

# RSPH Level 3 Award in Understanding how to Develop a HACCP Plan

January 2020

Guided Learning 21 hours Total Qualification Time 24 Hours

Ofqual Qualification Number 603/3653/5 Qualification Wales C00/3672/2

# **Description**

The objective of the RSPH Level 3 Award in Understanding how to Develop a HACCP Plan is for learners to be able to develop and implement Hazard Analysis and Critical Control Point (HACCP) procedures. HACCP is a well-established system of food safety management that all related businesses must adhere to.

This Level 3 qualification covers the importance of prerequisite programmes, HACCP-based food safety management procedures, the preliminary processes and development of the HACCP plan using the 7 Codex principles. The qualification is firmly based on National Occupational Standards.

This qualification enables the learner to develop a HACCP-based food safety management system. Holders of this qualification will have the appropriate knowledge and understanding to be an integral part of a HACCP team and to supervise the operation of a HACCP-based system in the work environment. Although designed primarily for employees of the food manufacturing industry, this qualification will also be of benefit to related industries.

RSPH is a Business Partner of the Craft Guild of Chefs.



http://craftguildofchefs.org/

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# **Unit: Application of HACCP Principles**

Unit Level: 3

Unit reference number: K/617/2522

Guided Learning: 21 hours

# **Summary of Outcomes:**

#### To achieve this qualification, a candidate must:

- 1. Understand the requirements for HACCP, with reference to:
- 1.1 The importance of HACCP based food safety management procedures
- 1.2 The preliminary processes for HACCP
- 1.3 The role of the HACCP team member
- 2. Understand the practical application of HACCP principles, with reference to:
- 2.1 How a HACCP plan is developed using the Codex principles
- 2.2 How HACCP plans are implemented, validated, verified, maintained and documented

Candidates successfully achieving this qualification will have factual, procedural and theoretical knowledge and understanding of HACCP to complete tasks that while well-defined, may be complex and non-routine. They will be able to interpret and evaluate relevant information and ideas, be aware of the nature of HACCP and of different perspectives or approaches within a food safety management system.

#### Content:

- Understand the requirements for HACCP
- 1.1 *Importance of HACCP:* The importance of HACCP is due to the need for HACCP based Food Safety Management Procedures and legislative requirements.
- 1.1.1 Need for HACCP based food safety management procedures: Role of HACCP based food safety management procedures in ensuring safe food, definitions of food safety, food safety management and food safety management procedures; effect and consequences of poor food hygiene and safety; effect on consumer confidence.
- 1.1.2 The HACCP approach to food safety management: HACCP described as a proactive, preventative food safety management system; overview of HACCP; the seven HACCP principles; HACCP terminology; definition of HACCP terms as stated in Codex Alimentarius; importance of pre-requisite programmes, education and training; advantages and benefits of HACCP systems.
- 1.1.3 Legislation relating to HACCP: Relationship of European legislation to UK food safety legislation; legal status of Acts of Parliament, Regulations; importance and main provisions of Regulation (EC) No 852/2004 'Hygiene of foodstuffs); The Food Safety and Hygiene (England) Regulations 2013, The Food Hygiene (Scotland) Regulations 2006, The Food Hygiene (Wales) Regulations 2006 and the Food Hygiene Regulations (Northern Ireland) 2006 or any superseding legislation; enforcement of legislation and consequences of non-compliance; relevance of Codes of Practice and Industry Guides produced by Government departments and the food trade; the role of HACCP in due diligence defence.
- 1.2 Preliminary processes for HACCP based food safety management procedures: Preliminary processes include prerequisite programmes, description of the product and its intended use and development of the process flow diagram.
- 1.2.1 Prerequisites for effective HACCP systems: Management commitment, need for food businesses to have effective prerequisite programmes (policies and procedures) in place prior to the development of a HACCP-based food safety management system; prerequisite programmes to include, resources and facilities, approval systems for suppliers, staff training, staff hygiene procedures, effective cleaning and disinfection procedures, pest management, waste management, labelling, food chain information, traceability and recall procedures.
- 1.2.2 The product and the intended use: Description of the product and procedures for manufacture; consideration of raw materials; transport and receipt of raw materials; processing/treatment; storage of ingredients, intermediate and final products; packaging; distribution; intended use of the product; identification of at-risk groups.

- 1.2.3 *Process flow diagrams:* Purpose and use of flow diagrams; correlation to scope of study; all steps in the specified operation; confirmation of the flow diagram.
- 1.3 The HACCP team: Benefits of a team approach; multidisciplinary and inter hierarchical with appropriate knowledge, competence and expertise; responsibilities of the team, such as: defining the scope of the study, developing and maintaining the HACCP plan.

# 2. Understand the practical application of HACCP principles

- 2.1 HACCP based food safety management procedures: Procedures include hazards and controls, critical control points, critical limits monitoring procedures and corrective actions.
- 2.1.1 Hazards and controls: Biological, chemical, allergenic and physical hazards; examples of each type of hazard; hazards associated with purchase of raw materials, delivery of raw materials, storage, handling, preparation, processing, cooling, post-processing treatments, packaging of finished product, transport of finished product; correct description of hazards to include manifestation and source/cause; determination of significant hazards based on likelihood and severity; availability of support, information and advice for hazard identification; validation of information and advice obtained; control measures; possible controls for hazards associated with purchase of raw materials, delivery of raw materials, storage, handling, preparation, processing, cooling, post-processing treatments, packaging of finished product, transport of finished product.
- 2.1.2 Critical control points: Definition of critical control points, identification of critical control points; use of decision trees.
- 2.1.3 Critical limits: Measurement of parameters such as temperature, time, pH, water activity, concentration; target levels and their benefits; relationship of critical limits to food safety; sources of information for critical limits; availability of support, information and advice for establishing critical limits; validation of information and advice obtained.
- 2.1.4 Monitoring procedures at critical control points: Purpose of monitoring; continuous and batch monitoring; frequency of monitoring; calibration and testing of monitoring equipment; responsible personnel; monitoring procedures for different critical limits; importance of accurately recording parameter values when monitoring; supervision of personnel; verification of monitoring procedures.
- 2.1.5 Corrective actions: Development of corrective actions for each CCP if critical limits not met (deviation), or if monitoring indicates a trend towards loss of control; assigning responsibility for implementing corrective actions; importance of restoring control; need for action plans for maintaining control; importance of monitoring after control restored; the need for review and verification of corrective actions; treatment of product produced during deviation; importance

- of record keeping and reporting procedures for the use of corrective actions at critical control points.
- 2.2 How HACCP plans are implemented, validated, verified, maintained and documented:
- 2.2.1 Implementation: Need for staff training; barriers to the implementation of HACCP, development of written procedures
- 2.2.2 Validation: Validation of HACCP plans; information required for validation; need for independent experts; methods of validation
- 2.2.3 Documentation and record keeping procedures: Importance of documentation and record keeping; examples of HACCP records and documentation; retention of completed records.
- 2.2.4 Verification: Verification of HACCP plans; importance of verification; elements in the HACCP system requiring verification; frequency of verification; methods of verification; role of audits and inspections; end-product testing; verification reports
- 2.2.5 Maintenance of HACCP: Importance of review of HACCP plans and systems; frequency of scheduled reviews, circumstances which would prompt a review.

# **Assessment and Grading**

The knowledge and understanding of the candidates will be assessed by a one-hour multiple-choice examination consisting of 30 questions that is split into two parts. The multiple-choice examination is provided by RSPH. Part 1 will contain 20 multiple-choice questions and part 2 will contain two scenarios to be completed consisting of a further 10 multiple-choice questions.

Candidates will have the choice of selecting two from four scenarios available. The scenarios will reflect both manufacturing and catering.

The qualification is graded as either *Pass* or *Distinction*. Candidates who fail to reach the minimum standard for the *Pass* grade will be recorded as having failed the qualification and will not receive a certificate.

In order to be awarded a *Pass* a candidate who is able to satisfy the learning outcomes will achieve a score of at least 20 out of 30 in the examination. The candidates must be able to recall relevant knowledge and facts from some parts of the specification and demonstrate a satisfactory level of understanding of the principles and concepts used in food safety management such that the candidate will be able to work satisfactorily in the catering/manufacturing or related industries.

In order to be awarded a *Distinction*, a candidate who is able to satisfy the learning outcomes will achieve a score of at least 26 out of 30 in the examination. Candidates must be able to recall relevant knowledge and facts from the entire specification with few significant omissions and demonstrate a high level of understanding of the principles and concepts used in food safety management.

Strong performance in some areas of the qualification content may compensate for poorer performance in other areas.

#### **Centre Guidance**

#### **Recommended Reading:**

Codex Alimentarius: Codex Alimentarius Commission <u>www.codexalimentarius.net</u> Gaze, R. 2015. HACCP: A Practical Guide (5<sup>th</sup> Edition), Campden BRI

#### **Recommended Prior Learning:**

The possession of a Level 2 qualification in HACCP, such as those offered by RSPH would be advantageous but is not essential. It is recommended that candidates have knowledge of food hygiene and safety equivalent to that contained in the RSPH *Level 3 Award in Supervising Food Safety & Hygiene.* 

#### **Special Assessment Needs:**

Centres that have candidates with special assessment needs should consult The Society's Reasonable Adjustments and Special Consideration Policy; this is available from The Society and The Society's web site (www.rsph.org.uk).

#### **National Occupational Standards:**

This qualification is mapped to the following National Occupational Standards:

PPL4GEN1 Manage food safety in a professional kitchen PPL4GEN17 Comply with legislative requirements in hospitality Understand how to analyse and control food safety hazards and IMPFS130K risks in food and drink operations IMPFS124K Understand how to manage food safety in food and drink

IMPFS122Kv1 Understand analysis and control of food safety hazards and risks

in manufacture

### **Recommended Qualifications and Experience of Tutors:**

RSPH would expect that tutors have teaching/training experience and a qualification in a relevant subject area, but recognises that experienced teachers/trainers can often compensate for a lack of initial subject knowledge, or experienced practitioners for a lack of teaching/training experience. It is, however, recommended that tutors have experience of implementing and maintaining HACCP systems and / or the audit of HACCP systems.

Suitable qualifications for the RSPH Level 3 Award in Understanding how to Develop a HACCP Plan include:

Degree, HNC/D or Dip. HE in: a)

> Food Science Food Technology **Environmental Health Environmental Science** Microbiology

or one that contains elements of these subjects.

b) Level 4 HACCP qualification

#### **Progression Opportunities:**

On completion of this qualification learners will be able to gain employment within the relevant manufacturing environment. Candidates should be expected to be able to supervise others in these establishments where necessary/required.

Successful candidates can also progress on to further qualifications, such as:

- RSPH Level 4 Award in Managing Food Safety & Hygiene
- RSPH Level 4 Award in Managing the HACCP System
- RSPH Level 4 Award in Nutrition

#### Other Information:

All RSPH specifications are subject to review. Any changes to the assessment or learning outcomes will be notified to Centres in advance of their introduction. To check the currency of this version of the specification, please contact the Qualifications Department or consult the RSPH website.

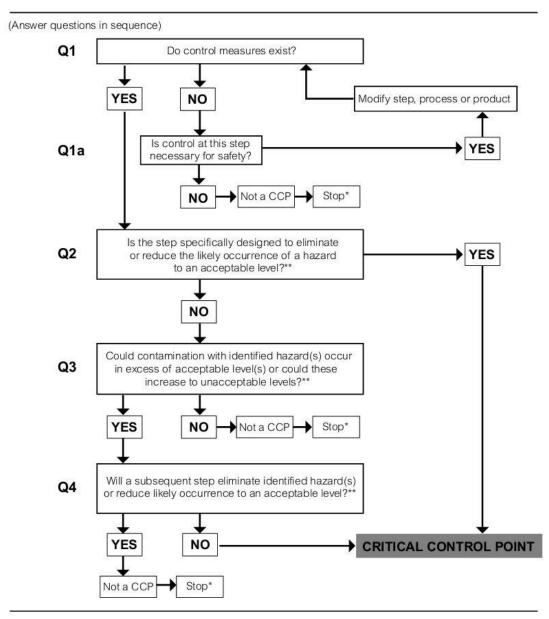
Centres must be registered with RSPH.

Any enquiries about this qualification should be made to:

The Qualifications Department, Royal Society for Public Health, John Snow House 59 Mansell Street, London E1 8AN Tel. 0207 265 7300 www.rsph.org.uk Email: info@rsph.org.uk

# **Appendix**

#### Example of a codex decision tree to identify CCPs



<sup>\*</sup> Proceed to the next identified hazard in the described process.

<sup>\*\*</sup> Acceptable and unacceptable levels need to be defined within the overall objectives in identifying the CCPs of HACCP plan.

#### **Growth Requirements of Bacteria**

In order to grow, bacteria require a source of nutrients, an appropriate atmosphere, neutral or alkaline conditions, available moisture and an appropriate temperature.

A large number of bacteria are able to grow with or without oxygen. Some bacteria (known as obligate aerobes) will only grow if oxygen is present. Other bacteria (obligate anaerobes) will only grow in the absence of oxygen.

Most bacteria grow best in a neutral or alkaline environment. Bacteria do not grow well in foods which are too acidic ((with a pH of less than 4.5)), the more acidic the food, the less likely they are to support the growth of bacteria.

Foods that are dried or high in salt or sugar have reduced available moisture content. Bacteria will grow poorly on these foods.

Most bacteria will not grow in cold conditions, or will only grow and divide slowly. High temperatures will also inhibit the growth of bacteria, most food poisoning bacteria are killed if exposed to a temperature of 70°C for two minutes or more. The optimum temperature range for the growth of most bacteria is 5°C to 63°C. This is known as the 'temperature danger zone'.

### **Spore Production by Bacteria**

Some bacteria are able to produce spores. These are highly resistant structures that allow the bacterial cell to survive adverse conditions such as high temperatures, lack of moisture and disinfectants. Normal cooking and processing temperatures may not be high enough to destroy any spores present in food. If cooking and processing is followed by slow cooling the spores may germinate, allowing rapid multiplication of bacteria.

Some spore formers are obligate anaerobes. The presence of oxygen will stimulate spore production in these bacteria. These spores may later germinate if the environment becomes anaerobic.