Annual In-Service Schedule for a University Dining Hall

Topics :

1. Sick employees
2. Cleaning and sanitizing
3. Hand washing and personal hygiene
4. Knife etiquette and safety
5. Slips, trips, and falls
6. Receiving and storage (Cold)
7. Receiving and storage (Dry)
8. Allergens
9. Diet preferences
10. Cross-contamination
11. Food borne illness
12. Cooking and holding temperatures

TITLE: Sick Employee

GOAL: Review and explain the policy for coming to work when sick by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Recognize signs and symptoms of illnesses that need to be reported to a supervisor.
2. Identify illnesses that need to be reported to a supervisor.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. Introduction
    a. Explain who you are and what will be covered during the lesson
2. Pre-test
    a. If you are diagnosed with jaundice, you can come to work but will be restricted to areas away from food. T / **F**
    b. You cannot come to work if you had diarrhea in the last 24 hours. **T** / F
    c. Children are considered a high risk population. **T** / F
    d. You must provide medical documentation of clearance to work after being infected with nontyphoidal Salmonella. **T** / F
    e. You do not need to report wound infections to a supervisor. T / **F**
3. Symptoms to report to a supervisor
    a. Sore throat with fever
        i. S. typhoid
        ii. Restricted working *away* from food and food-preparation area
    b. Infected wound
        i. Allowed to work *after* appropriately bandaging and covering the wound before handling food
        ii. Norovirus, Hepatitis A, Shigella, Salmonella, or E. coli infections must be reported to supervisor
4. Symptoms not allowed in the workplace (report to supervisor)
    a. Diarrhea or vomiting less than 24 hours
        i. Salmonella, Norovirus, Shigella spp.
        ii. Nontyphoidal Salmonella
            1. Must provide medical documentation prior to returning to work
    b. Jaundice
        i. 7 days of symptoms
        ii. Possible Hepatitis A infection

        1. Must provide medical documentation prior to returning to work
5. Populations who are at high risk
    a. Pregnant women, children, elderly, and immunocompromised individuals
6. Summary
    a. Sore throat with fever or infected wounds can be allowed in the workplace but under certain circumstances
    b. Not allowed in the workplace if you are jaundice within the last 7 days or have experienced diarrhea or vomiting in the last 24 hours
    c. Keep in mind certain populations are at higher risk of becoming sick
7. Post-test
    a. If you are diagnosed with jaundice, you can come to work but will be restricted to areas away from food. T / **F**
    b. You cannot come to work if you had diarrhea in the last 24 hours. **T** / F
    c. Children are considered a high risk population. **T** / F
    d. You must provide medical documentation of clearance to work after being infected with nontyphoidal Salmonella. **T** / F
    e. You do not need to report wound infections to a supervisor. T / **F**

HANDOUT (Sick Employee)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

- Symptoms to report to a supervisor
  - Sore throat with fever
    - Allowed to work *away* from food and food-contact areas
  - Infected wound
    - Allowed to work *after* appropriately bandaging and covering the wound before handling food
- Pathogens to be reported to supervisor
  - Norovirus, Hepatitis A, Shigella, Salmonella, or E. coli infections
- Symptoms not allowed at work
  - Diarrhea or vomiting less than 24 hours
  - Jaundice
- Conditions that require a medical documentation of clearance to return to work
  - Nontyphoidal Salmonella
  - Jaundice
- High risk populations
  - Pregnant women, children, elderly, and immunocompromised individuals

Post-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

References

https://www.statefoodsafety.com/Resources/Training-Tips/stand-up-training-food-employee-illness-training
https://www.fda.gov/media/77065/download

TITLE: Cleaning and Sanitizing

GOAL: Explain proper cleaning and sanitation techniques by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Recognize when surfaces need to be cleaned and sanitized.
2. Demonstrate checking sanitizer levels and how to prepare sanitizer.
3. Explain how and why cleaning and sanitizing help prevent cross-contamination.
4. Demonstrate how to properly clean and sanitize.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. <u>Introduction</u>
    a. Explain who you are and what will be covered during the lesson
2. <u>Pretest</u>
    a. If a student needs utensils and they are still drying, you can use a drying cloth to dry them for the student. T / **F**
    b. When preparing food for more than 4 hours, you must clean and sanitize your surface. **T** / F
    c. Sanitizer water must be cold to properly clean surfaces and dishes. T / **F**
    d. Cooking equipment must be cleaned once a week. T / **F**
3. Cleaning
    a. The use of soap and water to remove grease, food particles, and other grime
    b. Water temp must be at least 110F
4. Rinse
    a. Clean water used to remove any remaining detergent
5. Sanitizing
    a. The use of a very hot water and bleach solution after cleaning a surface to kill remaining pathogens.
        i. Discard if the solution was made more than 24 hours, concentration does not meet standards, temperature is below standard, or if the solution is dirty.
    b. Portable sanitizing solutions contains chloride bleach
        i. One tablespoon per gallon of water
        ii. Test for concentration around 100 parts per million
        iii. Temperature is at least 140F
    c. Final sanitizing rinse for a dishwashing machine must be at least 180F or hotter.

   d. Final sanitizing rinse for a three-compartment sink must be at least 171F
6. Air dry
   a. Item or surfaces that have been sanitized must air dry
      i. Cloth or paper towels could contaminate with pathogens
7. Frequency
   a. Wash and sanitize surfaces
      i. Before and after preparing food in general
      ii. Before and after handling foods with allergens
      iii. Switching between food categories (ex : raw meat and vegetables)
         1. Prevents cross-contamination and foodborne illness
      iv. After continuously using a surface for more than 4 hours
         1. Bacteria will multiply to dangerous levels
      v. Once a table has been used
      vi. Serving area and student-food interaction area every [amount of time]
         1. According to COVID guidelines at the time
      vii. Cooking equipment is cleaned on a daily basis
   b. Wash and sanitize dishes and cutlery
      i. Any time after be used
      ii. Prevents cross-contamination and foodborne illness
8. <u>Summary</u>
   a. Cleaning means to remove grease, food particles, and other particles from a surface or item with clean water above 110F.
   b. Rising means to remove remaining detergent.
   c. Sanitizing means to kill any remaining pathogens with a solution 140F or higher depending on mode of sanitization.
   d. Air dry items or surfaces after sanitization ensure no recontamination will occur
   e. Cleaning and sanitizing should be performed on items and surfaces frequently.
9. <u>Post-test</u>
   a. If a student needs utensils and they are still drying, you can use a drying cloth to dry them for the student. T / **F**
   b. When preparing food for more than 4 hours, you must clean and sanitize your surface. **T** / F
   c. Sanitizer water must be cold to properly clean surfaces and dishes. T / **F**
   d. Cooking equipment must be cleaned once a week. T / **F**

HANDOUT (Cleaning and Sanitizing)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____

- Cleaning
  - Use soap and water to remove grease, food particles, and other grime
  - Water temp >110F
- Rinse
  - Remove any remaining detergent
- Sanitize
  - Use very hot water and bleach solution to kill remaining pathogens
  - Portable sanitizing solution
    - Temperature >140F
    - Test solution for concentration around 100 parts per million
  - Dishwasher machine
    - Temperature >180F
  - Three-compartment sink
    - Temperature >171F
- Air dry
  - Allow for items and surfaces to complete air dry before use
  - Do not use cloth or paper towels
- Frequency
  - Wash and sanitize surfaces frequently
    - Preparing food, handling foods with allergens, switching between food categories, every 4 hours if using surface continuously, after a table has been used, service area, student-food interaction area, and cooking equipment daily.

Post-test : 1) _____ 2) _____ 3) _____ 4) _____

References

https://extension.psu.edu/cleaning-and-sanitizing-in-foodservice-operations
https://saniprofessional.com/cleaning-sanitizing-food-contact-surfaces/
https://www.statefoodsafety.com/Resources/Training-Tips/stand-up-training-cleaning-and-sanitizing

TITLE: Handwashing and Personal Hygiene

GOAL: Demonstrate proper hand washing techniques and explain personal hygiene policies by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Demonstrate proper hand washing techniques.
2. Identify habits of good personal hygiene.
3. Recognize when to wash hands.
4. Explain why it is important to wash hands and keep good personal hygiene.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. <u>Introduction</u>
    a. Explain who you are and what will be covered during the lesson
2. <u>Pre-test</u>
    a. You should always wash your hands with warm water. **T** / F
    b. When washing your hands you should scrub up to your elbows. T / **F**
    c. You can use your clean hands to turn off the faucet instead of with a paper towel to save on waste. T / **F**
    d. You should always tie or cover your hair if it is long. **T** / F
    e. It is ok to wear nail polish. T / **F**
3. Handwashing and good personal hygiene can prevent many foodborne illnesses
    a. Everyone, healthy or not, has pathogens prone to causing food poisoning
        i. Norovirus, Campylobacter, Salmonella Typhi, Staphylococcus aureus, Shigella spp., Hepatitis A, and E. coli are the most common
    b. Hand sanitizers cannot replace handwashing
        i. Hand sanitizers does not allow for scrubbing
            1. Handwashing allows dirt and particles to be scrubbed off
        ii. Can be applied *after* proper handwashing
4. Handwashing
    a. Rinse under clean, warm water
    b. Lather soap and rub/scrub all surfaces on hands and up to your wrists for 10-15 seconds
        i. Under fingernails, between fingers, front and back of hands, and wrists
    c. Rinse thoroughly under clean, warm water
    d. Dry hands with disposable paper towels or clean towels
        i. Never dry your hands on clothing

    e. Avoid recontamination
        i. Use a clean barrier, like a paper towel, to turn off faucet or touching handles of doors
    f. When to wash your hands
        i. Handling garbage, between tasks and handling raw food, touching body parts, smoking, blowing your nose, going to the bathroom, prior to wearing gloves, before handling clean equipment and serving utensils, after handling dirty dishes/equipment/utensils, before handling food or around food, and after handling service animals or aquatic animals
5. Personal hygiene
    a. Wash and dry hands thoroughly and frequently before and during handling food
    b. Dry hands with disposable paper towels or a clean cloth towel
    c. Never sneeze or cough where food is being prepared or stored
    d. Never smoke, spit, chew gum, or eat in a food handling or food storage area
    e. Wear clean clothing and the use of an apron
    f. Tie or cover long hair
    g. Trim fingernails short for easy cleaning
    h. Do not wear nail polish, may chip into food
    i. Avoid wearing jewelry, it may carry pathogens and debris in the groves
    j. Cover all cuts and wounds
        i. Waterproof bandage with additional covering
        ii. Disposable gloves over coverings
    k. Always use gloves when handling food and change frequently
6. <u>Summary</u>
    a. Washing hands and having good personal hygiene can help prevent foodborne illnesses
    b. Hand sanitizers cannot replace handwashing
    c. The proper method to washing hands is under warm water, scrub for 10-15 seconds getting under fingernails, top and bottom of hands, between fingers, and up to the wrists.
    d. Cover all wounds and cuts with a waterproof bandage and additional covering
    e. Be conscious of what you touch and when to wash your hands.
7. <u>Post-test</u>
    a. You should always wash your hands with warm water. **T** / F
    b. When washing your hands you should scrub up to your elbows. T / **F**
    c. You can use your clean hands to turn off the faucet instead of with a paper towel to save on waste. T / **F**
    d. You should always tie or cover your hair if it is long. **T** / F
    e. It is ok to wear nail polish. T / **F**

HANDOUT (Handwashing and Personal Hygiene)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

- Handwashing and good hygiene can help prevent many foodborne illnesses
- Common pathogens
    - Norovirus, Campylobacter, Salmonella Typhi, Staphylococcus aureus, Shigella spp., Hepatitis A, and E. coli
- Hand sanitizer cannot replace handwashing
- Handwashing
    - Rinse under clean, warm water
    - Rub/scrub with soap for 10-15 seconds
        - Under fingernails, between fingers, front and back of hands, and wrists
    - Rinse under clean, warm water
    - Only dry hands with clean towels or disposable paper towels
- When to wash hands
    - After touching a dirty surface, body parts, dirty dishes/equipment/utensils, blowing your nose, and before handling food or around food.
- Personal hygiene
    - Wear clean clothing and a clean apron
    - Do not wear nail polish and trim fingernails to be short for easy cleaning
    - Avoid jewelry to prevent debris from getting into the food
    - Cover all cuts and wounds with waterproof bandage and additional covering
    - Wear gloves when handling food and change frequently

Post-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

References

https://www.health.vic.gov.au/food-safety/personal-hygiene-for-food-handlers
https://www.cdc.gov/nceh/ehs/ehsnet/plain_language/food-worker-handwashing-in-restaurants.html
https://www.fda.gov/media/77065/download

TITLE: Knife Etiquette and Safety

GOAL: Thoroughly explain knife etiquette and safety by the end of the in-service presentation.
LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Identify specific parts of the knife.
2. Recognize the various types of knives and their uses.
3. Demonstrate how to sharpen a knife.
4. Demonstrate how to use a knife properly.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. <u>Introduction</u>
    a. Explain who you are and what will be covered during the lesson
2. <u>Pre-test</u>
    a. The tang is the extended part of the blade that helps form the handle and provides better handling of the knife. **T** / F
    b. Serrated knives should not be used on breads and cakes. T / **F**
    c. A dull blade can cause injury. **T** / F
    d. When sharpening, hold the knife at a 20 degree angle. **T** / F
    e. You should catch a falling knife to prevent damage from hitting the floor. T / **F**
3. What is a knife?
    a. Blade is what is used when cutting
        i. Spine is the top of the metal part away from the sharp part
        ii. Edge is the sharp part that is used
        iii. Tip is the tip of the blade
        iv. Heel is the back part where the blade meets the handle
    b. Handle is used when holding the knife and directs the blade
        i. Rivets hold the blade and handle into place
        ii. Tang is the extended part of the blade, giving the handle something to hold
4. Types of knives
    a. Chef knives
        i. Used for most tasks like cracking, chopping, and mincing.
        ii. Between 3 - 12” (8” being standard)
    b. Utility knives
        i. Used for slicing and working with delicate foods like fruit, small roasts, and poultry

    ii. Many different types and sizes allow for better handling of the item at hand
  c. Serrated knives
    i. Used for slicing breads and cakes
    ii. Do not use for cutting or chopping
5. Sharpening the knives
  a. Blades deteriorate over time and should be sharpened often
  b. Dull blades can be dangerous to handle because of the inability to effortlessly cut
    i. Applying pressure can lead to losing control of the knife
  c. Sharpening stones
    i. Hold at a 20 degree angle to the stone and sweep across in one motion repeatedly in the same direction
  d. Sharpening steels
    i. Do not sharpen knives but keep blades sharp between sharpenings with a stone
    ii. Hold at 20 degrees against the steel and run it across in one motion repeatedly in the same direction
  e. Storing knives will preserve and protect the blade
6. Using the knife
  a. S.A.F.E.T.Y.
    i. Securely hold your knife
      1. Transporting knives need have the sharp end away from the body and preferably pointing down
        a. Announce when transporting knife by shouting “sharp”
      2. Grip handle with all four fingers with forefinger behind the heel
      3. Thumb will rest on the face of the blade
    ii. Anchor cutting boards
      1. Find a cutting board what is easy to clean and sanitize
      2. Use a non-slip mat under the board, a board with rubber feet, or a *damp* dish cloth
    iii. Fingertips curled back
      1. The blade presses against the joints in the fingers
      2. Move fingers down as you cut the item
    iv. Eyes on the knife
      1. Never use the knife with your eyes away from the knife
    v. Take your time
      1. Relax and take your time, safety is priority
    vi. Yield to falling knives
      1. Never catch a falling knife
7. <u>Summary</u>

a. A knife consists of a blade and handle.
b. Different types of knives are used for different items and uses
c. Sharpening knives will prevent injuries and allow for proper usage
d. Storing knives preserves and protects the blade
e. Hold your knife correctly with forefingers on handle and thumb on blade
f. Secure the cutting board
g. Fingers are curled back to guide the blade and prevent injury
h. Never use a knife when not looking at it
i. Take your time when using a knife, safety is key
j. Never catch a falling knife, let it fall

8. <u>Post-test:</u>
    a. The tang is the extended part of the blade that helps form the handle and provides better handling of the knife. **T** / F
    b. Serrated knives should not be used on breads and cakes. T / **F**
    c. A dull blade can cause injury. **T** / F
    d. When sharpening, hold the knife at a 20 degree angle. **T** / F
    e. You should catch a falling knife to prevent damage from hitting the floor. T / **F**

HANDOUT (Knife Etiquette and Safety)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

- Knife properties
  - Blade consists of the spine, edge, tip, and heel
  - Handle consists of rivets and the tang
- Types of knives
  - Chef knives are used for most tasks including cracking and chopping
  - Utility knives are used for slicing and working with delicate foods
  - Serrated knives are used for slicing breads and cakes
- Sharpening the knives
  - Dull blades can cause injury by losing control of the knife when pressing down
  - Use a sharpening stone often to keep blade formed properly and sharp
    - Hold at a 20 degree angle to the stone and sweep across in one motion repeatedly in the same direction
  - Use a sharpening steel to keep blade sharp between sharpenings with a stone
    - Hold at a 20 degree angle to the steel and sweep across in one motion repeatedly in the same direction
  - Store knives to preserve and protect the blade
- S.A.F.E.T.Y.
  - Securely hold your knife
    - Hold knife pointing down when transporting knives
    - Grip handle using all four fingers with forefinger behind the heel and thumb rests on the face of the blade
  - Anchor cutting boards
    - Use a non-slip mat under the board, a board with rubber feet, or a *damp* dish cloth
  - Fingertips curled back
    - Press knife against the joints in the fingers and guide the blade with each motion
  - Eyes on the knife
  - Take your time
  - Yield to falling knives (never catch a falling knife)

Post-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

References

https://extension.usu.edu/foodbiz/ou-files/FSC_Educational_Tools_2011-01pr.pdf

TITLE: Slips, Trips, and Falls

GOAL: Thoroughly explain proper technique, protocol, and remedies for common slips, trips, and falls by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Recognize causes of slips, trips, and falls in the workplace.
2. Identify hazards within the workplace.
3. Demonstrate implementation of remedies to identified hazards.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. Introduction
    a. Explain who you are and what will be covered during the lesson
2. Pre-test
    a. If there is a wet surface you should report it to a supervisor and not touch it. T / **F**
    b. You should only check mats/rugs at the beginning of service. T / **F**
    c. Wearing non-slip footwear in the workplace will prevent slips. **T** / F
    d. Checking frequented food-student interaction areas during service can prevent slips. **T** / F
    e. You should shout “coming” when going around corners. T / **F**
3. Slips
    a. Occur when foot traction is lost while walking
    b. Wet surfaces including oil, food, ice, snow, mud, and water
        i. Higher chance around sinks, dishwasher, and cooler or freezer
        ii. Remedy : report and clean up spills immediately
        iii. This will prevent students and staff from injuring themselves and others
        iv. Check service area for any spills to prevent students from slipping
        v. Check and reposition slip-resistant mats or runners
    c. Materials including cloth and scraps of paper
        i. Remedy : clean up debris on the floor
    d. Unanchored mats or rugs
        i. Remedy : report to supervisor and rearrange the rug or mark the area
        ii. Check heavily frequented areas for both staff and students throughout service
    e. Footwear with inappropriate soles for walking surfaces
        i. Remedy : wear slip-resistant shoes when in the workplace
4. Trips

a. Occur when foreign objects are interrupting the walking area
b. Clutter on the floor (cords and hoses on the floor, debris, material, boxes, and/or tools)
    i. Remedy : report to supervisor to and remove/fix clutter if necessary
    ii. This will prevent students and staff from injuring themselves and others
c. Uneven walking surfaces (floors, wrinkled/torn carpet)
    i. Remedy : report to supervisor and add a sign to mark the area
d. Poor lighting
    i. Remedy : turn on lighting when entering a room and report burned-out light bulbs
e. Poor view of walking path blocked by items being carried
    i. Remedy : carry smaller loads or use a cart/hand truck to allow for clear vision of the path

5. Walking behavior
    a. Slow down when walking, pushing/pulling carts, and carrying food containers and trays
    b. Shout “corner” when moving around corners to let others know you are coming around even if others can see you
6. <u>Summary</u>
    a. Slips can occur because of wet surfaces, cloth and scraps of paper, loose mats or rugs, and not wearing proper footwear.
    b. Trips can occur due to clutter on the floor blocking the walking area, uneven surfaces, poor lighting, and poor view of the walking path from carrying too big of a load.
    c. Slow down when walking, pushing/pulling parts, and carrying food containers and trays.
    d. Shout “corner” when moving around corners.
7. <u>Post-test</u>
    a. If there is a wet surface you should report it to a supervisor and not touch it. T / **F**
    b. You should only check mats/rugs at the beginning of service. T / **F**
    c. Wearing non-slip footwear in the workplace will prevent slips. **T** / F
    d. Checking frequented food-student interaction areas during service can prevent slips. **T** / F
    e. You should shout “coming” when going around corners. T / **F**

HANDOUT (Slips, Trips, and Falls)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

- Slips occur when foot traction is lost while walking
    - Wet surfaces should be reported and cleaned immediately
    - Cloth and paper materials should be cleaned immediately
    - Unanchored mats or rugs should be reported and rearranged/marked
    - Wearing non-slip footwear can prevent slips
- Trips occur when foreign objects are interrupting the walking area
    - Clutter on the floor should be reported and removed/fixed immediately
    - Uneven surfaces should be reported and marked
    - Burnt light bulbs should be reported immediately
    - Carrying smaller loads to prevent blockage of the view of the path
- Slow down when walking, pushing/pulling carts, and carrying food containers and trays
- Shout “corner” when moving around corners

Post-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

References

http://dpg-storage.s3.amazonaws.com/dhcc/resources/Inservice2010Final/Inservice%202010.pdf
https://www.philasd.org/foodservices/wp-content/uploads/sites/76/2017/07/RCN-101-Food-Service-Safety-Preventing-Slips-Trips-Falls.pdf
https://district.schoolnutritionandfitness.com/avhsd/files/Training%20Modules/Food%20Service%20General%20Safety.pdf

TITLE: Receiving and Storage (Dry)

GOAL: Thoroughly explain proper receiving and storage procedures for dry items by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Identify guidelines to maintain compliance with federal and state regulations.
2. Recognize steps to ensure food safety and quality.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. Introduction
    a. Explain who you are and what will be covered during the lesson
2. Pre-test
    a. Dry storage should be <41F. T / **F**
    b. You can eat in the dry storage room but cannot drink. T / **F**
    c. You must store heavier/bulkier items on lower shelves. **T** / F
    d. You should leave the scoop for flour, sugar, and spices in the container to prevent it from getting lost. T / **F**
    e. You must keep chemicals locked away from food. **T** / F
3. Receiving
    a. Never during peak hours
    b. Direct food delivery worker to proper food storage area and where to unload
    c. Vendors are not allowed to stock items
    d. Never rush inspections
        i. Check for improper handling
            1. Leaky packaging, dented cans, broken boxes, …
        ii. Check all receiving items have been labeled and dated upon arrival
4. Food Storage
    a. Food must be stored >6 inches above the floor and >18 inches from the ceiling or anything hanging from the ceiling
    b. Allow for space between items to provide adequate ventilation
    c. Food must be in categorical groups to allow for easier storage, location, and inventory.
    d. Heavier/bulkier items are stored on lower shelves
    e. Dry and canned foods without expiration dates need to be dated and used <6 months of delivery
    f. Tight-fitting covers are used for storing grains, cereal, and dried vegetables.

   g. All containers must be legibly and accurately labeled
   h. Scoops must be provided when using flour, sugar, spices, and dried vegetables
      i. Keep in protected area close to the container, do not store scoop in container
      ii. Wash and sanitize scoops on a weekly basis or as needed
5. Chemical Storage
   a. Kept away from food in a locked area
   b. Clearly labeled in their original container
   c. Cleaning compounds and bactericides cannot be stored in the same cabinet or area with insecticides and other poisonous materials
6. Storage Room Care
   a. Arrange food according to type
   b. Follow a FIFO (first in / first out) protocol
      i. Place new items of the same food behind older stock
   c. Remove any and all trash from storeroom daily or as needed
   d. Keep walls, shelves, equipment, and floors clean
      i. Sweep frequently and mop weekly
      ii. Dusted weekly
   e. Remove spoiled food and leaking cans
   f. Proper lighting with temperature between 50 - 70F
   g. Report to supervisor immediately
      i. Leaks, pests, temperature change, and burnt light bulbs
   h. No eating, drinking, or smoking
7. <u>Summary</u>
   a. Check for improper handling when receiving an order.
   b. Report leaks, pests, temperature changes, and burnt light bulbs immediately.
   c. No eating, drinking, or smoking in the dry storage room.
   d. Allow for space between items to provide adequate ventilation.
   e. Follow a FIFO (first in / first out)
   f. Keep scoops out of the food containers and wash and sanitize weekly or as needed.
   g. Keep chemicals away from food items.
   h. Keep walls, shelves, equipment, and floors clean.
8. <u>Post-test</u>
   a. Dry storage should be <41F. T / **F**
   b. You can eat in the dry storage room but cannot drink. T / **F**
   c. You must store heavier/bulkier items on lower shelves. **T** / F
   d. You should leave the scoop for flour, sugar, and spices in the container to prevent it from getting lost. T / **F**

e. You must keep chemicals locked away from food. **T** / F

HANDOUT (Receiving and Storage (Dry))

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

- Receiving
    - Never during peak hours
    - Check for improper handling (leaks, dents, broken boxes, …)
    - Check for proper labeling and dates
- Proper lighting with temperature between 50 - 70F
- Report to supervisor immediately if leaks, pests, temperature changes, and burnt light bulbs are found.
- No eating, drinking, or smoking in dry storage room
- Food storage
    - >6 inches above the floor
    - >18 inches from the ceiling or anything hanging from the ceiling
    - Allow for space between items to provide adequate ventilation
    - Food must be in categorical groups to allow for easier storage, location, and inventory.
    - Heavier/bulkier items are stored on lower shelves
    - All containers must be legibly and accurately labeled
    - Keep scoops in protected area close to containers
    - Do not store scoop in container
    - Wash and sanitize scoops on a weekly basis or as needed
- Chemical storage
    - Kept away from food in a locked area
    - Clearly labeled in their original container
- Storage room care
    - Follow a FIFO (first in / first out) protocol
        - Place new items of the same food behind older stock
    - Remove any and all trash from storeroom daily or as needed
    - Keep walls, shelves, equipment, and floors clean
    - Remove spoiled food and leaking cans

Post-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

References

http://dpg-storage.s3.amazonaws.com/dhcc/resources/Inservice2010Final/Inservice%202010.pdf

https://www.statefoodsafety.com/Resources/Training-Tips/stand-up-training-receiving-a-food-delivery

TITLE: Receiving and Storage (Cold)

GOAL: Thoroughly explain proper receiving and storage procedures for cold items by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Identify guidelines to maintain compliance with federal and state regulations.
2. Recognize steps to ensure food safety and quality.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. Introduction
    a. Explain who you are and what will be covered during the lesson
2. Pre-test
    a. You can eat in the dry storage room but cannot drink. T / **F**
    b. Frozen items must be <32F when receiving. **T** / F
    c. You are allowed to place items on the floor if it has been swept and mopped recently. T / **F**
    d. Raw meat must be stored below fruits and vegetables. **T** / F
    e. You must redate a frozen item if it was thawed and not used immediately. **T** / F
3. Receiving
    a. Never during peak hours
    b. Direct food delivery worker to proper food storage area and where to unload
    c. Vendors are not allowed to stock items
    d. Never rush inspections
        i. Check for improper handling
            1. Leaky packaging, dented cans, broken boxes, …
        ii. Check all receiving items have been labeled and dated upon arrival
        iii. Check for proper temperature (use a calibrated thermometer)
            1. Cold items must be 32 - 41F
            2. Frozen items must be <32F
    e. Refrigerate or freeze perishable food immediately after delivery
4. Cold foods
    a. Food must be stored >6 inches above the floor and >18 inches from the ceiling or anything hanging from the ceiling
    b. Allow for space between items to provide adequate ventilation
    c. Food must be in categorical groups to allow for easier storage, location, and inventory.

   d. Follow a FIFO (first in / first out) protocol
   e. All food must be covered, labeled, and dated.
   f. Store food with space between each item to allow adequate airflow
   g. Store cooked foods above raw foods
5. Frozen foods
   a. Food must be stored >6 inches above the floor and >18 inches from the ceiling or anything hanging from the ceiling
   b. Allow for space between items to provide adequate ventilation
   c. Food must be in categorical groups to allow for easier storage, location, and inventory.
   d. Follow a FIFO (first in / first out) protocol
   e. All food must be covered, labeled, and dated.
   f. Store food with space between each item to allow adequate airflow
   g. Meat, fish, and poultry must be stored on lower shelves
   h. Fruit, vegetables, juices, and breads must be stored on upper shelves
   i. Move meat, poultry, and fish into refrigerator for 24 - 48 hours to allow defrosting
      i. Use immediately after thawing
   j. Redate frozen item if not used immediately
6. Storage Room Care
   a. Keep clean by sweeping frequently
   b. Proper lighting
   c. Check and log internal temperature (beginning and end of shift)
      i. Refrigerator must be 32 - 41F
      ii. Freezer must be <32F
         1. Discard any ice to prevent build up
   d. Report to supervisor immediately
      i. Leaks, pests, temperature change, and burnt light bulbs
   e. No eating, drinking, or smoking
7. <u>Summary</u>
   a. Check for improper handling when receiving an order.
   b. Report leaks, pests, temperature changes, and burnt light bulbs immediately in the storage area.
   c. No eating, drinking, or smoking in the cold storage room.
   d. Allow for space between items to provide adequate ventilation.
   e. Follow a FIFO (first in / first out)
   f. Items must be >6 inches from the floor and >18 inches from the ceiling or anything hanging from the ceiling.
   g. Refrigerator must be 32 - 41F and the freezer must be <32F.
   h. Raw meat must be stored below fruits and vegetables.

   i. Allow meat, poultry, and fish to defrost in the refrigerator for 24 - 48 hours and use immediately after thawing.

8. Post-test
   a. You can eat in the dry storage room but cannot drink. T / **F**
   b. Frozen items must be <32F when receiving. **T** / F
   c. You are allowed to place items on the floor if it has been swept and mopped recently. T / **F**
   d. Raw meat must be stored below fruits and vegetables. **T** / F
   e. You must redate a frozen item if it was thawed and not used immediately. **T** / F

HANDOUT (Receiving and Storage (Cold))

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

- Receiving
  - Check for improper handling (leaks, dents, broken boxes, …)
  - Check for proper labeling, dates, and temperature using calibrated thermometer
    - Cold items must be 32 - 41F
    - Frozen items must be <32F
  - Move to cold storage immediately after delivery
- General cold storage information
  - >6 inches above the floor
  - >18 inches from the ceiling or anything hanging from the ceiling
  - Allow for space between items to provide adequate ventilation
  - Food must be in categorical groups to allow for easier storage, location, and inventory.
  - Follow a FIFO (first in / first out) protocol
  - Store cooked foods above raw foods
- Frozen foods
  - Meat, fish, and poultry must be stored on lower shelves
  - Fruit, vegetables, juices, and breads must be stored on upper shelves
  - Move meat, poultry, and fish into refrigerator for 24 - 48 hours to allow defrosting
    - Use immediately after thawing
  - Redate frozen item if not used immediately
- Storage room care
  - Keep clean and sweep frequently
  - Keep walls, shelves, equipment, and floors clean
  - Remove spoiled food and leaking cans
  - Refrigerator must be 32 - 41F and the freezer must be <32F.
  - Report to supervisor immediately
    - Leaks, pests, temperature change, and burnt light bulbs
  - No eating, drinking, or smoking

Post-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

References

http://dpg-storage.s3.amazonaws.com/dhcc/resources/Inservice2010Final/Inservice%202010.pdf

https://www.statefoodsafety.com/Resources/Training-Tips/stand-up-training-receiving-a-food-delivery

TITLE: Allergens

GOAL: Thoroughly explain allergen definitions and procedures by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Identify main allergens.
2. Recognize when a food contains allergens.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. <u>Introduction</u>
    a. Explain who you are and what will be covered during the lesson
2. <u>Pre-test</u>
    a. Egg is considered a major allergen. **T** / F
    b. Milk contains sugar that causes discomfort. **T** / F
    c. Bananas are considered a major allergen. T / **F**
    d. Oats are naturally gluten-free but are contaminated during processing. **T** / F
3. Allergens can be fatal and must be taken serious during food preparation
    a. Follow proper food preparation hygiene and protocol
    b. Use dedicated allergen-free preparation stations and equipment
4. Major allergens
    a. Milk, eggs, fish, shellfish, tree nuts, peanuts, wheat, soybeans
5. Allergen-free dining halls
    a. Fish and egg are prohibited in the fish and egg allergen-free dining hall
    b. Nut and dairy are prohibited in the nut and dairy allergen-free dining hall
6. Milk (dairy-free or lactose intolerant)
    a. Lactose is a naturally occurring sugar found in milk and dairy products
    b. Common dairy products include ice cream, milk, cheese, pudding, cream sauces (ex : alfredo), cream, sour cream, whipped cream, soups, butter, and yogurt.
7. Eggs
    a. Contains proteins found naturally in eggs
    b. Common egg products include baked goods, meatloaf, pasta, fried foods made with batter, sauces, burgers, and dressings.
8. Fish
    a. Contains proteins found naturally in fish
    b. Common fish allergen products include fish sticks, fish filets, alaska pollock, carp, cod, dogfish, mackerel, sole, salmon, tuna, soups, pastas, and ramen.

9. Shellfish
    a. Contains proteins found naturally in both crustacean and mollusk shellfish
    b. Common shellfish include crab, shrimp, lobster, mussels, oyster, scallop, and snail.
    c. Squid and octopus should also be avoided
10. Tree nuts
    a. Contains proteins found naturally in tree nuts
    b. Common tree nuts include brazil nut, hazelnut, chestnut, pine nut, walnut, almonds, cashews, macadamia, pecan, and pistachio
    c. Coconut is OK to consume.
11. Peanuts
    a. Contains proteins found naturally in peanuts
    b. Common peanut products include chocolates, indian and asian cuisine, ice creams, pastries, pesto, peanut oil, and baked goods.
12. Wheat (gluten-free)
    a. Gluten is a protein found in wheat, barley, rye, malt, and oats (unless specified gluten-free)
    b. Common wheat products include pasta, bread, bread crumbs, fried foods breaded in batter, sauces, soups, cakes, pastries, cooking sprays, meatloaf, vegetarian burgers, gravies, cereals, and soy sauce.
13. Soybeans
    a. Contains proteins found naturally in soybeans
    b. Common soybean products include tofu, soy milk, emulsifier in various products, soy sauce, miso, okara, and tempeh.
14. <u>Summary</u>
    a. Allergens can be fatal and must be taken serious during food preparation
    b. Follow proper food preparation hygiene and protocol
    c. Use dedicated allergen-free preparation stations and equipment
    d. Major allergens are milk, egg, fish, shellfish, tree nuts, peanuts, wheat, soybeans
    e. Allergens are prohibited in the specified allergen-free dining halls
    f. Lactose is the sugar found in milk causing the allergy
    g. Egg, fish, shellfish, tree nuts, peanuts, wheat, and soybeans contain proteins causing the allergy
15. <u>Post-test</u>
    a. Egg is considered a major allergen. **T** / F
    b. Milk contains sugar that causes discomfort. **T** / F
    c. Bananas are considered a major allergen. T / **F**
    d. Oats are naturally gluten-free but are contaminated during processing. **T** / F

HANDOUT (Allergens)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____

- Allergens can be fatal and must be taken serious during food preparation
    - Follow proper food preparation hygiene and protocol
    - Use dedicated allergen-free preparation stations and equipment
- Major allergens are milk, egg, fish, shellfish, tree nuts, peanuts, wheat, soybeans
- Allergens are prohibited in the specified allergen-free dining halls
- Lactose is the sugar found in milk causing the allergy
- Egg, fish, shellfish, tree nuts, peanuts, wheat, and soybeans contain proteins causing the allergy
- Common *dairy* products include ice cream, milk, cheese, pudding, cream sauces (ex : alfredo), cream, sour cream, whipped cream, soups, butter, and yogurt.
- Common *egg* products include baked goods, meatloaf, pasta, fried foods made with batter, sauces, burgers, and dressings.
- Common *fish* allergen products include fish sticks, fish filets, alaska pollock, carp, cod, dogfish, mackerel, sole, salmon, tuna, soups, pastas, and ramen.
- Common *shellfish* include crab, shrimp, lobster, mussels, oyster, scallop, and snail.
    - Squid and octopus should also be avoided
- Common *tree nuts* include brazil nut, hazelnut, chestnut, pine nut, walnut, almonds, cashews, macadamia, pecan, and pistachio
    - Coconut is OK to consume.
- Common *peanut* products include chocolates, indian and asian cuisine, ice creams, pastries, pesto, peanut oil, and baked goods.
- Common *wheat* products include pasta, bread, bread crumbs, fried foods breaded in batter, sauces, soups, cakes, pastries, cooking sprays, meatloaf, vegetarian burgers, gravies, cereals, and soy sauce.
- Common *soybean* products include tofu, soy milk, emulsifier in various products, soy sauce, miso, okara, and tempeh.

Post-test : 1) _____ 2) _____ 3) _____ 4) _____

References

http://dpg-storage.s3.amazonaws.com/dhcc/resources/Inservice2010Final/Inservice%202010.pdf
https://www.statefoodsafety.com/Resources/Training-Tips/stand-up-training-food-allergies
https://www.fda.gov/food/buy-store-serve-safe-food/food-allergies-what-you-need-know
https://farrp.unl.edu/informallfish

https://farrp.unl.edu/informalltreenuts
https://farrp.unl.edu/informallmollshellfish
https://farrp.unl.edu/informallcrushellfish
http://research.bmh.manchester.ac.uk/informall/allergenic-food/?FoodId=50
http://research.bmh.manchester.ac.uk/informall/allergenic-food/?FoodId=38

TITLE: Diet Preferences

GOAL: Recognize various common diet preferences by the end of the in-service presentation.
LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Recognize various diet preferences.
2. Recommend food items in regards to a customer's diet preference.
3. Identify foods labeled as Halal, vegetarian, and vegan.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. Introduction
    a. Explain who you are and what will be covered during the lesson
2. Pre-test
    a. Diet preferences are chosen to best suit the consumer's religious beliefs, medical conditions, and/or ethical reasoning. **T** / F
    b. Vegetarians do not consume any animal products including honey, dairy, eggs, and gelatin. T / **F**
    c. Halal is defined by Jewish law. T / **F**
    d. Halal excludes alcohol and other intoxicants. **T** / F
3. Diet preferences are expressed when a customer chooses a diet best suited to benefit themselves.
    a. Religious, medical, and/or ethical reasoning
4. Treat all diet preferences as an allergen
    a. [Reference to allergen in-service handout]
5. Vegan
    a. No animal products
    b. Meat, dairy, eggs, honey, gelatin, and more
    c. Cannot use utensils or pots/pants that have been contaminated by animal products
    d. May see more students in both allergen-free dining halls
6. Vegetarian
    a. Like veganism but more relaxed
    b. No meat, meat by-products, and fish
    c. Yes to dairy products, eggs, gelatin, and more.
    d. May see more students in both allergen-free dining halls
7. Halal
    a. All foods are halal unless specified by the Qur'an or the Hadith

        i. Haram are the foods prohibited
            1. Alcohol, intoxicants, non-halal animal fat and shortening, enzymes, gelatin from non-halal sources, L-cysteine from human hair, lard, animal lipase, pork/bacon/ham/anything from pigs, unspecified meat broth, rennet except plant/microbial/synthetic/from halal slaughtered animals, stock made from mix spices or meat stock, tallow (non-halal spices), carnivorous animals, and birds of prey
        ii. Certain cuts of meat and/or animals can be halal
    b. Foods that have been processed, produced, made, manufactured and/or stored using equipment, utensils, and/or machinery that is properly cleansed according to Islamic law
8. Summary
    a. Diet preferences are made because of religious, medical, and/or ethical reasoning.
    b. Treat all diet preferences as an allergen
    c. Vegans do not consume any animal products.
    d. Vegetarians do not consume meat, meat by-products, and fish.
    e. Halal is the prohibition of foods specified by the Islamic law.
9. Post-test
    a. Diet preferences are chosen to best suit the consumer's religious beliefs, medical conditions, and/or ethical reasoning. **T** / F
    b. Vegetarians do not consume any animal products including honey, dairy, eggs, and gelatin. T / **F**
    c. Halal is defined by Jewish law. T / **F**
    d. Halal excludes alcohol and other intoxicants. **T** / F

HANDOUT (Diet Preferences)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____

- Diet preferences are chosen to best suit the consumer's religious beliefs, medical conditions, and/or ethical reasoning.
- Treat all diet preferences as an allergen.
- Vegan
    - No animal products
    - Main examples : meat, dairy, eggs, honey, gelatin
    - Do not cross-contaminate with pots/pans/utensils used to cook or prepare animal product containing foods
- Vegetarian
    - No meat, meat by-products, and fish
    - Yes to animal products including dairy, eggs, gelatin, and honey
- Halal
    - Foods outlined as permissible by the Islamic law
    - All foods are halal unless specified by the Qur'an or the Hadith
    - Alcohol, intoxicants, non-halal animal fat and shortening, enzymes, gelatin from non-halal sources, L-cysteine from human hair, lard, animal lipase, pork/bacon/ham/anything from pigs, unspecified meat broth, rennet except plant/microbial/synthetic/from halal slaughtered animals, stock made from mix spices or meat stock, tallow (non-halal spices), carnivorous animals, and birds of prey
    - Foods that have been processed, produced, made, manufactured and/or stored using equipment, utensils, and/or machinery that is properly cleansed according to Islamic law

Post-test : 1) _____ 2) _____ 3) _____ 4) _____

References

https://www.icv.org.au/about/about-islam-overview/what-is-halal-a-guide-for-non-muslims/

TITLE: Cross - Contamination

GOAL: Thoroughly explain food safety practices to prevent cross - contamination by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Describe the consequences of allergen and pathogenic contamination in foods.
2. Demonstrate proper hygiene skills.
3. Identify when a surface is contaminated.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. Introduction
    a. Explain who you are and what will be covered during the lesson
2. Pre-test
    a. Cross contamination can occur when a clean surface has been properly cleaned and sanitized. T / **F**
    b. Raw foods contain pathogens. **T** / F
    c. You may use allergen-free equipment with allergens. T / **F**
    d. Dirty uniforms can cause cross-contamination. **T** / F
    e. Ready-to-eat foods must be stored below raw foods. T / **F**
3. Cross-contamination occurs when unwanted pathogens, chemicals, and/or foreign objects move from one food to another
4. Contaminants
    a. Pathogens (bacteria, viruses, and fungus), dirt, metal shavings, foreign substances (from food or person), allergens, and chemicals
5. Food
    a. Raw food may contain pathogens
    b. Keep ready-to-eat and raw foods separate throughout storage and preparation.
    c. Direct transfer when foods touch
    d. Indirect transfer when surfaces, gloves/hands, utensils, and/or equipment are not cleaned and sanitized properly
    e. Leaky boxes or broken cartons containing raw products when receiving
    f. Clean and sanitize equipment, utensils, and surfaces when preparing and cooking different foods
        i. Ex : clean and sanitize all surfaces, utensils, and equipment between preparing raw meat and vegetables
        ii. Ex : using the same utensil, spatula, or other equipment for multiple tasks

6. Food contact surfaces and equipment
    a. Improper washing and sanitizing
        i. Residues of chemicals, allergens, using dirty cloths, and pathogens
    b. Using dedicated allergen-free utensils and equipment with allergens
7. People
    a. Improper washing of hands
    b. Dirty uniforms and gloves
8. Storing
    a. Ready-to-eat foods must be stored on high/top shelves
    b. Raw meats must be stored on on the lower shelves
        i. Raw meats with low minimum cooking temps must be stored above raw meats with higher minimum cooking temps
            1. Ex : Poultry is below beef and steak
    c. Keep allergens below or away from allergen-free ingredients
    d. Keep all products covered
    e. Keep all chemicals away from food products
9. <u>Summary</u>
    a. Cross-contamination occurs when unwanted pathogens, chemicals, and/or foreign objects move from one food to another
    b. Contaminants include pathogens (bacteria, viruses, and fungus), dirt, metal shavings, foreign substances (from food or person), allergens, and chemicals
    c. Keep raw foods away from other foods
    d. Properly clean and sanitize all surfaces, utensils, and equipment between tasks
    e. Only use allergen-free utensils and equipment when preparing food without allergens.
    f. Keep yourself, uniforms, and gloves/hands clean
    g. Store raw foods below ready-to-eat items
    h. Keep all products covered
10. <u>Post-test</u>
    a. Cross contamination can occur when a clean surface has been properly cleaned and sanitized. T / **F**
    b. Raw foods contain pathogens. **T** / F
    c. You may use allergen-free equipment with allergens. T / **F**
    d. Dirty uniforms can cause cross-contamination. **T** / F
    e. Ready-to-eat foods must be stored below raw foods. T / **F**

HANDOUT (Cross - Contamination)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

- Cross-contamination occurs when unwanted pathogens, chemicals, and/or foreign objects move from one food to another
- Contaminants
    - Pathogens (bacteria, viruses, and fungus), dirt, metal shavings, foreign substances (from food or person), allergens, and chemicals
- Raw foods may contain pathogens
- Direct transfer when foods touch can cause cross-contamination
- Indirect transfer when surfaces, gloves/hands, utensils, and/or equipment are not cleaned and sanitized properly can cause cross-contamination
- Leaky boxes or broken cartons containing raw products when receiving can cause cross-contamination
- Clean and sanitize equipment, utensils, and surfaces when preparing and cooking different foods
- Improper washing and sanitizing
    - Residues of chemicals, allergens, using dirty cloths, and pathogens
- Using dedicated allergen-free utensils and equipment with allergies may cause cross-contamination
- Dirty hands, uniforms, and gloves will cause cross-contamination
- Ready-to-eat foods must be stored on high/top shelves
- Raw meats must be stored on on the lower shelves
    - Raw meats with low minimum cooking temps must be stored above raw meats with higher minimum cooking temps
- Keep allergens below or away from allergen-free ingredients
- Keep all products covered
- Keep all chemicals away from food products

Post-test : 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

References

https://www.statefoodsafety.com/Resources/Training-Tips/stand-up-training-preventing-food-to-food-cross-contamination

https://www.gov.mb.ca/agriculture/food-safety/at-the-food-processor/food-safety-program/pubs/fs_7.pdf

TITLE: Foodborne Illness

GOAL: Thoroughly explain key principles of foodborne illnesses by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Identify the three types of foodborne hazards.
2. Identify the top five most common bacteria.
3. Describe what conditions are needed to allow bacterial growth.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. <u>Introduction</u>
    a. Explain who you are and what will be covered during the lesson
2. <u>Pre-test</u>
    a. Most common source of foodborne illnesses is viruses. T / **F**
    b. The danger zone is between 41 - 140 degrees fahrenheit. **T** / F
    c. Reheating internal temperature must be at least 165 degrees fahrenheit. **T** / F
    d. Bacteria grow best on items that are dry. T / **F**
3. At risk populations for severe foodborne illnesses
    a. Elderly, infants, pregnant, and immunocompromised individuals
4. Bacteria
    a. Most common source of foodborne illness
    b. Humans, animals, insects, foods, soil, and water can carry bacteria
    c. Salmonella and Escerichia coli (E. coli) are the most common bacterial causing foodborne illness
5. Viruses
    a. Transmitted from people to food
    b. Cannot grow on food
6. Parasites
    a. Microscopic organisms living within another organism
7. Fungi
    a. Mold
        i. Bright colored and fuzzy
        ii. Some produce toxins which cause the foodborne illness
    b. Yeast
        i. Causes spoilage but rarely foodborne illness
        ii. Alcohol smell, discoloration, and fermentation

8. Biological toxins
    a. Naturally occurring in seafood, mushrooms, and plants
    b. Identification of naturally toxic foods help in prevention
9. Conditions to grow
    a. High-protein
    b. Acidic foods between pH 4.6 - 7.0
        i. Adding lemon juice or vinegar to drop the pH of a food item will help slow pathogen growth
    c. Temperature and time
        i. Danger zone is between 41 - 140 degrees fahrenheit
        ii. Foods remaining in the temperature danger zone for more than 2 hours
    d. Moisture
        i. Water activity (a_w) is the amount of water available in food
        ii. Decreasing a_w can cause the food to be less hazardous
            1. Adding sugar or salt, cooking, dehydrating, and/or freezing
        iii. Below a level of 0.85 is considered not hazardous
        iv. Most hazardous foods have an a_w of 0.97 - 0.99
        v. Dry foods become potentially hazardous when water is added
            1. Ex : beans, lentils, and rice
10. Sources and prevention
    a. Improper heat/cooking of food
        i. Cook food to specified temperatures
    b. Improper cooling of foods
        i. Foods must pass through danger zone quickly
    c. Poor personal hygiene
        i. Wash hands, or change gloves, frequently
    d. Foods prepared in advance without proper cooling and storing
        i. Properly cool and store after preparation
    e. Raw and/or contaminated foods added to ready-to-eat foods that receive no further cooking
        i. Prepare and store raw foods properly
        ii. If food is meant to be served raw, properly store and prepare the item and ensure it is of good quality/grade
    f. Foods kept in the danger zone over 2 hours
    g. Improper reheating of food
        i. Internal heat must be at least 165 degree fahrenheit
    h. Cross-contamination
        i. Practice proper cleaning and sanitizing of surfaces, utensils, and equipment

11. Summary
    a. Bacteria, viruses, parasites, fungus, and naturally occuring toxins are the main causes of foodborne illness
    b. Salmonella and Escherichia coli (E. coli) are the most common bacterial causes of foodborne illnesses
    c. Viruses are transmitted through people to food to people but does not multiply on food
    d. Parasites are microscopic organisms living within another organism
    e. Fungi (mold) can produce toxins which cause foodborne illness
    f. Biological toxins are naturally occurring toxins found in seafood, mushrooms, and plants
    g. Conditions needed to grow include high-protein environment, slightly acidic, temperature between 41 - 140 degrees fahrenheit for more than 2 hours, and moisture levels above allowing for bacterial growth above 0.85 a_w
    h. Follow proper cooking, storing, and hygiene practices to ensure adequate prevention.
12. Post-test
    a. Most common source of foodborne illnesses is viruses. T / **F**
    b. The danger zone is between 41 - 140 degrees fahrenheit. **T** / F
    c. Reheating internal temperature must be at least 165 degrees fahrenheit. **T** / F
    d. Bacteria grow best on items that are dry. T / **F**

HANDOUT (Foodborne Illness)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____

- Individuals who are elderly, infants, pregnant, and immunocompromised are at high risk for foodborne illness
- Bacteria is the most common cause of foodborne illness
    - Salmonella and Escerichia coli (E. coli) being the most common
- Viruses transmit through people and food but cannot grow on food
- Parasites are microscopic organisms living within another organism
- Mold and yeast are the most common fungi
    - Mold produce toxins that cause foodborne illness
    - Yeast causes spoilage but rarely foodborne illness
- Biological toxins are naturally occurring in seafood, mushrooms, and plants
- Conditions to grow include a high protein environment, acidic foods between pH 4.6 - 7.0, between 41 - 140 degrees fahrenheit, and enough water/moisture (water activity level above 0.85).
- Preventing foodborne illness
    - Cooking food to specified temperatures
    - Pass hot food through the danger zone quickly when cooling
    - Good personal hygiene
    - Properly cool and store food after preparation or use right away
    - Prepare and store raw foods properly
    - Internal heat must be at least 165 degrees fahrenheit when reheating
    - Practice proper cleaning and sanitizing of surfaces, utensils, and equipment

Post-test : 1) _____ 2) _____ 3) _____ 4) _____

References

http://dpg-storage.s3.amazonaws.com/dhcc/resources/Inservice2010Final/Inservice%202010.pdf
https://www.smchealth.org/sites/main/files/file-attachments/general_food_safety_in-service.pdf?1485884271

TITLE: Cooking and Holding Temperatures

GOAL: Thoroughly explain cooking and holding temperatures when preparing cooked foods by the end of the in-service presentation.

LEARNING OBJECTIVES: By the end of the lesson, employees will be able to:

1. Identify when to record temperatures of food.
2. Identify what the proper food temperatures are.
3. Explain how to take temperatures of food properly.

MATERIALS:

1. Handout with key information from the presentation.

PROCEDURES:

1. Introduction
    a. Explain who you are and what will be covered during the lesson
2. Pre-test
    a. You must calibrate the thermometer by placing it in hot water to see if it reads the correct temperature. T / **F**
    b. You should not check the temperature of foods at the thickest part because the thermometer might get stuck. T / **F**
    c. You must throw away food if it has been sitting in holding for more than one hour. T / **F**
    d. Poultry is cooked at a minimum temperature of 165 degrees fahrenheit. **T** / F
3. Taking food temperatures
    a. Calibrated thermometer
        i. Test ice water to see if it reads 0 degrees celsius (32 degrees fahrenheit)
    b. Cooking, reheating, or cooling
    c. Take the temperature at the thickest part of the food and not touching the bottom or sides
    d. Clean and sanitize the thermometer when testing different foods
4. Cooking temperatures
    a. 165 degrees fahrenheit
        i. Poultry
        ii. Stuffing that includes meat
        iii. Stuffed meats and pastas
        iv. Dishes containing previously cooked food
    b. 155 degrees fahrenheit
        i. Ground meat
        ii. Seafood

        iii. Injected, marinated, or tenderized meats
    c. 145 degrees fahrenheit
        i. Whole seafood
        ii. Beef, pork, veal, and lamb
        iii. Roasts
        iv. Eggs
    d. 135 degrees fahrenheit
        i. Ready-to-eat hot-held foods
        ii. Fruits, vegetables, grains, and legumes to be hot held
5. Holding temperature
    a. Hot foods
        i. Warming lamps and hot wells
        ii. Above 140 degrees fahrenheit
        iii. Must reheat or throw out after two hours
    b. Cold foods
        i. Must stay below 40 degrees fahrenheit
        ii. Throw out if above 40 degrees fahrenheit
        iii. Must store or throw out after two hours
6. <u>Summary</u>
    a. Calibrate the thermometer prior to testing
    b. Test when cooking, reheating, or cooling
    c. Cooking temperatures vary depending on what is being cooked
    d. Hot holding is above 140 degrees fahrenheit
    e. Cold holding is below 40 degrees fahrenheit
7. <u>Post-test:</u>
    a. You must calibrate the thermometer by placing it in hot water to see if it reads the correct temperature. T / **F**
    b. You should not check the temperature of foods at the thickest part because the thermometer might get stuck. T / **F**
    c. You must throw away food if it has been sitting in holding for more than one hour. T / **F**
    d. Poultry is cooked at a minimum temperature of 165 degrees fahrenheit. **T** / F

HANDOUT (Cooking and Holding Temperatures)

Pre-test : 1) _____ 2) _____ 3) _____ 4) _____

- Calibrate the thermometer prior to testing
- Test when cooking, reheating, or cooling
- Test at the thickest part of the food and the thermometer is not touching the bottom or sides
- Foods cooked at 165 degrees fahrenheit include poultry, stuffing that includes meat, stuffed meats and pastas, and dishes containing previously cooked food
- Foods cooked at 155 degrees fahrenheit include ground meat, seafood, and injected, marinated, or tenderized meats.
- Foods cooked at 145 degrees fahrenheit include whole seafood, beef, pork, veal, lamb, roasts, and eggs.
- Foods cooked at 135 degrees fahrenheit include ready-to-eat hot-held foods, fruits, vegetables grains, and legumes to be hot held.
- Hot holding foods must be held above 140 degrees fahrenheit
- Hot holding foods must be reheated to above 165 degrees fahrenheit or thrown out after two hours
- Cold holding foods must be held below 40 degrees fahrenheit
- Cold holding foods must be stored, thrown out after two hours or if above 40 degrees fahrenheit

Post-test : 1) _____ 2) _____ 3) _____ 4) _____

References

https://www.statefoodsafety.com/Resources/Training-Tips/stand-up-training-taking-food-temperatures
https://www.statefoodsafety.com/Resources/Resources/cooking-times-and-temperatures-poster