MTMPS414B Monitor and overview the production of Uncooked Comminuted Fermented Meat (UCFM)

MTMPS414B Monitor and overview the production of Uncooked Comminuted Fermented Meat (UCFM)

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the skills and knowledge required to understand and manage the production processes of Uncooked Comminuted Fermented Meat (UCFM).
	This unit relates to the Australia New Zealand Food Standards Code, Standard 3.2.2 Food Safety Practices and General Requirements, Clause 3 Food handling - skills and knowledge, which states: 'A food business must ensure that persons undertaking or supervising food handling operations have: (a) skills in food safety and food hygiene matters; and (b) knowledge of food safety and food hygiene matters, commensurate with their work activities.' (Page 3)

Application of the Unit

Application of the unit	This unit is applicable to personnel responsible for the outcomes of the production processes of UCFM in a smallgoods processing operation.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
	MTMCOR202A	Apply hygiene and sanitation practices

Prerequisite units		
	MTMCOR404A	Facilitate hygiene and sanitation performance

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify microbiological hazards for **UCFM products**	1.1. Types of **micro-organisms** are identified. 1.2. **Major threats** to UCFM products are identified. 1.3. Types of bacteria causing food poisoning and spoilage are identified. 1.4. Effects of bacterial contamination for food poisoning (i.e. impact on people) and food spoilage (i.e. shelf life) are identified. 1.5. Sources of bacterial contamination are identified. 1.6. Growth characteristics and requirements of bacteria are identified.
2. Identify chemical hazards for UCFM products	2.1. Chemical hazards which may affect UCFM products are identified. 2.2. **Common sources of chemical hazards/contamination** are identified. 2.3. Control methods which prevent chemical contamination locally and relevant national programs (e.g. residue testing) are explained. 2.4. Impact of chemical residues on meat (e.g. poisoning, tainting, rejections) is explained.
3. Identify physical hazards for UCFM products	3.1. Physical hazards which may affect meat are explained. 3.2. Common sources of physical hazards and/or contamination are identified. 3.3. Control methods to prevent contamination are explained. 3.4. Effects or impact of physical hazards on meat are explained.
4. Overview the production of UCFM products	4.1. Range of UCFM products is identified and explained. 4.2. Processing techniques involved in production of UCFM are identified and explained. 4.3. Hygiene and food safety hazards associated with the production of UCFM products are identified and explained. 4.4. **Regulatory requirements** associated with the production of UCFM products are identified and explained.
5. Monitor the preparation of processing **equipment** and areas	5.1. Procedures for pre-operational equipment checks are identified in accordance with workplace policies and procedures, and manufacturer's instructions. 5.2. Pre-operational checks and procedures carried out in accordance with workplace, food safety and

ELEMENT	PERFORMANCE CRITERIA
	regulatory requirements are monitored.
6. Manage the production of UCFM and further processed products	6.1. **Ingredients** are identified by type, quality and safety according to product specifications and their function in the process is explained (including starter culture). 6.2. Types of meat, by-product, stock, additive, binder and spices selected are identified according to the formulation specifications and regulatory requirements. 6.3. Handling requirements for ingredients (including starter culture) to prevent food safety hazards are demonstrated to ensure product quality and safety. 6.4. Relevant processing equipment is identified and operating procedures are explained according to manufacturer and workplace specifications. 6.5. Relevant time, temperature and humidity requirements for fermentation, maturation and monitoring are described in accordance with product specifications, regulatory requirements and industry guidelines. 6.6. Relevant consistency, appearance, texture and monitoring requirements are described in accordance with product specifications and regulatory requirements. 6.7. Procedures for rejection, reprocessing and/or recall for products which do not meet specifications or hygiene and sanitation requirements are identified and assessed against regulatory requirements and industry guidelines. 6.8. Relevant processing area hygiene and sanitation requirements are identified and monitored as specified in workplace procedures and regulatory requirements.
7. Overview the implementation of the Approved Hazard Analysis Critical Control Point (HACCP) plan for the production of UCFM products	7.1. Critical Control Points (CCPs) and control points for prevention and control of bacterial contamination (e.g. process controls and systems) are identified. 7.2. Control methods to prevent microbiological contamination are explained and implemented. 7.3. Critical limits for CCPs are identified and monitoring processes are implemented. 7.4. Validation requirements for critical limits of HACCP programs are described. 7.5. Documented procedures are implemented which ensure any CCPs which are out of control are brought back into control and affected product is suitably handled.

ELEMENT	PERFORMANCE CRITERIA
	7.6. Documented procedures are implemented to ensure the whole HACCP system is regularly audited and verified as working effectively. 7.7. All documents and *records* required for the system are kept available, up-to-date and in use.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- apply relevant *communication* and *mathematical skills*
- maintain currency of knowledge and techniques through informal learning, regular professional development and personal research such as by using the web, industry journals, circulars from regulators and industry workshops
- work effectively as an individual and as a team member
- demonstrate initiative and creativity in proposing solutions and contributing to the development of appropriate actions to resolve problems
- identify and apply relevant Occupational Health and Safety (*OH&S*) and *workplace requirements*
- monitor production of UCFM to ensure compliance with workplace and regulatory requirements
- provide relevant information to work colleagues to facilitate understanding of, and compliance with the Australian Standards and associated regulations
- take action to improve own work practice as a result of self-evaluation, feedback from others, or changed work practices, regulations or technology
- use technology to access information, prepare reports, and to access and prepare relevant data

Required knowledge

Knowledge of:

- process involved in manufacturing UCFM
- purpose of fermentation
- raw materials storage and selection
- fermentation control criteria for pH
- fermentation speed control

REQUIRED SKILLS AND KNOWLEDGE

- purpose of maturation and drying
- maturation and drying speed control
- impact of the raw material on product quality and food safety
- water activity as a release criteria
- microbiological criteria in UCFM production and microbiological limits of UCFM, particularly the following significant microbial pathogens: enterohaemorrhagic Escherichia coli, Salmonella, enterotoxin of Staphylococcus aureus and Listeria monocytogenes
- physical hazards for UCFM products
- role of starter culture
- storage and handling requirements for starter culture
- product handling and release criteria
- impact of critical limits in a HACCP program for UCFM production
- procedures required to ensure the product is fit for human consumption and meets regulatory, food safety and quality requirements
- implementation of the HACCP plan for the production of UCFM products

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Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	The meat industry has specific and clear requirements for evidence. A minimum of three forms of evidence is required to demonstrate competency in the meat industry. This is specifically designed to provide evidence that covers the demonstration in the workplace of all aspects of competency over time. These requirements are in addition to the requirements for valid, current, authentic and sufficient evidence. Three forms of evidence means three different kinds of evidence - not three pieces of the same kind. In practice it will mean that most of the unit is covered twice. This increases the legitimacy of the evidence. All assessment must be conducted against Australian meat industry standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Competency must be demonstrated through sustained performance over time, with an appropriate level of responsibility and authority under typical operating and production conditions for the enterprise.
Context of and specific resources for assessment	Resources may include • relevant documentation such as: • manufacturer's instructions and operation manuals • regulatory requirements • workplace policy and procedures • workplace environment.
Method of assessment	Recommended methods of assessment include: • assignment focusing on understanding and application of principles and theory to workplace operations • third-party referee report of sustained performance at appropriate level of authority and responsibility • workplace project with a focus on enterprise environment and conditions.

EVIDENCE GUIDE	
	Assessment practices should take into account any relevant language or cultural issues related to Aboriginality or Torres Strait Islander, gender, or language backgrounds other than English. Language and literacy demands of the assessment task should not be higher than those of the work role.

EVIDENCE GUIDE	
Guidance information for assessment	A current list of resources for this Unit of Competency is available from MINTRAC www.mintrac.com.au or telephone 1800 817 462.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
UCFM products may include	- caccitora - chorizo - csabai - landjaeger - Lebanon Bologne - mettwurst - polnische - salami - some cabanossi - summer sausage - Teewurst, and others.
Micro-organisms may include:	- bacteria - mould - virus - yeast.
Major threats may include:	- bacteria - relevant yeast or moulds.
Common sources of chemical hazards/***contamination*** may include:	- agricultural residue - cleaning - veterinarian chemical residues.
Regulatory requirements may include:	- Export Control Act - Export Meat Orders (EMOs) - hygiene and sanitation requirements - importing country requirements where

RANGE STATEMENT	
	appropriate • relevant domestic requirements • relevant regulations and Australian Standards • AS 4696:2007 Australian Standard for the hygienic production and transportation of meat and meat products for human consumption • federal, state and territory regulations regarding meat processing.

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RANGE STATEMENT	
Equipment may include:	• blenders • choppers • cooking utensils • dryers • fermentation environment • injectors • knives • machine or vat • mixers • pressure cookers • sausage machine • silent or bowl cutter • smokehouse • tables, conveyors, platforms • tumblers.
Ingredients may include:	• additives • binders • by-products and other relevant materials • fats • meats • Nitrate • Nitrite • spices • starter cultures • water.
Recording and monitoring systems may be:	• electronic • manual.
Communication skills may include:	• communicating with people from a range of cultural, social and ethnic backgrounds • preparing oral or written reports which include information from a range of sources • reading and interpreting workplace documentation, such as audit reports, monitoring data, specifications and status reports • speaking clearly and directly • listening and understanding • preparing documentation for a specified audience • using negotiation and persuasion skills, and

RANGE STATEMENT	
	being appropriately assertive • using technical workplace and mathematical language and data • sharing of information.
Mathematical skills may include:	• identifying acceptable limits, tolerances, out-of-specification performance, trends • collection, estimation, calculation and interpretation of deviations within cycle, internal temperature, humidity, ambient temperature, weights • measurement and interpretation in relation to time, temperature, moisture humidity, ratios, percentages, weight, mass, volume.

OH&S requirements may include:	• enterprise OH&S policies, procedures and programs
	• OH&S legal requirements
	• Personal Protective equipment (PPE) which may include:
	   • coats and aprons
	   • ear plugs or muffs
	   • eye and facial protection
	   • head-wear
	   • lifting assistance
	   • mesh aprons
	   • protective boot covers
	   • protective hand and arm covering
	   • protective head and hair covering
	   • uniforms
	   • waterproof clothing
	   • work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.

Workplace requirements may include:	• enterprise-specific requirements • OH&S requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.

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Unit Sector(s)

Unit sector	

Co-requisite units

Co-requisite units		

Competency field

Competency field	