follow policies, procedures and legislative requirements for cheese making process   |  |

Approved Page 4 of 5

# **Unit Mapping Information**

| Code and title current version                     | Code and title previous version                        | Comments  | Equivalence status |
|--|--|---|--------------------|
| FBPCHE5004 Produce acid and heat coagulated cheese | FDFCH4004A<br>Produce acid - heat<br>coagulated cheese | Updated to meet Standards for Training Packages   | Equivalent unit    |
|  |  | Unit code updated to reflect AQF level Minor changes to Performance Criteria to clarify the intent  Minor change to title |                    |

#### Links

Companion Volume Implementation Guides are found in VETNet: - <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</a>

Approved Page 5 of 5