

Basic Meat Microbiology and HACCP for Food Processors

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Goals: After completing this course, a participant will be able to:

- Identify how to clean and sanitize a work space
- Describe and differentiate the microorganisms important to meat
- Develop a process flow and product description
- Conduct a hazard analysis and identify critical control points
- Establish monitoring and recordkeeping procedures
- Verify and supply validation information for a HACCP plan

Course Organization

This course will be delivered online utilizing a learning platform called BrightSpace - D2L. As you are taking an online course it is assumed you have access to a reliable internet service and a computer with an internet browser that is compatible with D2L. Internet Explorer has difficulties with D2L. It is suggested you download another internet browser such as Firefox or Google Chrome. These are not the only two available but you do need to make sure the internet browser allows you to open all of the files associated with the class.

This course is comprised of 10 modules that will be delivered electronically between Monday to Friday, June 1-5. The class is mostly self-paced but assignments must be turned in and the participant is required to participate in Webex discussions. Quizzes will be given and should be taken after you have completed listening to the lectures on those parts. You will also be submitting portions of a HACCP plan to meet the requirements set forth in 9 CFR 417.7. The class will begin on Monday at 8 am with a WebEx meeting. After, you will proceed through the lectures. There will be a WebEx question and answer on Tuesday evening (5 – 6), Wednesday Evening (5-6) and Friday Evening (5-6). To receive the certificate of completion for the class, the student must participate in the WebEx Q and A and submit a process flow, hazard analysis, critical limits worksheet including a records review procedure. These processes will be explained as you proceed through the lectures and you can ask questions during the question and answer sessions.

Course modules will be comprised of lecture capture technology and videos. The participant will need to have a computer or tablet that can handle the technology.

A discussion board will be available for participants to share comments and ask questions related to class content outside of the evening question and answer sessions.

Netiquette

Everyone participating in this class deserve a positive and courteous learning environment. Be aware that your behavior impacts other people, even online. Please strive to develop a positive and supportive atmosphere and be courteous to fellow students and your instructor. Some things to remember about the online environment

- 1. Always think before you write.** Without the nonverbal cues you can get during a face to face conversation, your message can be misinterpreted. So please think twice before you hit submit.
- 2. Keep it relevant and focused.** Stay specific to your discussion.
- 3. Never use all caps.** This is the equivalent of yelling in the online world. It is not fun to read. Only use capital letters when appropriate.
- 4. Make sure to use full words and appropriate grammar and structure.** In other words I don't want to see anyone writing "R U" instead of "are you". There are people in the class that may not understand this type of abbreviation.
- 5. Treat people the same as you would face-to-face.** In other words it is easy to hide behind the computer. In some cases it empowers people to treat others in ways they would not in person. Remember there is a person behind the name on your screen. Treat all with dignity and respect and you can expect that in return.

Module 1 – Cleaning

- Handwashing and environmental sampling
- Sanitizing
- Complete Quiz

Module 2 – Microorganisms

- What are microorganisms, how do they increase in number
- Top 7 Least Wanted Pathogens
- How to control them.
- Complete Quiz

Module 3 – Basic Foundation of HACCP

- Prerequisite programs
- GMP's
- Food Defense
- Food Recalls
- Complete Quiz

Module 4 – Principles of HACCP

- "Site" visits
- Preliminary steps of HACCP – Assemble a Team, describe the product, develop process flow/verify
- Hazard Analysis, Critical Control Points, Critical Limits, Monitoring, Corrective Actions, Record Keeping, Verification/Validation

Module 5 – Developing a Process Flow

- Submit Process/Product Description

- Submit Process flow and product description for comments

Module 6 – Principle 1 Hazard Analysis

Module 7 – Principle 2 Critical Control Points and Principle 3 Critical Limits

- Submit Hazard Analysis with Critical Control Points
- Establish Critical limits with justification

Module 8 – Principle 4 Monitoring the HACCP plan and Principle 5 Corrective Actions

- Submit Critical Control Points/Critical Limit Worksheet

Module 9 – Principle 6 Maintaining Records for the HACCP plan

Module 10 – Principle 7 Verification and Validation of the HACCP plan

- HACCP, Microbial Testing and Scientific Literature
- Complete Quiz on Verification and Validation

Question and answer sessions will be conducted every day at 5 pm. Participants must participate in at least two of the sessions along with the Friday session to obtain a certificate.