RSPH Level 3 Award in Understanding how to Develop a HACCP Plan for the Meat Industry

Date: January 2020

Guided Learning	**21 Hours**
Total Qualification Time	**24 Hours**
Ofqual Qualification Number	**603/5401/X**

Description

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

This Level 3 qualification covers the importance of prerequisite programmes, HACCP-based food safety management procedures for the meat industry, the preliminary processes and development of the HACCP plan using Codex principles.

This qualification enables the learner to develop a HACCP-based food safety management system that is appropriate for the meat industry. Holders of this qualification will have the appropriate knowledge and understanding to be an integral part of a HACCP team within a meat plant and to supervise the operation of a HACCP-based system.

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

http://craftguildofchefs.org/

Content:

Unit: Application of HACCP Principles for the Meat Industry

Guided Learning: 21 hours
Total Unit Time: 24 hours
Unit Level: 3
Unit reference number: A/617/9085

Summary of Outcomes:

To achieve this qualification, a candidate must:

1. **Understand the requirements for HACCP for the meat industry,** *with reference to the:*

1.1 Importance of HACCP based food safety management procedures in a meat establishment
1.2 Preliminary processes for HACCP for meat establishments
1.3 Role of the HACCP team member within a meat establishment

2. **Understand the practical application of HACCP principles in the meat industry,** *with reference to:*

2.1 How a HACCP plan for meat establishments is developed using the Codex principles
2.2 How HACCP plans are implemented, validated, verified, maintained and documented within meat establishments

Candidates successfully achieving this qualification will have factual, procedural and theoretical knowledge and understanding of HACCP in meat establishments 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:

1. **Understand the requirements for HACCP for the meat industry**

1.1 *Importance of HACCP:* The importance of HACCP is due to the need for HACCP based Food Safety Management Procedures for the meat industry and legislative requirements.

1.1.1 Need for HACCP based food safety management procedures in a meat establishment: Role of HACCP based food safety management procedures in ensuring meat establishments produce safe meat and meat products, definitions of food safety, food safety management and food safety management procedures; effect and consequences of poor food hygiene and safety in a meat establishment; effect on consumer confidence.

1.1.2 *The HACCP approach to food safety management in a meat establishment:* 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 in meat establishments, education and training; advantages and benefits of HACCP systems in a meat establishment.

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 on the hygiene of foodstuffs and Regulation (EC) 853/2004 on specific hygiene rules for food of animal origin; 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 meat industry; the role of HACCP in a due diligence defence for a meat establishment.

1.2 *Preliminary processes for HACCP based food safety management procedures for meat establishments:* 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 in a meat establishment: Management commitment, need for meat establishments 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 food chain information, livestock handling, resources and facilities, approval systems for suppliers, staff training, staff hygiene procedures, effective cleaning and disinfection procedures, pest management, waste management (including management of animal by-products), labelling, food chain information, traceability and recall procedures.

1.2.2 The product and the intended use: Description of the product and procedures in the meat establishment; consideration of raw materials; transport and receipt of raw materials; processing/treatment; storage of ingredients, fresh meat, offal, minced meat, mechanically separated meat, meat preparations and meat products, intermediate and final products; packaging; distribution; 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 in a meat establishment; 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 in the meat industry

2.1 *Development of the HACCP plan for meat establishments:* Procedures include hazards and controls, critical control points, critical limits, monitoring procedures within the meat establishment 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 in the meat establishment; use of decision trees.

2.1.3 Critical limits: Measurement of parameters such as temperature, time, pH, water activity, concentration (eg of preservatives and additives); 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 within a meat establishment; 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 meat establishment 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 within meat establishments:*

2.2.1 *Implementation:* Need for staff training; barriers to the implementation of HACCP, development of written procedures for meat establishments.

2.2.2 *Validation:* Validation of HACCP plans for meat establishments; 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: V*erification 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 meat establishment HACCP plans and systems; frequency of scheduled reviews, circumstances which would prompt a review.

Assessment and Grading

The knowledge and understanding of the candidates is assessed by a one-hour multiple-choice examination consisting of 30 questions. The examination is split into two parts. Part 1 consists of 20 multiple-choice questions. Part 2 contains two scenarios, there are five multiple-choice questions for each of the scenarios.

The qualification is graded as *Pass, Distinction* or *Fail.*

Candidates who are graded as *Not Achieved* will have achieved a score of less than 20/30 and will not receive a certificate.

In order to be awarded a *Pass* grade, candidates must achieve a mark of 20/30 or greater.

In order to be awarded a *Distinction* grade, candidates must achieve a mark of 26/30 or greater.

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

The examinations are provided by RSPH.

Centre Guidance

Recommended Reading:

Codex Alimentarius: Food Hygiene (Basic Texts) Fourth Edition – Recommended International Code of Practice General Principles of Food Hygiene CAC/RCP 1-1969 Revision 2003
Gaze, R. 2015. HACCP: A Practical Guide (5th Edition), Campden BRI
Wallace, C.A. 2018 Intermediate HACCP (6th Edition), Highfield

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 and 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:

IMPFS130K	Understand how to analyse and control food safety hazards and risks in food and drink operations
IMPFS124K	Understand how to manage food safety in food and drink operations
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 for the production of safe meat and meat products:

a) Degree, HNC/D or Dip. HE in:
   Food Science
   Food Technology
   Environmental Health
   Environmental Science
   Microbiology

   or one that contains elements of these subjects.

b) Level 4 HACCP qualification

Progression Opportunities:

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

- RSPH Level 4 Award in Managing Food Safety & Hygiene
- RSPH Level 4 Award in Food Safety Management for Manufacturing
- RSPH Level 4 Award in Managing the HACCP System
- RSPH Level 4 Award in Managing the HACCP System for the Meat Industry

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.

Specimen assessment materials are available on the RSPH website.

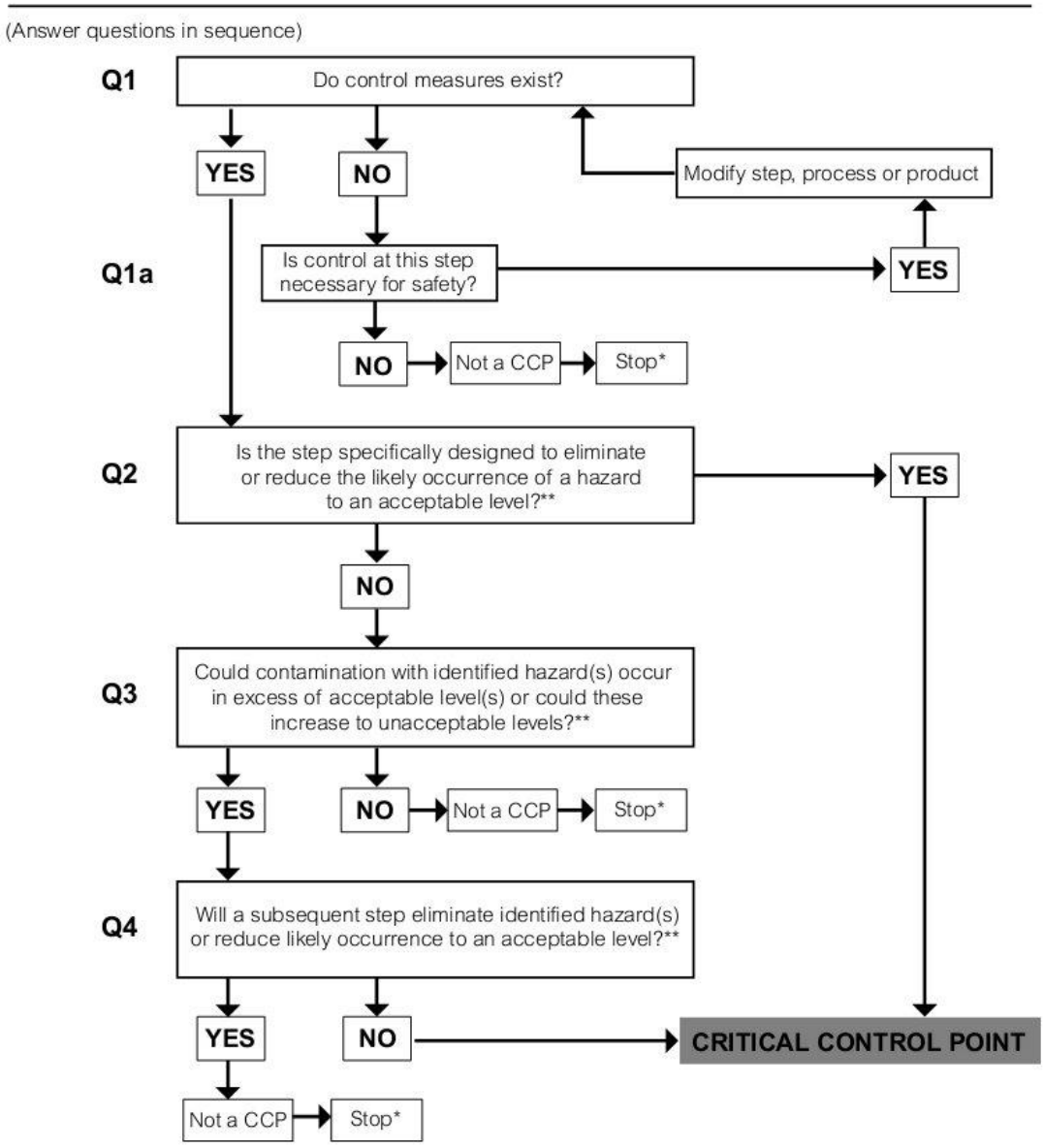
Centres must be registered with RSPH.

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: 020 7265 7300 Fax: 020 7265 7301 Email: info@rsph.org.uk www.rsph.org.uk

Appendix

Example of a codex decision tree to identify CCPs



* Proceed to the next identified hazard in the described process.
** 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.