





South Carolina Department of Health and Environmental Control
Healthy People. **Healthy Communities.**

Food Safety Training Modules

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Introduction

- Food Safety knowledge can help you protect yourself and your residents or participants
- The information in this presentation will give you tips to safely store, prepare, and serve food at your facility.



Did you know....

- 48 million *people get sick*
- 128,000 *people are hospitalized*
- 3,000 *people die*

Highly Susceptible Populations

- Children younger than 5 years old
- **Elderly**
- Pregnant women
- **Immune-compromised (due to cancer, AIDS, diabetes, certain medications, or other conditions)**



Effective July 27, 2016

- Food Protection Manager Certification
- Date Marking
- Proper holding temperatures



FOOD PROTECTION MANAGER CERTIFICATION

- Per Regulation 61-25, section 2-102.12: At least one employee that has supervisory and management responsibility and the authority to direct and control food preparation and service shall be a certified food protection manager who has shown proficiency of required information through passing a test that is part of an accredited program.
- Only Conference for Food Protection certified courses meet this requirement



Food Handler vs. Food Protection Manager Certification

- Food handler certification **is not** a substitute for food protection manager certification

Food Handler Certification vs. Food Protection Manager Certification

Food Handler

- Basic food safety principles
- Personal Hygiene
- Cross Contamination
- Time and Temperature
- Cleaning and Sanitizing

Food Protection Manager

- Foodborne illnesses
- Good Personal Hygiene
- Purchasing, receiving, and storage
- Preparation
- Cooking and Sanitizing
- Day to Day operation

Five key factors that can lead to a food borne illness

- Improper holding temperatures
- Inadequate cooking
- Using contaminated equipment
- Food from unsafe or unapproved sources
- Practicing poor personal hygiene

Person in Charge (PIC)

- The permit holder shall be the PIC or shall designate a PIC and shall ensure that a PIC is present at the food establishment during **all** hours of operation.
- Hours of Operation mean during all hours of food preparation, production, and service

Employee Health

- Vomiting
- Diarrhea
- Jaundice (yellowing of the eyes or skin)
- Sore throat with fever
- Infected cuts or wounds or lesions containing pus such as boils on hands, wrists or other exposed body parts



Employee Health

- Norovirus
- Hepatitis A
- Shigella
- E-Coli
- Salmonella



Employee Health

- The food service establishment must have in place a written policy to exclude or reinstate food employees for the previously mention conditions.



Good Personal Hygiene

HANDWASHING

- Handwashing is the most important part of good personal hygiene.

Hand cleaning procedures

- Rinse hands, and exposed portions of your arms under clean, running warm water
- Apply soap
- Rub hands together vigorously for at least 20 seconds
- Thoroughly rinse hands under clean running warm water; and
- Dry hands with a paper towel

When to wash hands

- After touching bare human body parts
- After using the bathroom
- After any break
- After handling dirty equipment, dishes or utensils
- Before putting on gloves and when changing into a new pair
- Between working with raw meats and working with ready to eat foods
- As often as necessary



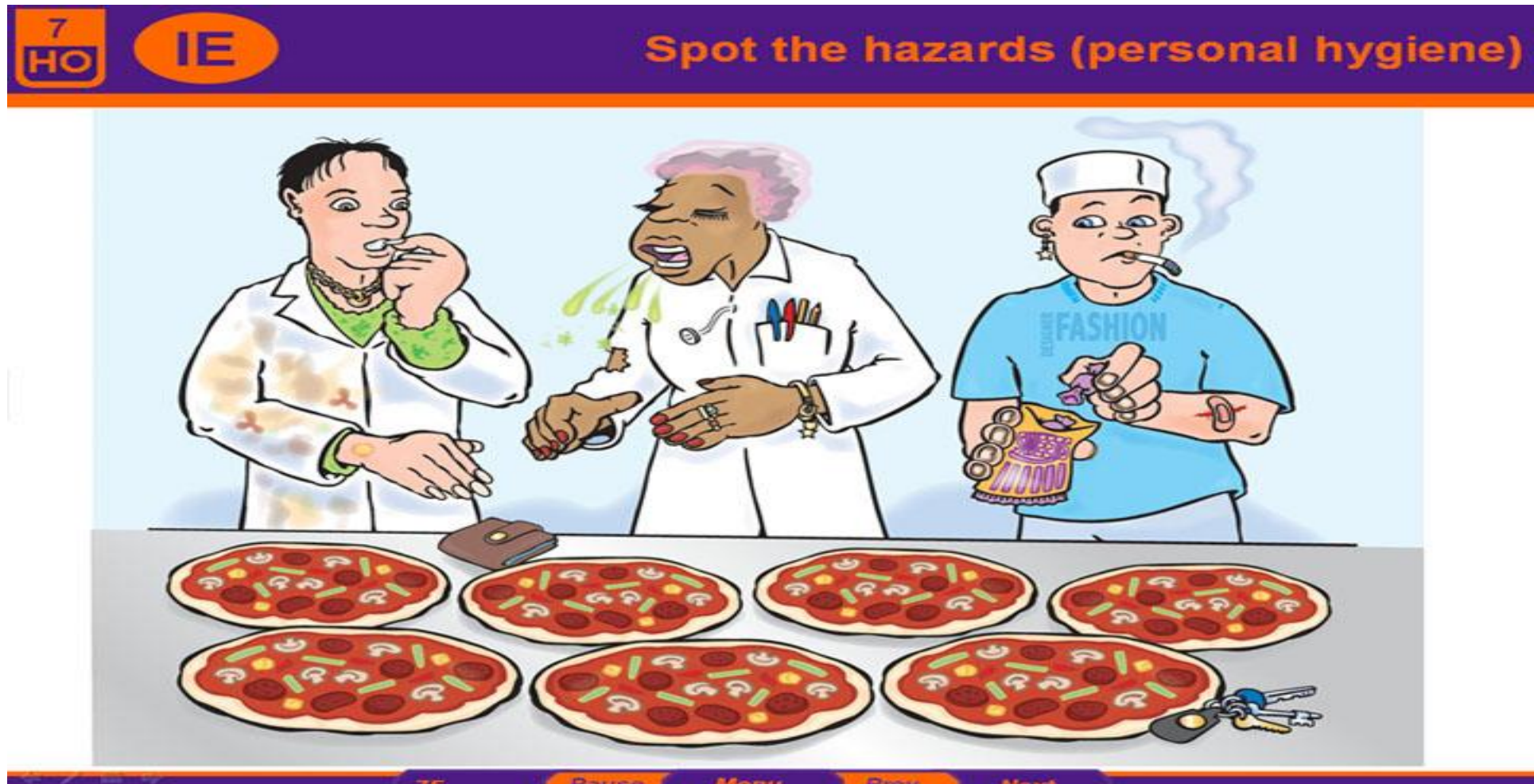
Where to wash hands

- In a hand-sink **ONLY**

Good Personal Hygiene

- Eating, drinking, and smoking
- Hair restraints
- Fingernails
- Infected cuts and wounds
- Jewelry
- Personal Items
- Wearing clean clothing and removing aprons when leaving prep areas.

What's wrong with this picture?



NO BARE HAND CONTACT

- Food establishment regulation 61-25, section 3-801.11D state that food employees may not contact ready-to-eat food.



Suitable utensils for handling ready-to-eat foods

- Tongs
- Forks, spoons, or other serving utensils
- Spatulas
- Deli tissues
- Single-use gloves

Single-use Gloves

- Always wash hands before putting on gloves and when changing into a new pair; And, change gloves when:
- Become soiled or torn;
- Before beginning a different task; and after handling raw meat, fish, poultry and before handling ready-to-eat foods

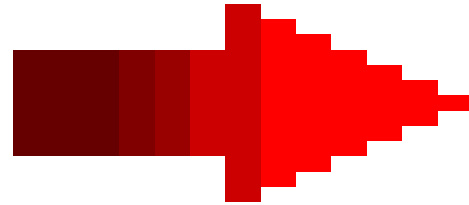
USE YOUR THERMOMETER

- Cooking, cooling, reheating, and holding food to the right temperature is the best way to kill bacteria that might be in the food.

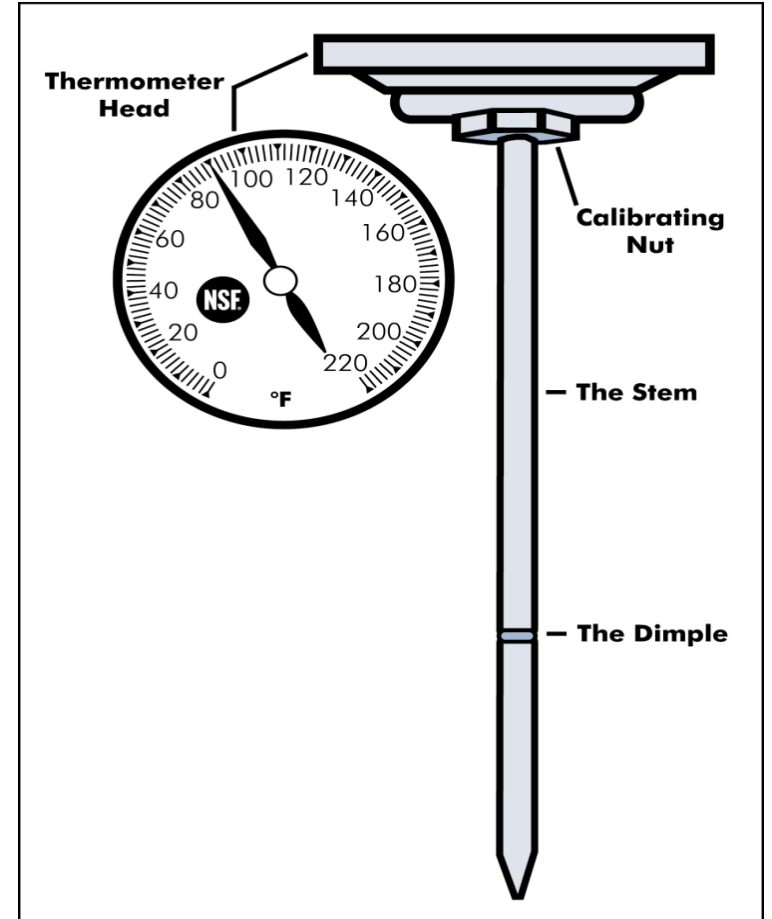


Thermometers

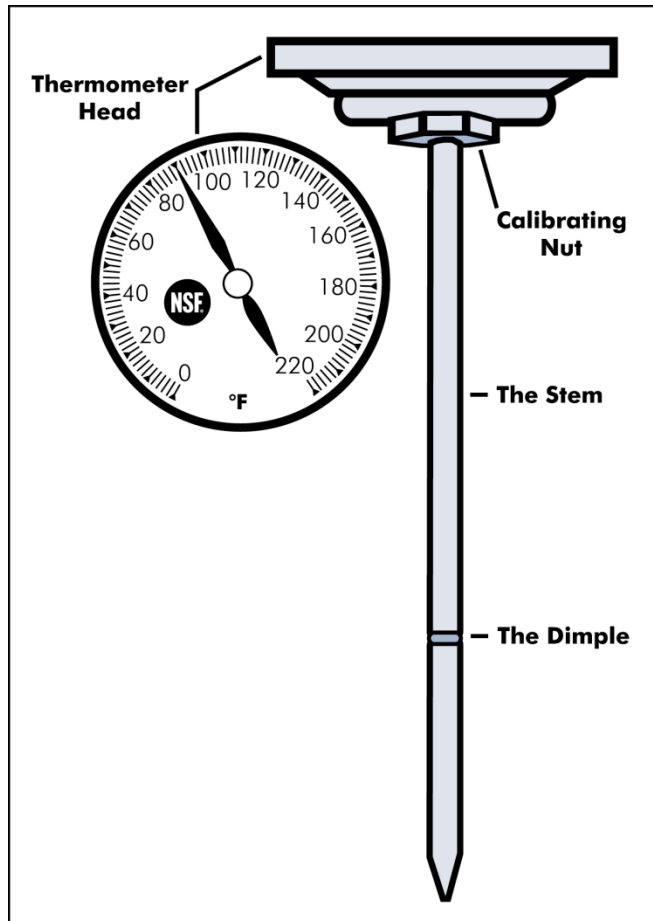
- Metal stem thermometer



- Digital thermometer



Calibrating Thermometers



There are two methods of calibrating a bimetallic stemmed probe thermometer:

- *The ice-point method (0°C /32°F)*
- *The boiling-point method (100°C /212°F)*

Time/Temperature Control (TCS)

- Meat: Beef, pork, lamb
- Poultry: Chicken, turkey
- Heat-treated plant food such as cooked rice, beans, fruits and vegetables
- Raw seed sprouts
- Cut melons
- Cut leafy greens
- Eggs
- Baked potatoes

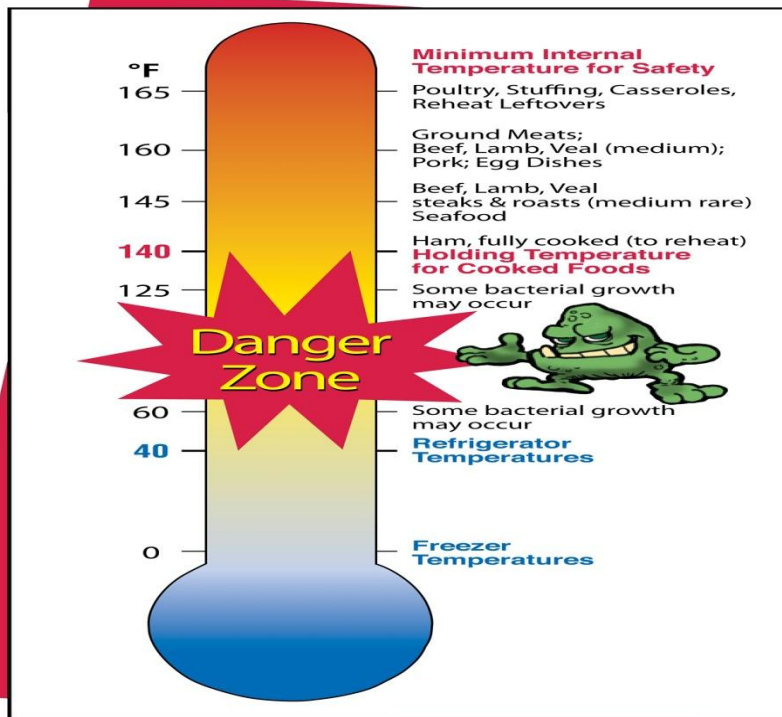


Proper Holding Temperatures

- Hot foods must be maintained hot at 135°F or above
- Cold foods must be maintained cold at 41°F or below

Danger Zone

- The range of temperatures between 41°F and 135°F is called the danger zone.



Cold foods = 41°F or below

Hot foods = 135°F or above



Proper Cooking Temperatures

Fruits and vegetables that are cooked for hot holding	135°F			
Pork	145°F			
Beef	145°F			
Fish	145°F			
Eggs for immediate service	145°F			
Ground Beef	155°F			
Eggs for hot holding	155°F			
Poultry	165°F			
Stuffed Foods	165°F			



Proper reheating temperatures

- TCS food that is cooked, cooled and reheated for hot holding shall be reheated to 165°F within 2 hours.
- Ready to eat food taken from a commercially processed, sealed container must be reheated to at least 135°F for hot holding.
- An example of commercially processed foods are hot dogs.



Proper cooling temperatures

TCS foods requiring cooling must be cooled quickly:

- From 135°F to 70°F within 2 hours
- From 70°F to 41°F within 4 hours



Proper cooling temperatures

TCS foods requiring cooling must be cooled quickly:

- From 135°F to 70°F within 2 hours
- From 70°F to 41°F within 4 hours

Approved cooling methods

- Use shallow pans (i.e. 4 inches or less deep)
- Rapid cooling equipment (i.e. ice paddles, blast chillers)
- Stirring food consistently in an ice water bath before storing in the cooler
- Adding ice and/or cold water as an ingredient to the food product
- Cutting food product into smaller or thinner portions



DATE MARKING

- Food must be discarded within seven (7) days of the date that it was prepared or opened.
- Date of preparation or date opened count as DAY ONE (1)
- **Example #1:** Food prepared on June 1 must be used or discarded on June 7
- **Examples #2:** A new gallon of milk opened on April 1 must be used or discarded by April 7



DATE MARKING

- On the label, write “prep-6/1/17”
- On the label, write “prep-6/1/17 and use by 6/7/17”
- On the label, write “open-4/1/17”
- On the label write “open-4/1/17 and use by 4/7/17”

Proper Thawing

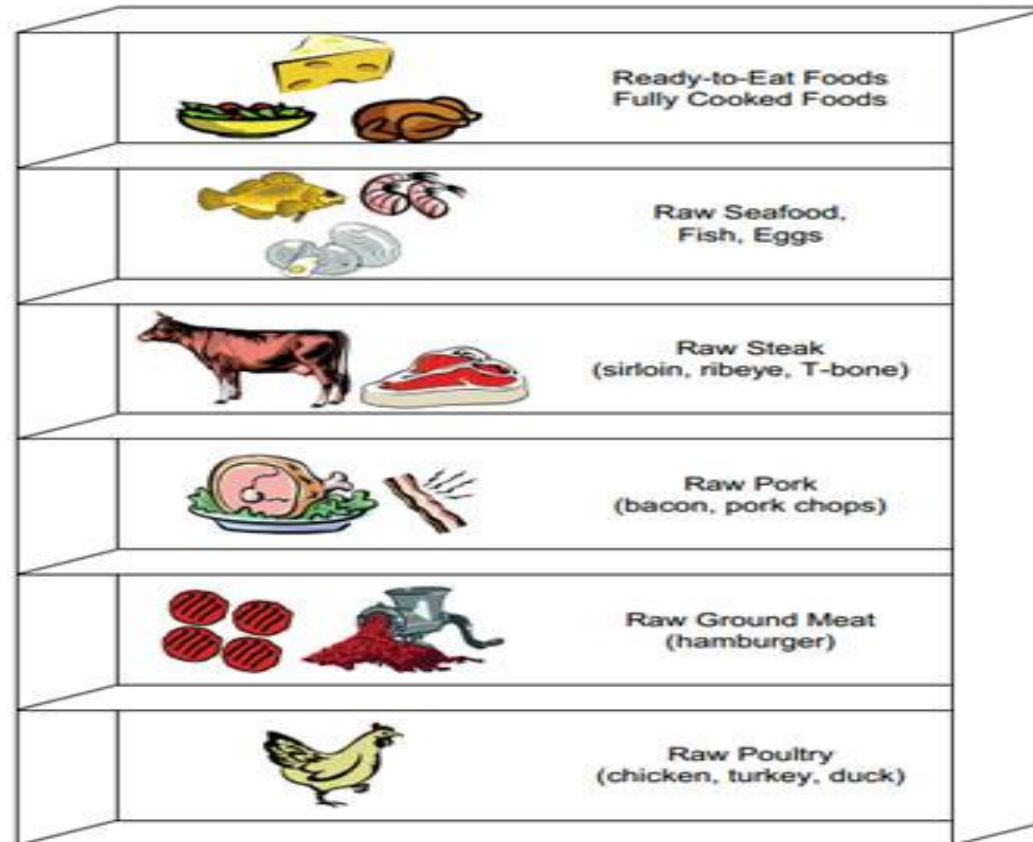
- under refrigeration at 41°F or below (Safest method)
- under cold running water at 70°F or below
- in the microwave, or
- as part of the cooking process

Cross Contamination Prevented

- Using separate equipment
- Cleaning and sanitizing
- Prepping food at different times
- Buying prepared food
- Proper food and supply storage

Proper Food Storage Order

SAFE REFRIGERATOR STORAGE



Proper 3 compartment sink manual dish washing

- **Step 1:** Clean and Sanitize Sinks and Drain boards
- **Step 2:** Pre-flush or Pre-Scrape utensils/dishes of excess debris.
- **Step 3:** Fill 1st Compartment with detergent and hot water and WASH dishes thoroughly
- **Step 4:** Fill 2nd Comp. with warm to hot water and RINSE dishes thoroughly
- **Step 5:** Fill the 3rd Comp. with a chemical sanitizer and SANITIZE dishes thoroughly for at least 30 seconds
- **Step 6:** Let dishes AIR DRY

Proper 2 Compartment Sink Manual Dish Washing-METHOD #1

- **Step 1:** Clean and Sanitize Sinks and Drain boards
- **Step 2:** Pre-flush or Pre-Scrape utensils/dishes of excess debris.
- **Step 3:** Fill 1st Compartment with detergent and hot water and WASH dishes thoroughly
- **Step 4:** Fill 2nd Compartment with warm to hot water and RINSE dishes thoroughly
- **Step 5:** Fill a large bin/container with chemical sanitizer and SANITIZE dishes thoroughly
- **Step 6:** Let dishes AIR DRY

Proper 2 Compartment Sink Manual Dish Washing-METHOD #2

- **Step 1:** Clean and Sanitize Sinks and Drain boards
- **Step 2:** Pre-flush or Pre-Scrape utensils/dishes of excess debris.
- **Step 3:** Fill 1st Compartment with detergent and hot water and WASH dishes thoroughly
- **Step 4:** Fill 2nd Compartment with warm to hot water and RINSE dishes thoroughly
- **Step 5:** Drain the WASH water from the 1st comp. and re-fill sink with a chemical sanitizer solution and SANITIZE dishes thoroughly
- **Step 6:** Let dishes AIR DRY

Appropriate Sanitizer Concentrations

- Chlorine: 50 to 200 parts per million (PPM)
- Quaternary Ammonium: 150 to 400 parts per million (PPM) or 200 to 400 PPM-Must follow the manufacturer's instructions (typically 200 to 400 PPM or 150 to 400 ppm)
- USE YOUR TEST KITS!!!

Other observations

- Insuring that food contact surfaces and equipment are clean
- Insuring that non-food contact surfaces and equipment clean
- If applicable, insuring that your dish Machine (low or high temperature) is operating according to data plate
- No expired food items
- Insuring that food isn't molded or contaminated by any foreign objects, insects, etc.

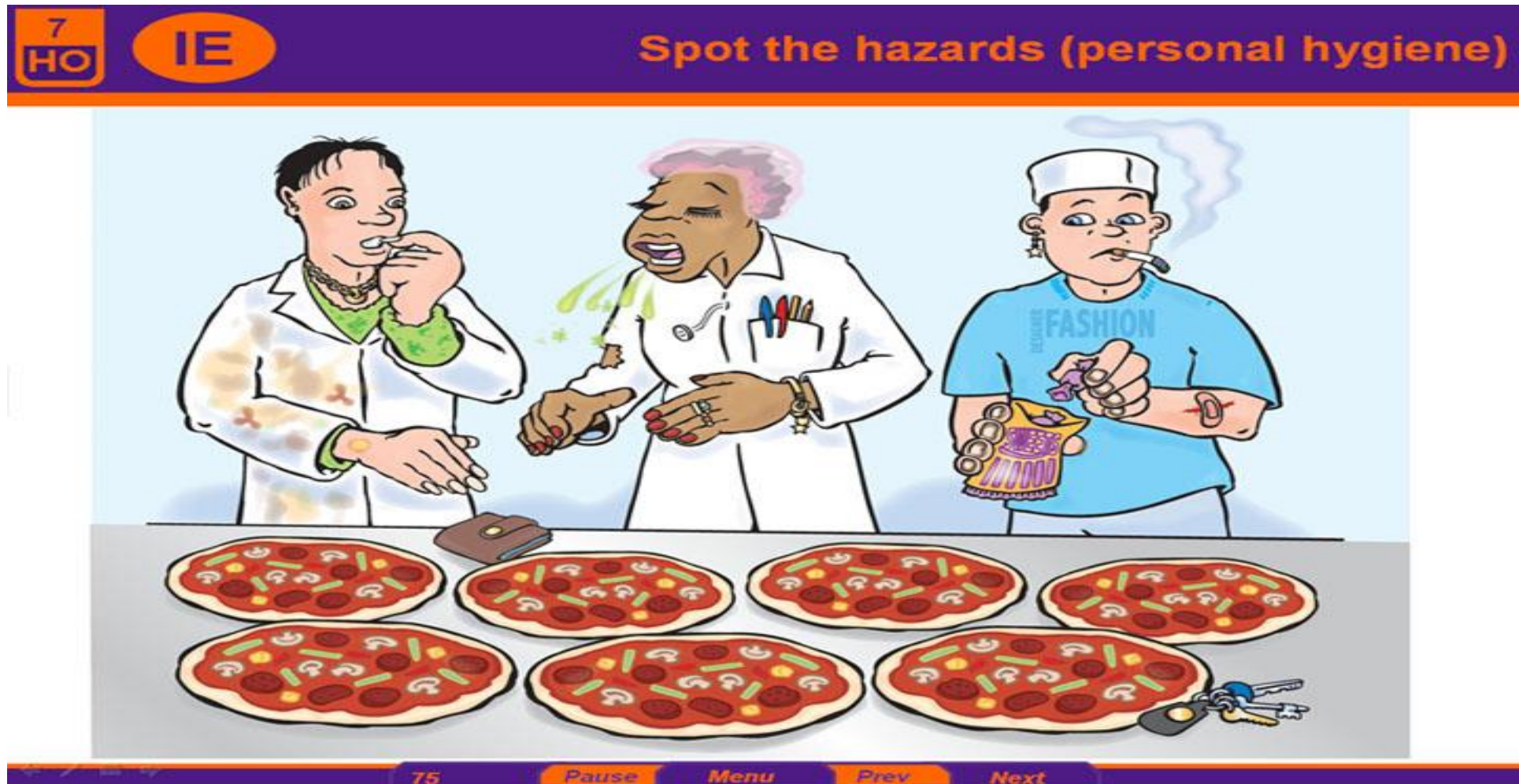
Other Observations

- Insuring that hot water at hand-sink is 100F minimum
- Insuring that hand washing signs are at all hand-sinks used by employees
- Insuring that food is stored properly: in clean/dry area, not under exposed plumbing, away from contamination, at least 6 inches off of the floor
- Insuring that single service items are stored properly: in clean/dry area, not under exposed plumbing, away from contamination, covered or in its original protective covering, at least 6 inches off of the floor.

Other observations

- Overall cleanliness of the facility: Clean, clutter free
- No insects and/or rodents present (or evidence)
- Insuring that outside of premises is clean: Neat, clutter free, no trash on ground
- Insuring that dumpsters are closed and dumpster plugs are installed
- Insuring that walls, ceilings, and floors in good repair
- Insuring that non-food contact and food contact equipment in good repair

What's wrong with this picture?





What Do You Know!

Foods requiring cooling should be cooled from 135°F to 70°F within _____ hours and from 70°F to 41°F within _____ hours.



Answer

Foods requiring cooling should be cooled from 135°F to 70°F within 2 hours and from 70°F to 41°F within 4 hours.



What Do You Know!

- What are some examples of approved and effective cooling methods for food requiring cooling?

Answer

- Rapid cooling equipment (i.e. ice paddles)
- Stirring food consistently in an ice bath
- Adding ice as an ingredient
- Cutting food in smaller/thinner portions
- Using shallow metal pans/containers (i.e. 4 inches or less deep)



What do you know

What are some examples of how you could properly thaw out a frozen roast?

Answer

- Under refrigeration at 41°F or below (Safest method)
- Under cold running water at 70°F or below
- In the microwave
- As part of the cooking process



What Do You Know!

TRUE OR FALSE

A food employee may wash their hands in the 3 compartment sink.



ANSWER

- **FALSE.** Food employees must wash their hands in the hand-sink only.



What Do You Know!

TRUE OR FALSE

Dishes and utensils must be washed, rinsed, sanitized, and dried with a cloth towel.



ANSWER

- **FALSE.** Dishes and utensils must be washed, rinsed, sanitized, and **air-dried.**

Proper Refrigeration Storage Order

A. (Top Shelf)	1. Raw fish
B.	2. Apple Pie
C.	3. Raw Chicken
D.	4. Raw Ham
E. (Bottom Shelf)	5. Raw Ground Beef
	6. Whole cut of raw beef (i.e. raw roast)

ANSWER

A. (Top Shelf)	APPLE PIE
B.	RAW FISH
C.	RAW HAM AND RAW ROAST
D.	RAW GROUND BEEF
E. (Bottom Shelf)	RAW CHICKEN

1. Raw fish B
2. Apple Pie A
3. Raw Chicken E
4. Raw Ham C
5. Raw Ground Beef D
6. Whole cut of raw beef (i.e. raw roast) C

Questions





Contact Us

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