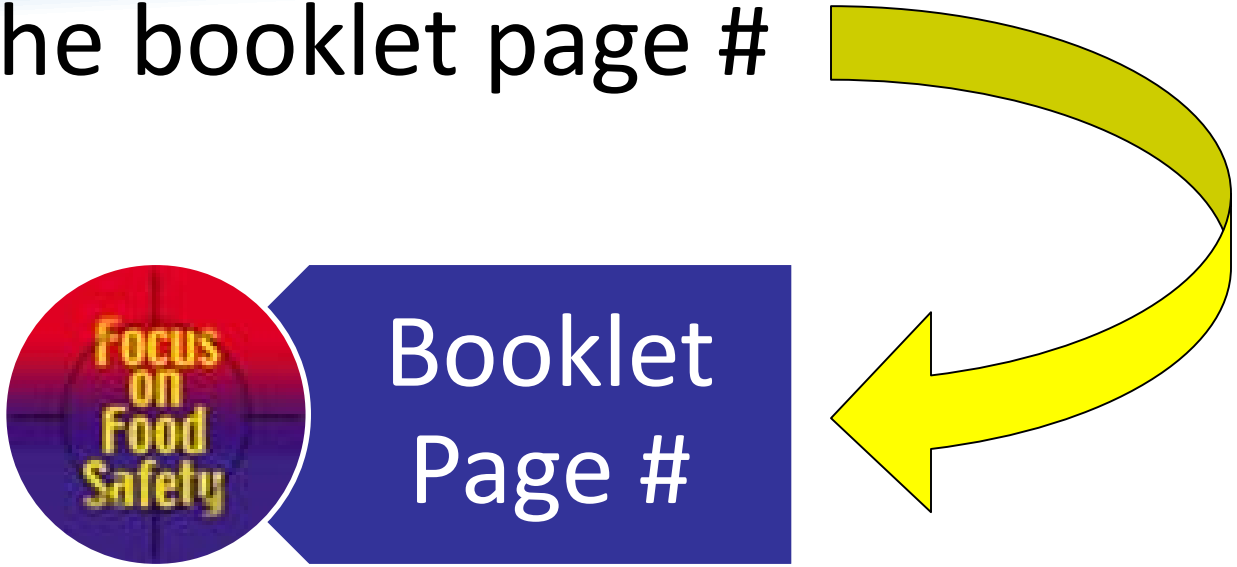
Food Safety and Lodging
1320 Research Park Drive
Manhattan, Kansas 66502

Kansas Department of Agriculture

FOLLOW ALONG

Look for the booklet page #



PRESENTATION OVERVIEW

- Introduction
- Identifying Common Foodborne Illnesses
- Food Microbiology
- Protecting Food in Preparation
- Consumer Advisory
- Protecting Food in Serving
- Safe & Clean
- Corrective Actions
- When to Call
- Contacts
- Helpful Websites

Focus on Food Safety

Booklet Page 1

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POP QUIZ

- Q. What ingredient/s of potato salad require refrigeration?
- A. Potatoes, eggs.

FOOD SAFETY IS…

Important

Everyone’s Responsibility

In Your Hands

A Full-Time Job

Booklet Page 2

FOODBORNE ILLNESS

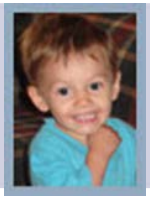
Annual estimates for the United States	48 million illnesses
	128,000 hospitalizations
	3,000 deaths
	$77 Billion cost to the economy

Booklet Page 5

THE REAL COST

Kyle 2003-2006

- Died from E. coli O157:H7 at age 2 and a 1/2
- Spinach



Shirley 1936-2008

- Died from Salmonella at age 73
- Peanut butter

Michael 2004

- Died from Listeria monocytogenes
- Infected through the placenta
- Emergency C-section at 30 weeks
- Lettuce

Source:StopFoodborneIllness.org

THE REAL COST

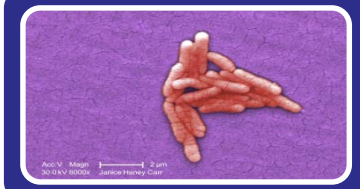
“Lauren Beth, age six years, ten months and ten days, died in my arms while on a life support system at San Diego's, highly respected, Children's Hospital, three days after Christmas on December 28th, 1992. Although at the time we did not know Lauren's true killer, we would soon come to the brutal reality of E. coli O157:H7.

For those of you not familiar with the carnage that E. coli O157:H7 can provide. It is an experience that none of us are prepared to endure, much less observe! Her struggle was valiant, but brutal. After excruciating pain, all of her main organs falling victim to this deadly toxin that is E. coli O157:H7. Three heart attacks, the first of which I was left helpless to witness. Her brain waves were no longer active. Her body was tormented and beaten. Her kidneys, liver and heart were ravaged. Lauren fell into a coma and was taken from my arms forever.”

– Roni (Lauren’s Mother)

Source:StopFoodborneIllness.org

HAZARDS



Biological

- Bacteria, Viruses, Parasites

Chemical

- Cleaners, Degreasers, Sanitizers, Additives, Medicines

Physical

- Glass, Metal Shavings, Fingernails, Jewelry

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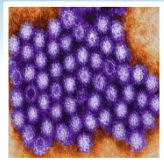
BIOLOGICAL HAZARDS

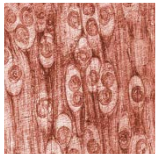


Viruses

- Norovirus
- Hepatitis A

Bacteria

- *E. coli*
- *Salmonella*
- *Listeria monocytogenes*

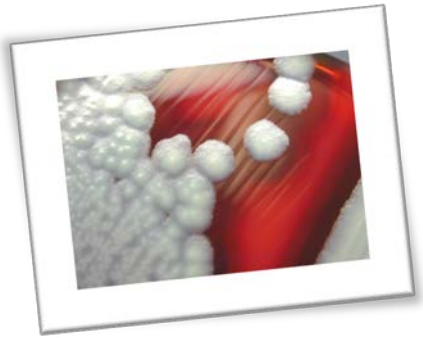


Parasites

- *Trichinella spiralis*
- *Cyclospora*
- *Cryptosporidium*

FOODBORNE ILLNESSES

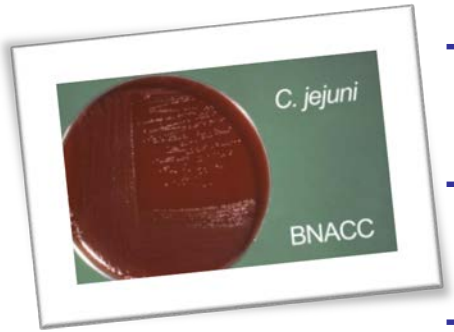
Bacillus cereus



Onset	1-16 hours
Lasts	6-24 hours
Symptoms	Nausea, vomiting, cramping, diarrhea
Common Sources	Rice and rice dishes, vegetables, sauces
Prevention	Proper cooking, cooling, and reheating

FOODBORNE ILLNESSES

Campylobacter

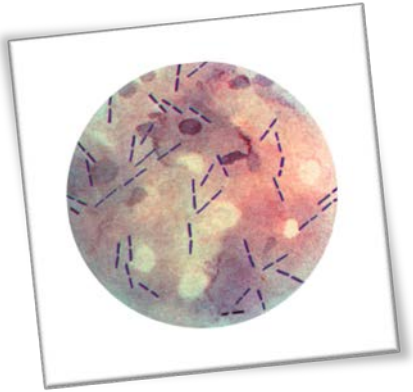


Onset	2-5 Days
Lasts	1-4 Days
Symptoms	Cramping, fever, diarrhea, nausea, headache, vomiting
Common Sources	Unpasteurized dairy, poultry, meats, infected food worker
Prevention	Proper cooking or pasteurization

Booklet Page 3

FOODBORNE ILLNESSES

Clostridium perfringens



Onset	8-24 Hours
Lasts	24-36 Hours
Symptoms	Cramping, diarrhea, nausea
Common Sources	Poultry, meats, beans, gravy, slow-cooked foods
Prevention	Proper cooking and reheating

FOODBORNE ILLNESSES

Entero-hemorrhagic

E. coli

Onset	2-10 Days
Lasts	1-4 Days
Symptoms	Diarrhea (often bloody), severe cramping, nausea, vomiting
Common Sources	Raw and undercooked meats (especially ground beef), produce
Prevention	Proper cooking, prevent cross-contamination

Focus on Food Safety Booklet Page 3

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FOODBORNE ILLNESSES

Hepatitis A

Onset	10-50 Days
Lasts	1-2 Weeks to Several Months
Symptoms	Fever, fatigue, headache, nausea, loss of appetite, vomiting, abdominal pain, jaundice
Common Sources	Shellfish, ready-to-eat foods contaminated by a carrier
Prevention	Approved shellfish sources, handwashing, no bare-hand-contact with ready-to-eat foods, employee illness policy

FOODBORNE ILLNESSES

Listeria monocytogenes

Onset	1 Day to 3 Weeks, up to 10 Weeks
Lasts	Depends on disease progression, may have permanent effects.
Symptoms	Nausea, vomiting, fever, chills, headache, meningitis, miscarriages
Common Sources	Unpasteurized dairy, cheese, vegetables, seafood, poultry, melons
Prevention	Hold refrigerated (<41° F) food less than 7 days, prevent cross-contamination

FOODBORNE ILLNESSES

Norovirus	
Onset	24-48 Hours
Lasts	1-2 Days
Symptoms	Diarrhea, vomiting, nausea, cramping, fever, headache
Common Sources	Unpasteurized dairy, cheese, vegetables, seafood, poultry, melons
Prevention	Hold refrigerated (<41° F) food less than 7 days, prevent cross-contamination

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FOODBORNE ILLNESSES

Shigella	
Onset	12 Hours to 7 Days
Lasts	4-7 Days
Symptoms	Diarrhea (often bloody), cramping, fever, nausea, headache, sometimes vomiting
Common Sources	Ready-to-Eat Foods from bare-hand-contact. Comes from human feces
Prevention	Good handwashing, no bare-hand-contact, approved food/water, control flies.

FOODBORNE ILLNESSES

Salmonella

Onset	6 Hours to 3 Days
Lasts	1-3 Days
Symptoms	Cramping, headache, nausea, diarrhea, fever, sometimes vomiting
Common Sources	Undercooked or raw animal foods, infected food workers
Prevention	Avoid cross-contamination, cook thoroughly, good handwashing

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FOODBORNE ILLNESSES

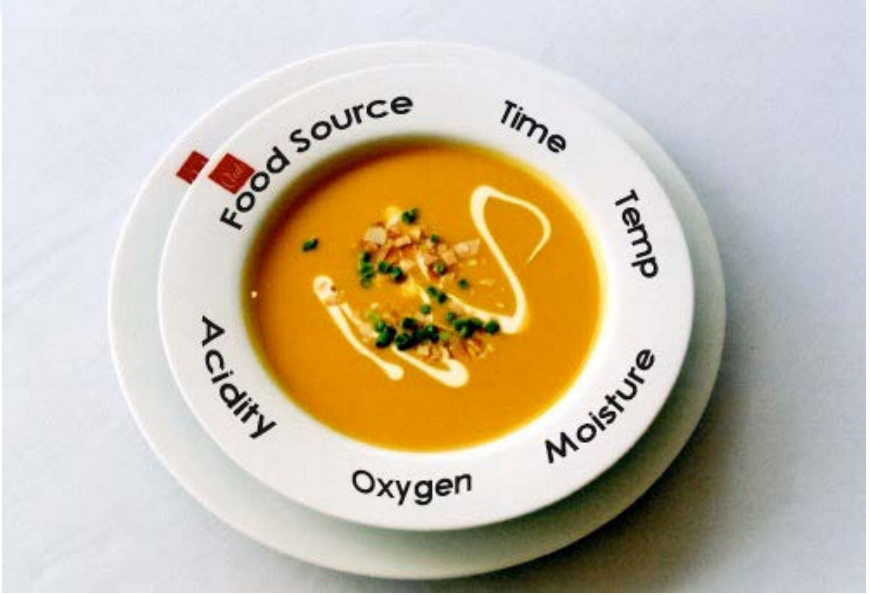
Salmonella Typhi

Onset	3-60 Days, usually 8-14 Days
Lasts	2-4 Weeks
Symptoms	Fever, headache, malaise, loss of appetite, constipation (sometimes diarrhea), joint pain
Common Sources	Ready-to-Eat Foods from bare-hand-contact. Comes from human feces
Prevention	Good handwashing, no bare-hand-contact, approved food/water, Employee exclusion

Focus on Food Safety Booklet Page 3

FOOD MICROBIOLOGY

- Growth Conditions
  - Food Source
  - Acidity
  - Time
  - Temperature
  - Oxygen
  - Moisture



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TCS FOODS

Foods that require Time and Temperature Control for Safety (TCS)

- Animal products
- Heat-treated Starches
- Special Produce

Booklet Page 7

TCS FOODS

Animal products

Meat, Poultry, Seafood, Dairy

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TCS FOODS

Heat treated Starches

Rice, Potatoes, Beans, Pasta, Vegetables

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TCS FOODS

Special Produce

Tofu, Sprouts, Cut Melons, Cut tomatoes, Garlic in Oil, Cut Leafy Greens

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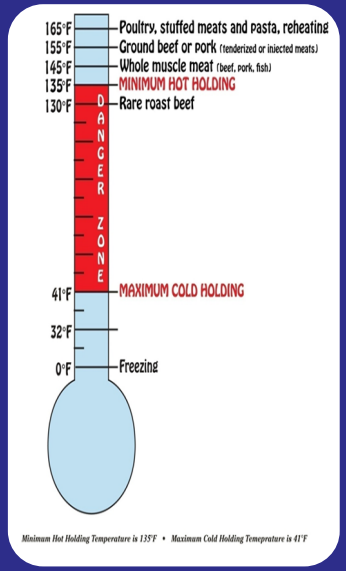
TIME & TEMPERATURE



Temperature Danger Zone

- 41°F to 135°F
- Rapid Bacterial Growth After 4 Hours

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Booklet Page 8

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THERMOMETERS

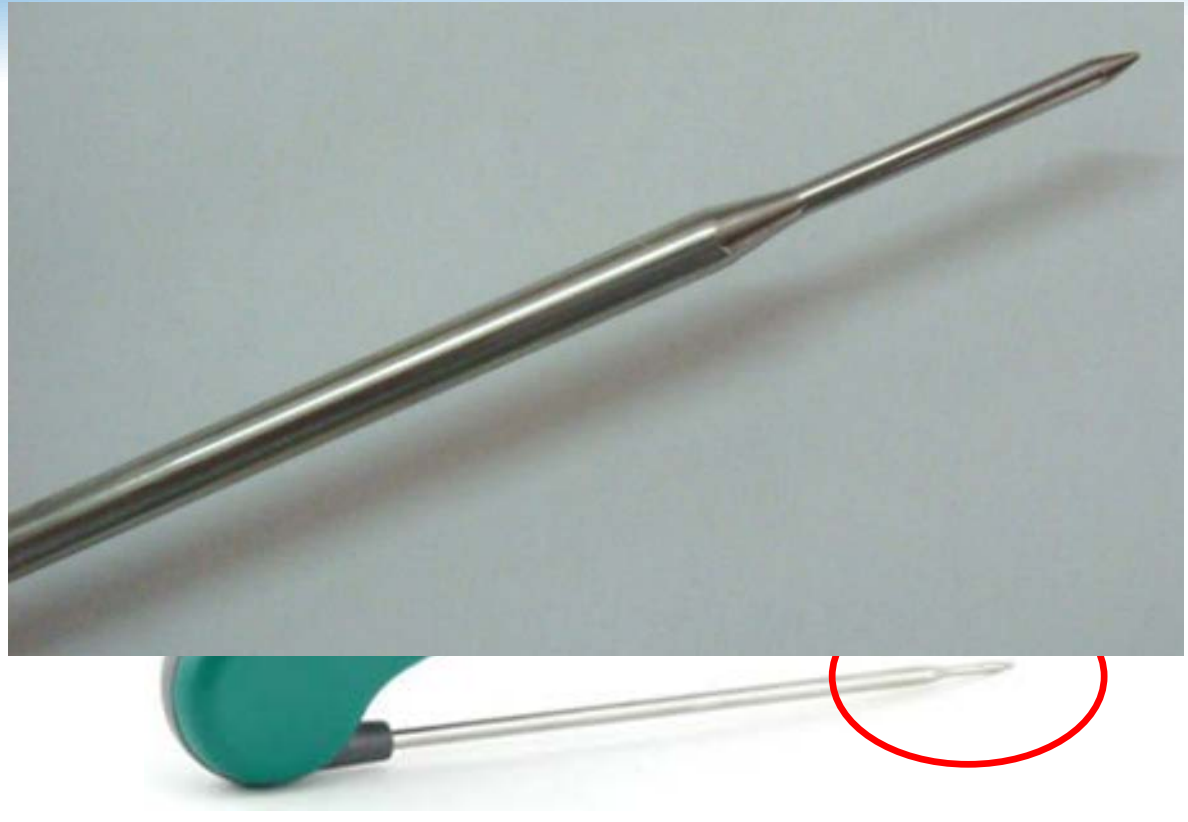
Use a Calibrated, Sanitized Temperature Measuring Device

Use approved sanitizer or single use alcohol wipe

Thin tip probe for thin foods

- Hamburgers, chicken patties, etc.

THERMOMETERS



CHECK FOR ACCURACY

Ice Slurry

- Fill a cup full of small ice cubes
  Add enough water to fill the spaces
- Place thermometer stem in the ice slurry
- Temperature should read 32°F
- For metal stem thermometers, adjust the calibration nut to 32°F while in ice

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Booklet Page 9

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FOOD SAFETY RISK FACTORS


Food Source


Poor Personal Hygiene


Inadequate Cooking

Improper Holding


Contamination


Environmental Contamination

Focus on Food Safety

Booklet Page 4

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FOOD SAFETY RISK FACTORS

FOOD SOURCE

- Food from unapproved or uninspected source
- Unsound or Adulterated food
- Shellfish records not maintained properly

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IMPROPER LABELING

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IMPROPER LABELING

Kansas Department of Agriculture

IMPROPER LABELING

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IMPROPER LABELING

EMPLOYEE HEALTH

Employee Reporting to Employer

- Certain Symptoms or Conditions (Big 5)

Employer Reporting to KDA

- Certain Symptoms or Conditions (Big 5)

Focus on Food Safety

Booklet Page 6

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EMPLOYEE HEALTH

BIG 5

- *Salmonella* Typhi
- *Shigella*
- Enterohemorrhagic *E. coli*
- Hepatitis A
- Norovirus

Booklet Page 6

EMPLOYEE HEALTH

Employee Restriction

Employee Exclusion

Focus on Food Safety

Booklet Page 6

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EMPLOYEE HEALTH

Employee Restriction

Booklet Page 6

EMPLOYEE HEALTH

Employee Restriction

- Can’t work with food or equipment

Booklet Page 6

EMPLOYEE HEALTH

Restrict Employees

- Fever
- Sore Throat w/Fever*
- Uncovered, Infected Wound (cut, lesion or boil)
- No symptoms but diagnosed w/ Shigella, EHEC E. coli, Norovirus*

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Booklet Page 6

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EMPLOYEE HEALTH

Highly Susceptible Populations (HSPs)

- Also restrict Employees when exposed to Big 5

Booklet Page 6

EMPLOYEE HEALTH

Removing Restrictions

- See Food code 2-201.13

Booklet Page 6

EMPLOYEE HEALTH

Employee Exclusion

Booklet Page 6

EMPLOYEE HEALTH

Employee Exclusion

- Can’t work in the facility

Booklet Page 6

EMPLOYEE HEALTH

Exclude Employees

- Vomiting
- Diarrhea
- Jaundice
- Diagnosis:
  - Hepatitis A
  - *S.* Typhi or Typhoid fever

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Booklet Page 6

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EMPLOYEE HEALTH

Highly Susceptible Populations (HSPs) - also exclude Employees when:

- Sore throat w/ fever
- Diagnosed w/ Big 5

Booklet Page 6

EMPLOYEE HEALTH

Removing Exclusions

- See Food code 2-201.13

Booklet Page 6

FOOD SAFETY RISK FACTORS

POOR PERSONAL HYGIENE:	Lack of appropriate hand washing
	Bare hand contact with ready-to-eat foods
	Ill food workers
	Employees eating, drinking or using tobacco in food areas
	Inadequate hand sink
	Lack of soap or paper towels

Focus on Food Safety Booklet Page 4

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PRACTICE GOOD HYGIENE

Wash hands only in the hand sink

- Don’t use dishwashing, food preparation or mop sinks for handwashing

Sick employees can spread illness

- Enforce sick leave policy or reassign duties

Don’t eat, drink, chew gum, or use any form of tobacco in food areas

- Designate non-work areas for breaks

Dry hands with paper towels

- Don’t use common cloth towels, wiping cloths, or aprons for hand wiping

Does Mr. Yucky work in your kitchen?

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Booklet Page 10

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PRACTICE GOOD HYGIENE

- No bare hand contact with ready-to-eat food!
- Wear nails short, clean and unpolished
- Restrict rings to plain bands
- Cover open cuts and burns with bandages and finger cots or single-use gloves

Does Mr. Yucky work in your kitchen?

Focus on Food Safety Booklet Page 10

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PRACTICE GOOD HYGIENE

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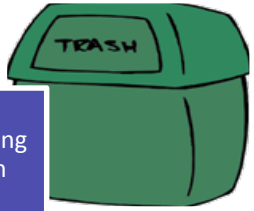
PRACTICE GOOD HYGIENE

FOOD SAFETY IS IN YOUR HANDS

Wash your Hands After:

- Touching hair, face, other body parts
- Eating or Smoking

- Handling dirty dishes
- Handling trash



- Going to the Restroom

- Handling money

- Handling raw food

- Using a tissue

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Booklet Page 11

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HANDWASH PROCEDURE

- Wet under warm water
- Apply Soap
- Scrub for 10-15 seconds
- Rinse with warm water
- Use paper towel to dry, turn off water, open door

Booklet Page 11

NO BARE HAND CONTACT

Must not touch Ready-to-Eat food with bare hands (RTE)

Use

- Deli Tissue
- Spatulas
- Tongs
- Forks
- Dispensing Equipment
- Single-Use Gloves

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Booklet Page 12

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GLOVE USE

- Glove usage does not replace the need for good hand washing practices
- Wash hands before putting on gloves
- Put gloves on only when you are ready to handle ready-to-eat food
- Use gloves for only one task, such as ready-to-eat foods, then discard
- If an interruption occurs during food preparation, remove gloves'
- Use clean gloves when you resume food preparation

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Booklet Page 12

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GLOVE USE

- Dispose of gloves immediately upon removal
- Single-use gloves should not be used around heat or hot fats
- Gloves are susceptible to contamination, so discard when soiled or damaged
- Fabric or re-usable gloves may not be used with RTE food
- Avoid single-use gloves made of natural rubber latex

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IS THIS OK?

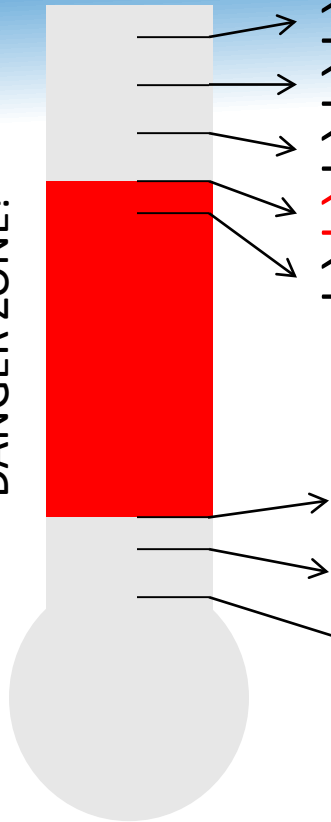
FOOD SAFETY RISK FACTORS

INADEQUATE COOKING:

- Improper cooking temperatures
- Improper reheating temperatures

Booklet Page 4

CRITICAL TEMPERATURES



165°F - Poultry, stuffed meats and pasta, reheating

155°F - Ground beef or pork (tenderized or injected meats)

145°F - Whole muscle meat (beef, pork) or fish

135°F - MINIMUM HOT HOLDING

130°F - Rare roast beef

41°F - MAXIMUM COLD HOLDING

32°F - Freezing

0°F - Frozen Food Storage

- 145°F - Intact Fish, Beef, Pork and Eggs
- 155°F - Non-intact Fish, Beef, Pork, Pooled Eggs

- 165°F - Raw Poultry

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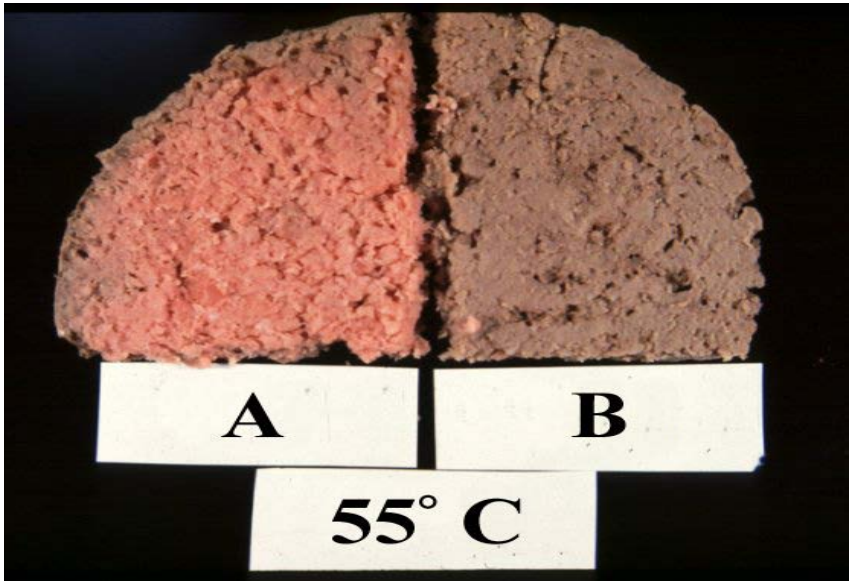
IS IT DONE?

- Eyeball test

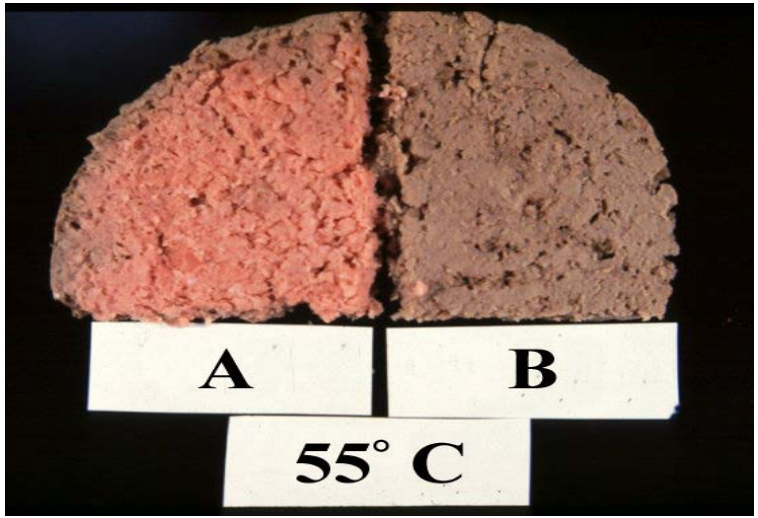


Picture courtesy of the Kansas State University Meat Science Program.


A
B
55° C

IS IT DONE?

- Eyeball test
  - Ground beef may turn brown below 155°F



Picture courtesy of the Kansas State University Meat Science Program.

IS IT DONE?

- Bake test

THE ONLY WAY

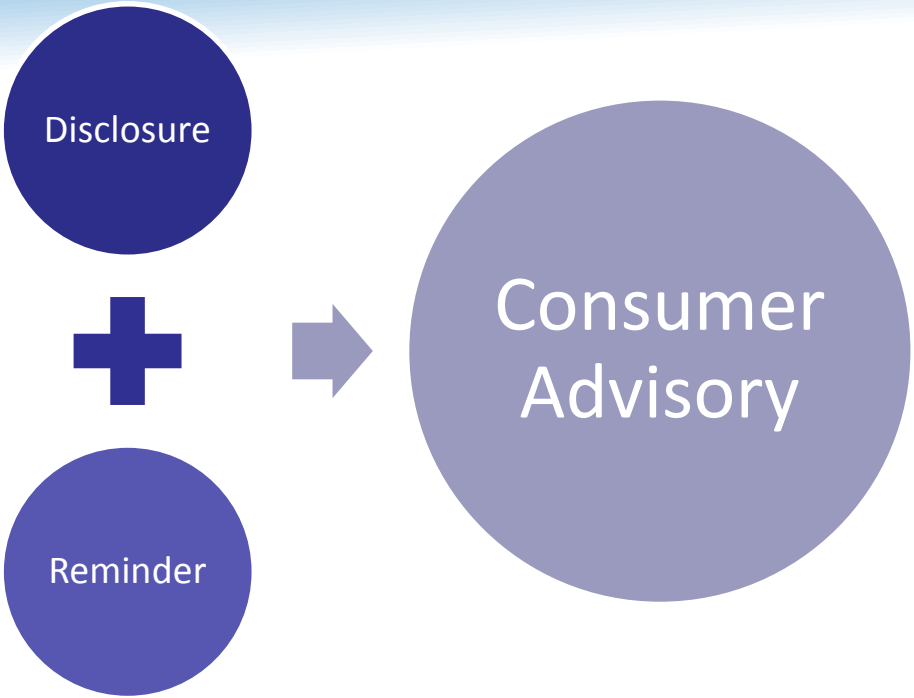
- Thin-tip probe for thin patties or small pieces

CONSUMER ADVISORY

You must advise consumers of the risks of eating raw or undercooked:

Hamburgers	Fish	Pork	Eggs	Lamb	Poultry	Shellfish

CONSUMER ADVISORY



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CONSUMER ADVISORY

Disclosure

- A description of the animal-derived FOODS
  - "oysters on the half shell (raw oysters),"
  - "raw-EGG Caesar salad," and
  - "hamburgers (can be cooked to order);" OR
- Identification of the animal-derived FOODS by asterisking them to a footnote that states the items are served raw or undercooked, or contain (or may contain) raw or undercooked ingredients.

CONSUMER ADVISORY

Reminder

- Asterisk to a footnote
  - Regarding the safety of these items, written information is available upon request;
  - Consuming raw or undercooked MEATS, POULTRY, seafood, shellfish, or EGGS may increase your RISK of foodborne illness; or
  - Consuming raw or undercooked MEATS, POULTRY, seafood, shellfish, or EGGS may increase your RISK of foodborne illness, especially if you have certain medical conditions.

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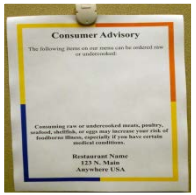
CONSUMER ADVISORY

Menu

Brochures

Table Tent

Sign



agriculture.ks.gov

Deli Case

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REHEATING

- Reheat previously cooled foods to an internal temperature of 165°F or above
- 41°F to 165°F in less than 2 hours
- Stir frequently to distribute the heat
- Measure the internal temperature with a thermometer
- After reaching 165°F, hold at 135°F or above

Booklet Page 23

REHEATING

- Direct heat (stove top) is best
- Steam cookers
- Ovens
- Microwaves
- Reheating in steam tables and crock pots is unsafe

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FOOD SAFETY RISK FACTORS

IMPROPER HOLDING:

- Improper cold/hot holding temperatures
- Lack of date marking

Focus on Food Safety Booklet Page 4

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HOT & COLD HOLDING

Hold cold food at 41°F or below

Hold hot foot at 135°F or above

Use proper equipment

Stir frequently to distribute the temperature

Covered foods maintain temperature longer

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TOO WARM

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TOO WARM

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TOO COOL

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OK?
NSF
NORLAKE
C
F

SAFE BUFFETS

Take food temperatures every 2-3 hours. If food is in the Temperature Danger Zone, take corrective actions (REHEAT, QUICK CHILL or DISCARD)

Determine why the food was in TDZ

Stir foods frequently to distribute temperature. Do not add fresh food to old. “First In, First Out”

SAFE BUFFETS

Trained food employees must monitor self-service food bars

Require customers to use clean plates and bowls for return trips to the food bar

- Post signs

Protect food from contamination

- Proper serving utensils
- Sneeze guards

Label foods

COOLING OR HOLDING?

THAWING

In a refrigerator

- The best way

Cold Water (<70°F)

- Less than 2 hours
- Running
- Submerged

During cooking

- Continuous process

Microwave

- First step in a continuous process

WHAT'S WRONG?

WHY IS THIS WRONG?

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WHY IS THIS WRONG?

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DATE MARKING

What foods?	Potentially hazardous, Ready-to-eat
	Prepared on-site and refrigerated, or commercially processed after the original container is opened
	Held for more than 24 hours
How long?	Hold up to 7 days at 41°F or less
	Mark With the Date To Be Consumed By or Discarded
	Day 1 is prep or open date (add 6 to the date)

DATE MARKING

When removed from the freezer

- Mark to consume within 24 hours
- Mark with remaining days-subtract days held in cooler before freezing

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OK?

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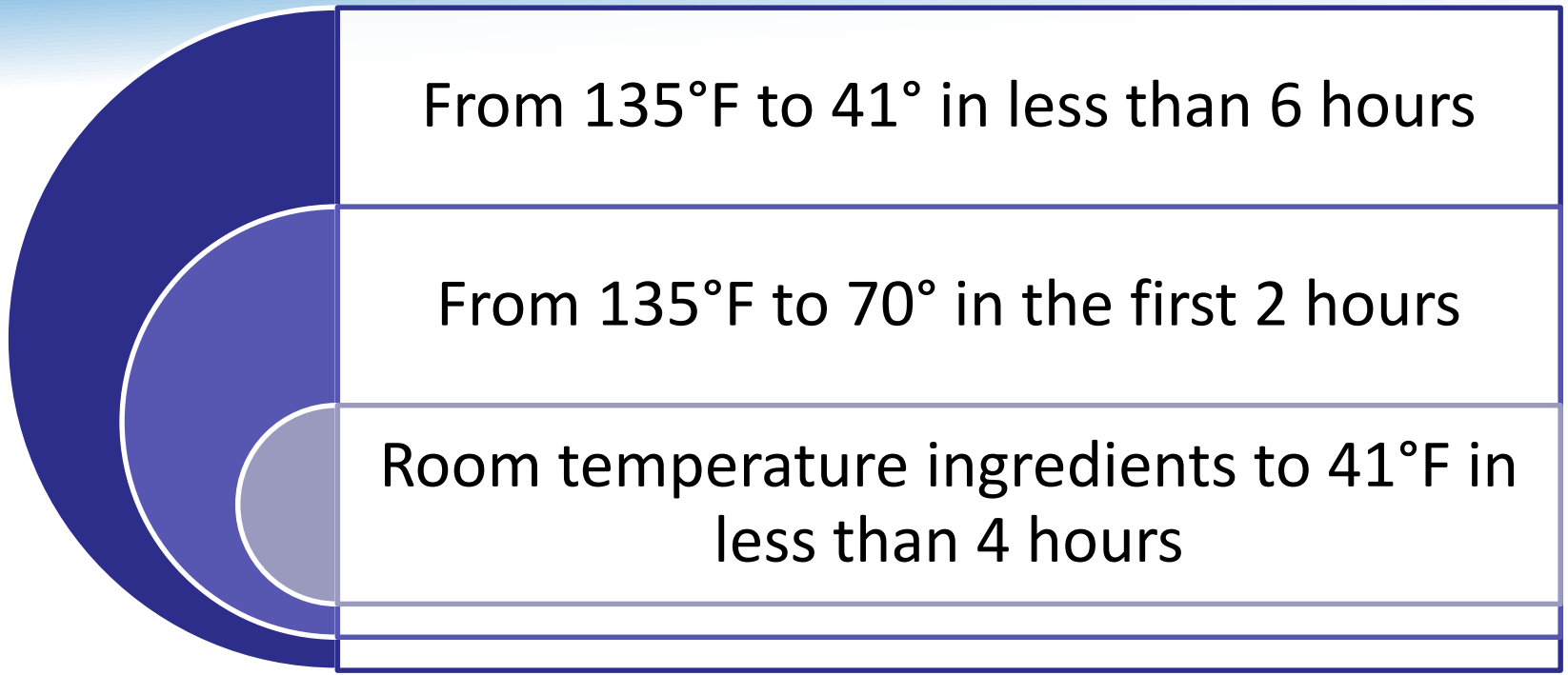
COOLING



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COOLING

Shallow metal pans - 2” - 4” deep

- Leave pan partially uncovered
- Refrigerate immediately
- DO NOT stack hot pans - allow for air flow

COOLING

Ice Bath

- Fill a clean sink or large pan with ice and fill spaces with cold water
- Divide product into 1 gallon containers
- Immerse product pan to depth of product in sink or larger pan until it is level with the ice
- Agitate/stir every 10 minutes using an ice paddle or other equipment
- Drain water and replenish ice as it melts
- Use a clean thermometer to monitor the temperature of the food
- Refrigerate immediately after the food has cooled to 41°F

COOLING

Small Portions - reduce the mass/volume

- Divide food into smaller pans
- Separate food into smaller or thinner portions (2” depth for thick foods/ 4” for thick liquids)
- Cut or slice portions of meat no larger than 4 inches or 4 pounds

COOLING

Hints

- Add ice directly to the product as an ingredient
- Use rapid chill refrigeration equipment that encourages quick cooling
- Never try to cool foods in plastic containers
- Never allow foods to cool at room temperature

WILL IT COOL IN TIME?

FOOD SAFETY RISK FACTORS

CONTAMINATION:

- Raw animal products not separated from ready-to-eat foods
- Species not separated
- Equipment not properly cleaned and sanitized

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Booklet Page 4

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AVOID CROSS CONTAMINATION

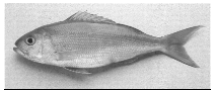
Incorrect

Correct

Use Separate Cutting Boards for Raw Meats & Cooked or Ready-to-Eat Foods

AVOID CROSS CONTAMINATION

Store food properly to prevent cross contamination that can lead to Foodborne Illness.

Cooked Foods			
			
Raw Beef	**Raw Pork**	**Raw Poultry**	**Raw Seafood**
			
			

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WHAT'S WRONG?

AVOID CROSS CONTAMINATION

- Clean and sanitize all utensils and surfaces that touch food:
  - after each use
  - when changing product
  - between raw animal types (beef, pork, fish, etc.)
  - frequently when preparing large amounts
  - between raw meats and cooked or ready-to-eat foods

CLEAN & SANITIZE

Items must be clean to the sight and touch

Items must be sanitized after cleaning

IS IT CLEAN?

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IS IT CLEAN?

MOLDY SODA NOZZLE

MOLDY ICE BIN

3-COMPARTMENT SINK

- Scrap
- Wash
- Rinse
- Sanitize
- Air Dry

Focus on Food Safety

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3-COMPARTMENT SINK

- Scrap
  - Remove scraps so cleaning is more effective

3-COMPARTMENT SINK

- Wash
  - Clean and sanitize sinks and drain boards
  - Pre-soak/pre-rinse all eating utensils and equipment
  - Use 110°F water and detergent

3-COMPARTMENT SINK

- Rinse
  - Use clean, 110°F water

3-COMPARTMENT SINK

- Sanitize
  - 50-200 parts per million (ppm) chlorine
  - 200 ppm quaternary ammonia (mix with 75°F water)
  - 25 ppm iodine
  - Use correct immersion time
  - Air dry utensils and equipment
  - Use appropriate test strips to check concentration

CHECK THE CONCENTRATION

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3-COMPARTMENT SINK

- Making a 100 ppm Chlorine Solution is as Easy as 1-2-3
  - 1 ounce of plain bleach to 3 gallons water
  - Read the label to confirm!

Booklet Page 24

3-COMPARTMENT SINK

- Air Dry
  - Allows sanitizer to continue working
  - Prevents cross contamination
  - Use clean, self-draining location.

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DISHMACHINE

- High Temperature
  - Wash Temperature:
    - Single tank, stationary rack, dual temperature machine is 150°F
    - Single tank, conveyor machine is 160°F
  - Hot Water Sanitization:
    - 180°F at manifold
    - 160°F at plate level

DISHMACHINE

- Low Temperature
  - Chemical Sanitization Required
  - Water Temperatures According to Manufacturer
  - Chemicals Must Be Auto-dispensed into Final Rinse Water
    - Check Daily
  - Must Have a Visual or Audible Low Sanitizer Indicator

DISHMACHINE

- Air Dry
  - Allows sanitizer to continue working
  - Prevents cross contamination
  - Use clean, self-draining location.

IS THIS OK?

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POOR CONDITION

PROPER STORAGE?

WHAT'S WRONG?

FOOD SAFETY RISK FACTORS

ENVIRONMENTAL CONTAMINATION:

- Improper storage, labeling, or usage of chemicals
- Presence of insects or rodents
- Lack of potable water
- Improper sewage disposal

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PEST CONTROL

- Insects and rodents carry diseases and can contaminate food and food-contact surfaces. Utilize measures to minimize their presence
- Protect outer openings
  - outer doors closed, repair screens, maintain tight fitting doors & openings, use air curtains
- Eliminate harborage conditions
- Use Integrated Pest Management practices

WHAT'S WRONG?

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CHEMICALS

- These Items Can Be Poisonous Or Toxic If Ingested
  - Detergents
  - Sanitizers
  - Polishes & Cleaners
  - Insecticides
  - Rodenticides
  - First Aid Supplies & Personal Medication

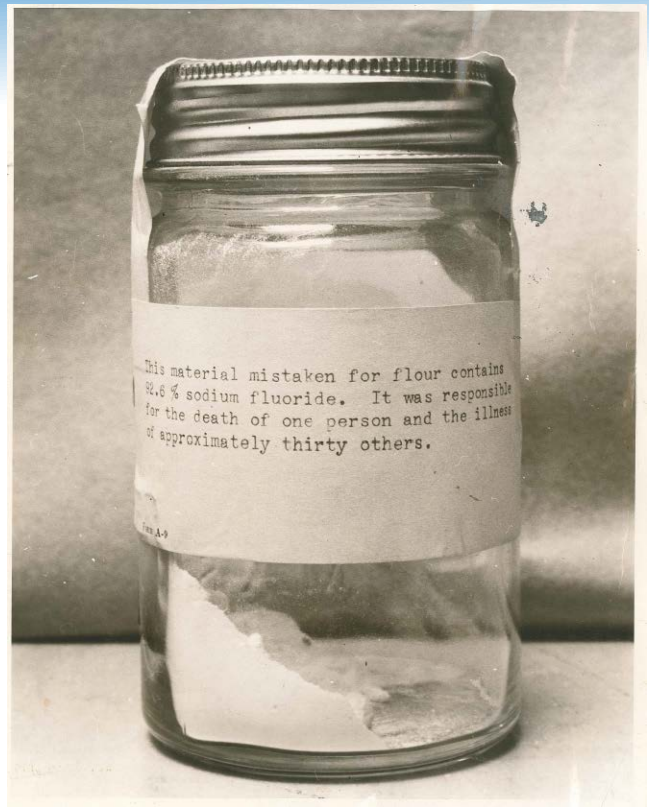
CHEMICALS

- Storage, Labeling & Use
  - Store separately from foods & food-contact surfaces
  - Never store above foods or food surfaces
  - Label all toxins
  - Use only approved chemical in food areas

OK?

WHAT'S WRONG?

LABEL THE BOTTLE



- “This material mistaken for flour contains 92.6% sodium fluoride. It was responsible for the death of one person and the illness of approximately thirty others.” 1944

LABEL THE BOTTLE

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HARBORAGE

WHAT'S WRONG?

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WATER SOURCE

- Water from a Public Water Supply
- Water from a Private Water Supply
  - Appropriate well construction
  - Water tested for:
    - total coliforms (0 CFU)
    - fecal coliforms (0 CFU)
    - nitrates (<20 PPM)

PLUMBING

Backflow prevention

- Protect water supply
  - Proper installation
  - Air gap or Backflow preventer
- Protect equipment
  - Indirect drain connection

PROPER PLUMBING?

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PROPER PLUMBING?

CORRECTIVE ACTIONS

Risk Factor: Approved Source/Sound Condition	Corrective Action
Food from unapproved/unlicensed source or in unsound condition	• Discard • Reject • Return

CORRECTIVE ACTIONS

Risk Factor: Handwashing	Corrective Action
Food worker failed to wash hands as needed	• Instruct worker about handwashing • Discard any contaminated food

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CORRECTIVE ACTIONS

Risk Factor: Cold Holding	Corrective Action
TCS Food above 41°F for MORE than 4 hours	• Discard
TCS Food above 41°F for LESS than 4 hours	• Use immediately • Cool below 41°F before total time reaches 4 hours

CORRECTIVE ACTIONS

Risk Factor: Cooking	Corrective Action
Raw Animal Food is undercooked	• Continue Cooking process until minimum temperature is reached • See page 15 for Temperatures

CORRECTIVE ACTIONS

Risk Factor: Hot Holding	Corrective Action
TCS Food below 135°F for MORE than 4 hours	• Discard
TCS Food below 135°F for LESS than 4 hours	• Use immediately • Reheat to 165°F before total time reaches 4 hours

CORRECTIVE ACTIONS

Risk Factor: Cooling	Corrective Action
TCS Food cooled from 135°F to 70°F in MORE than 2 hours	• Discard
TCS Food cooled from 135°F to 41°F in MORE than 6 hours	• Discard
Room temperature TCS Food ingredients cooled to 41°F in MORE than 4 hours	• Discard

CORRECTIVE ACTIONS

Risk Factor: Reheating	Corrective Action
TCS Food heated from 41°F to 165°F in MORE than 2 hours	• Discard

CONTACT KDA

Prior to opening food operations

For plan review prior to construction or remodeling

For licensing or inspection inquiry

To Report

- Change of ownership or location
- Natural disasters involving food
- Power outages of 2 hours or more
- Transportation accident involving food
- Food establishment complaint
- Reportable employee illness
- Foodborne illness outbreak

To request an educational seminar

CONTACT KDA

KANSAS DEPARTMENT OF AGRICULTURE

FOOD SAFETY AND LODGING

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UNSANITARY

ICE PRESERVATION

Kansas Department of Agriculture

NECESSARY CONDIMENTS

Kansas
Department of Agriculture

POTATO CHIP PRINTER

Kansas Department of Agriculture

QUESTIONS?

CONTACT KDA

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