



Australian Government

Department of Education, Employment and Workplace Relations

FDFAU4006A Audit a cook chill process

Revision Number: 1

FDFAU4006A Audit a cook chill process

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to support a food safety audit of food safety programs that include extended life cook chill processes.
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Application of the Unit

Application of the unit	This unit applies to the role of a food safety auditor responsible for auditing extended and short shelf-life cook chill processes. Audit processes would typically occur within the context of auditing a HACCP-based food safety program that defines related prerequisite program requirements. This unit applies to cook chill products which are minimally heat-processed foods distributed as chilled products with defined shelf-life. It supports relevant legislation, such as food standards contained in the Food Standards Code and industry codes of practice relating to the validation and verification of a HACCP-based food safety program, and should be read in conjunction with these documents. Both regulatory and commercial audit system owners may specify additional certification requirements of auditors eligible to audit food safety programs within their system.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFAU4002A	Communicate and negotiate to conduct food safety audits
	FDFAU4003A	Conduct food safety audits
	FDFAU4004A	Identify, evaluate and control food safety hazards

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify and assess food safety hazards and related control options for cook chill processes	1.1. Microbiological food safety hazards that could present a risk in cook chill products at the point of consumption are identified by type, origin and food association and assessed to determine the significance of the hazard 1.2. Chemical food safety hazards that could present a risk in cook chill products at the point of consumption, including toxin presence, are identified by type and food association and assessed to determine risk level and control requirements 1.3. Physical food safety hazards that could present a risk in the food at the point of consumption are identified and assessed to determine risk level and control requirements 1.4. Cook chill process control requirements and methods are identified to ensure that finished, cook chill products meet food safety objectives
2. Confirm that appropriate evidence supports validation of the cook chill process	2.1. Validation evidence and records are reviewed to confirm that appropriate level of validation has occurred 2.2. Evidence used by the business to validate the process is identified and assessed to confirm that it is credible and adequate to achieve the food safety objective
3. Verify the food safety program for a cook chill process	3.1. System records required to support verification are identified, collected and reviewed 3.2. Business documentation is reviewed and inspections are conducted to confirm that facilities and equipment design and components comply with regulatory and business standards 3.3. Business documentation is reviewed and inspections are conducted to confirm that operational monitoring and testing procedures and frequency meet regulatory requirements, and industry and business standards

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Ability to:

- interpret and apply relevant legislation, standards, codes of practice and technical specifications relating to heat treatment of foods in a cook chill process
- identify target micro-organisms to be controlled by a cook chill process according to food type and cold chain capacity
- inspect extended and short shelf-life cook chill plant and equipment to confirm that regulatory, industry and business standards are met
- apply principles of heat treatment and chilling to assess suitability of extended and short shelf-life cook chill processes to ensure food safety objectives are achieved
- review workplace records, including results of process monitoring and documentation of corrective actions to verify that the food safety program relating to cook chill processes is being implemented according to the prescribed process
- review evidence used to validate the food safety control process
- confirm methods and evidence used to test the reliability of cook chill processes

Required knowledge

Knowledge of:

- regulations, codes of practice, guidelines, technical standards and Australian standards relating to all forms of cook chill processing of foods
- target organisms that can occur in extended and short shelf-life cook chill foods, their survival and growth characteristics and related control methods
- principles of heat treatment and chilling as they apply to extended and short shelf-life cook chill processing methods and product types
- criteria used to specify heat treatment, cooling, storage and shelf-life parameters for extended and short shelf-life cook chill products
- factors that impact on heat and chilling processes meeting food safety objective
- prerequisite programs required to support effectiveness of cook chill processes
- operational principles of commercial extended and short shelf-life cook chill equipment, including equipment features required to meet regulatory requirements and critical factors to be controlled to ensure delivery of heating and chilling processes that meet food safety objective
- features of the environment in which cook chill foods are distributed, including risk factors
- foods and preparation methods that present a particular risk to vulnerable populations, including cross-contamination risks associated with multi-tasking and cold chain maintaining temperatures during storage, transport and distribution
- principles of packaging to form a suitable seal and impact of processing parameters

REQUIRED SKILLS AND KNOWLEDGE

- and conditions on packaging integrity
- effect of characteristics and pre-processing of raw materials and post-process packaging on the stability and safety of the product
- labelling requirements for extended and short shelf-life cook chill products
- food safety risks and controls to avoid post-process contamination of heat-treated product
- principles of test methods and frequency to confirm the effectiveness of cook chill processes and meet regulatory, industry and business standards

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

A person who demonstrates competence in this unit must be able to provide evidence that they can verify cook chill processes for a range of foods to meet regulatory, industry and business standards. They must also demonstrate capacity to confirm that appropriate validation has occurred.

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competency in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify target organisms for a range of foods
- determine capacity of distribution chain to control temperature parameters
- determine requirements of specific extended and short shelf-life cook chill methods for a range of products
- participate in audits of HACCP-based food safety programs to demonstrate ability and knowledge of technical aspects of extended and short shelf-life cook chill processes - audit scenarios must include:
 - a five-day cook chill process
 - a kettle or cook tank cook chill process
 - a sous vide cook chill process.

For given scenarios where prescribed cook chill processing requirements are not met, assess adequacy of evidence used to determine response procedures.

Context of and specific resources for assessment

Competency may be assessed in an actual workplace or simulated environment that provides access to the required resources.

Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints.

The following resources should be made available:

EVIDENCE GUIDE	
	• food safety programs covering extended and short shelf-life cook chill processes • food safety-related documentation typical of commercial businesses producing extended and short shelf-life cook chill products and used for the purpose of verification • evidence or documentation relevant to extended and short shelf-life cook chill processes that would typically be used by commercial businesses producing extended and short shelf-life cook chill products to support validation processes • plant and equipment that would typically be used by commercial businesses producing extended and short shelf-life cook chill products.
Method of assessment	This unit only covers the technical skills and knowledge related to the specific area of risk. Generic food safety auditing skills and knowledge are covered in prerequisite units. While participation in audit processes should follow good auditing practice as specified by prerequisite units, formal assessment of generic food safety auditing competence does not need to be repeated when assessing this unit. The following assessment methods should be considered to gather sufficient and valid evidence of competency: • observation and a report covering the audits specified in this • oral and written questioning to test the level and application of knowledge relevant to identifying target organisms for a range of foods, determining capacity of distribution chain to control temperature parameters and determining requirements of specific extended and short shelf-life cook chill methods for a range of products • workplace example or scenario to allow verification of records for food safety to be demonstrated. Audits conducted for the purpose of assessment must be witnessed by an auditor competent to audit extended and short shelf-life cook chill processes.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where

EVIDENCE GUIDE

possible, over a number of assessment activities.

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.

Cook chill products

Cook chill products may include:

- long shelf-life refrigerated foods
- short shelf-life refrigerated foods
- heat-treated refrigerated foods (HTRF) packed for extended shelf-life
- refrigerated processed foods of extended durability (REPFED)
- sous vide foods

Physical food safety hazards

Physical food safety hazards include an understanding of physical standards that may present particular risks to vulnerable populations either due to the nature of the food, the preparation method and/or the preparation environment

Validation

Validation refers to obtaining evidence to confirm that a HACCP-based food safety program is complete and effective and will deliver the expected food safety outcomes

Validation evidence

Validation evidence confirms that control measures are capable of being consistently effective and may include the application of:

- existing Australian legislative requirements
- challenge tests
- peer reviewed scientific papers
- targeted scientific reports
- validation already carried out in other jurisdictions and recognised by the responsible authority
- mathematical modelling (e.g. predictive microbiology models)
- industry codes of practice (where implementation by food business is verified)

RANGE STATEMENT	
	during audits)
Verification	Verification refers to methods and procedures used to carry out monitoring, including sampling and testing to provide evidence that the specifications set by relevant legislation and codes of practice continue to be met
Equipment	Equipment includes: • cook tanks • self-stirring kettles • combi ovens • re-thermalisation cabinets • brat pans • blast chillers • water baths • pump-fill station
Business standards	Business standards refer to standards or technical specifications set by the system owner based on and in addition to regulatory requirements that relate specifically to food safety
Test methods	Test methods include: • conducting studies of process evaluation • conducting studies of equipment performance
Relevant legislation, standards, codes of practice and technical specifications	Relevant legislation, standards, codes of practice and technical specifications relating to retort requirements may include: • relevant sections of the Australia New Zealand Food Standards Code • Australia Cook Chill Council, Guidelines for Chilled Food Production Systems Including Food Safety Programs, 2000 • Validation and Verification of Heat Treatment Equipment and Processes (ANZDAC - draft) • international protocols such as those of CODEX Alimentarius Commission • AQIS Code of Hygienic Practice for Heat-treated Refrigerated Foods Packaged for Extended Shelf Life, 1992 • state and territory regulations, codes of practice and guidelines

RANGE STATEMENT	
Target organisms	Target organisms are dependent on the food and cold chain capacity and include: • <i>Listeria monocytogenes</i> • <i>Clostridium botulinum</i> • <i>Bacillus cereus</i> • <i>Salmonella</i> • <i>Yersinia enterocolitica</i>
Prerequisite programs	Prerequisite programs are also referred to as support programs, such as Good Manufacturing Practice (GMP), Good Agricultural Practice (GAP) and Good Hygienic Practice (GHP). Prerequisite programs can be divided into two categories: Infrastructure and maintenance programs. These may include: • layout, design, construction and amenities of buildings and facilities • supplies of air, water, energy and other utilities • equipment, including sanitary design, preventative maintenance, calibration and cleaning and sanitation • support services, including waste and sewage disposal • pest control Operational prerequisite programs. These may include: • personal hygiene • measures for the prevention of cross-contamination • packaging and labelling procedures • supplier assurance • chemical storage • employee training • document control • internal audit programs • traceability programs • product integrity and security • cold chain management • inspecting and testing regimes, including analytical and microbiological testing

RANGE STATEMENT	
	control of non-conforming product, including product recall programs
Vulnerable populations	Vulnerable populations are defined by the sensitivity of a population. Examples of sectors serving food to vulnerable populations include: - hospitals - aged care facilities - childcare centres - organisations delivering to housebound people
Packaging methods	Packaging methods include: - controlled atmosphere (CA) packaging - modified atmosphere (MA) packaging - vacuum packing
Additional reference material	Additional reference material includes: - Food Standards Australia New Zealand, Safe Food Australia - A Guide to the Food Safety Standards, Australian Government Printing Service, Canberra - Campden & Chorleywood Food Research Association Publications

Unit Sector(s)

Unit sector	Food safety auditing
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		