

ServSafe® Study Outline

Chapter 1

Types of Hazards

- Biological
- Chemical
- Physical

Factors Affecting Food Safety (will re-visit this in Chapter 4)

- Time & Temperature
- Cross-Contamination: ready-to-eat food or food contact surface
- Personal Hygiene
- Cleaning and Sanitizing

“TCS”: Time & Temperature **C**ontrol for **S**afety (see graphic attached)

TCS Foods: (this is how I organize them in my mind)

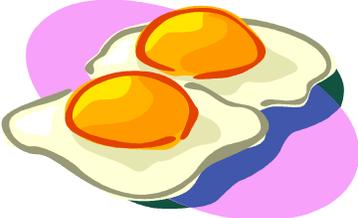
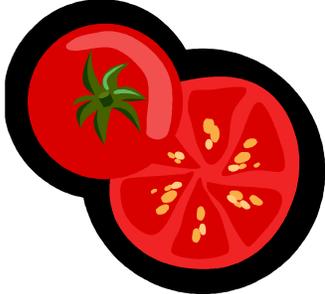
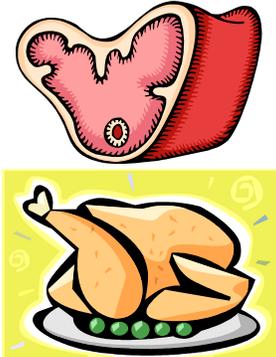
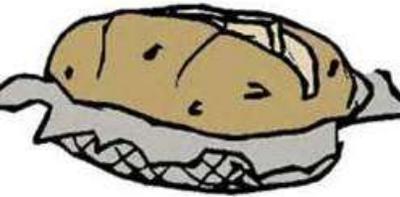
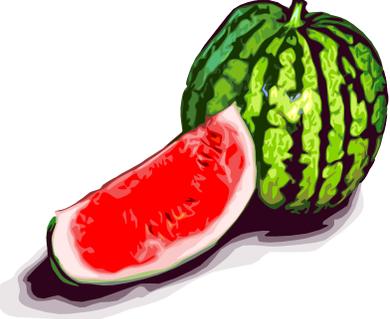
Proteins	Cooked Plants	Cut Produce	Other
Meat	Rice	Melons	Sprouts
Poultry	Beans	Greens	Garlic-oil
Fish	Baked potato	Tomatoes	
Eggs			
Dairy			
Soy products			

High-Risk Groups:

* **HINT: PIE** (See graphic attached)

Note: USDA adds 2 groups: “PIE + PI”

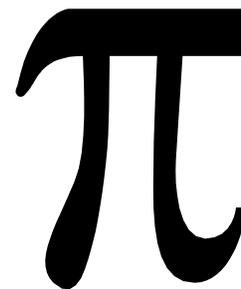
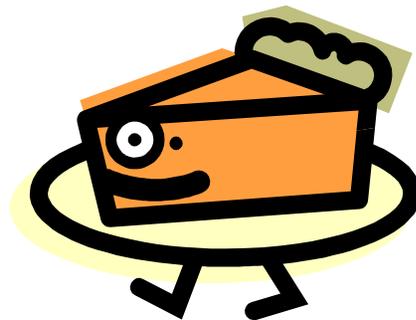
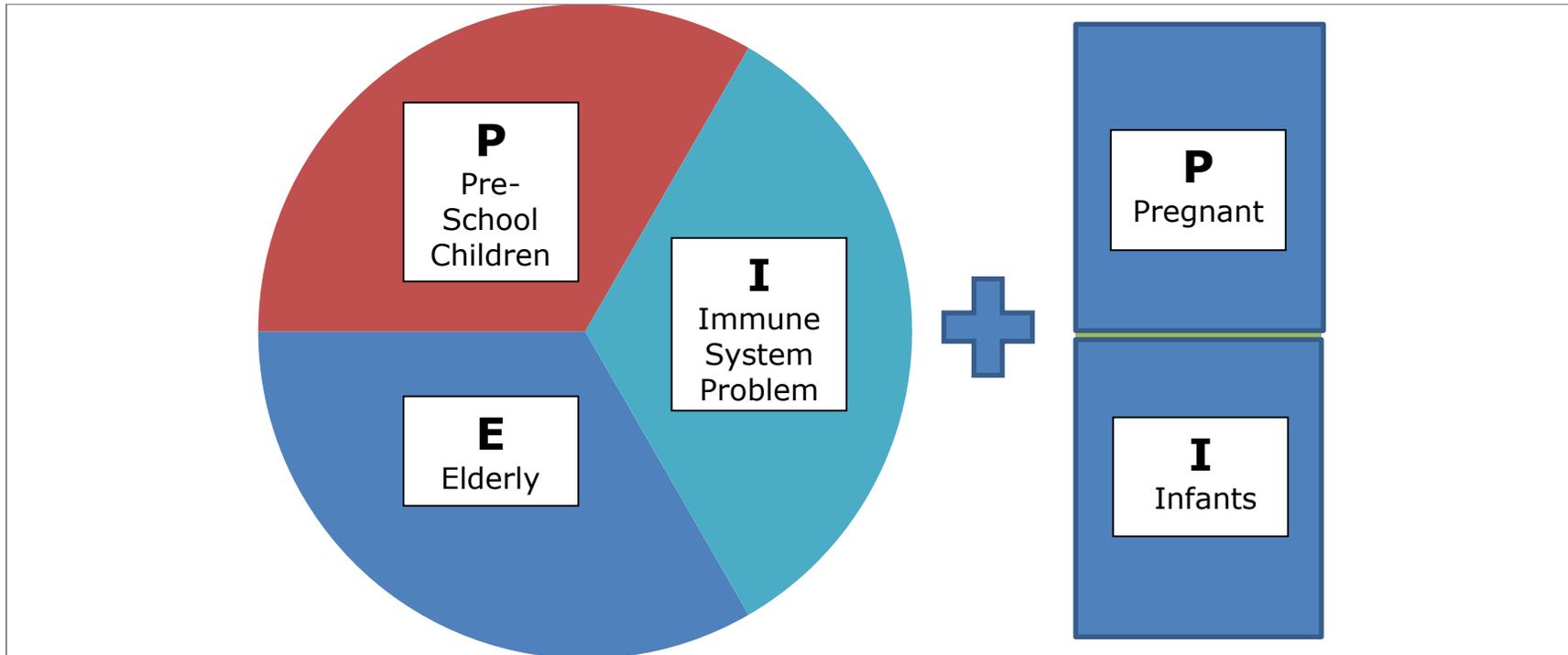
CH 1: FOODS THAT NEED TIME/TEMPERATURE CONTROL (TCS)

<p>Milk and Dairy</p> 	<p>Shell Eggs</p> 	<p>Cut Tomatoes (Salsa)</p> 
<p>Meat and Poultry</p> 	<p>Cooked Rice and Beans</p> 	<p>Cut Leafy Greens</p> 
<p>Fish, Shellfish and Crustaceans</p> 	<p>Baked Potatoes</p> 	<p>Sprouts (Do not use raw!)</p> 
<p>Tofu and Soy Foods</p> 	<p>Cut Melons</p> 	<p>Garlic & Oil Mixed</p> 

CH 1: High-Risk Groups for Food-Borne Illness: **P-I-E**

ServSafe® (FDA) = P.I.E.

USDA = P.I.E. + P.I.



ServSafe® Study Outline

Chapter 2

Biological Hazards – chart attached

- Bacteria
 - Viruses
 - Parasites
- } most common
- Fungi
 - Bio-toxins

“HESSN” – ***HINT** – like a snake...

6 organisms: highly contagious, cause severe illness

“FAT-TOM” – Bacterial growth factors

- Food
- Acid
- Temperature
- Time
- Oxygen
- Moisture

Allergens

Animal Source	Plant Source
Dairy	Soy
Eggs	Wheat
Fish	Peanuts
Shellfish	Tree nuts (walnut, almond, pecan)

Symptoms

Food-Borne Illness	Food Allergy
Diarrhea	Wheezing/short of breath
Vomiting, abdominal cramps	Hives/itching
Fever	Swelling of eyes, face
Jaundice	

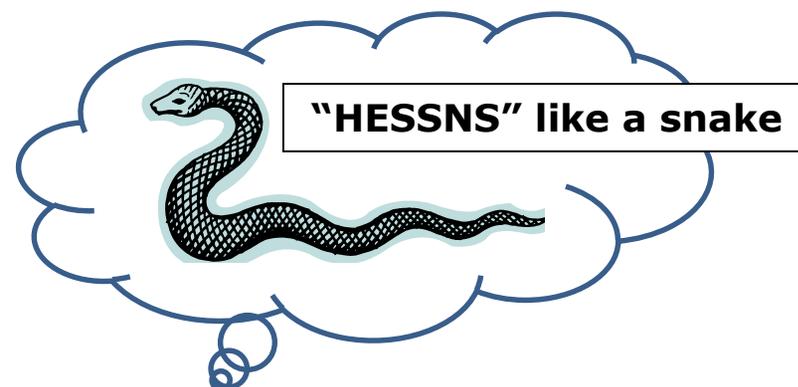
Response to Report of Food-Borne Illness

“Segregate” suspected food: Mark “DO NOT USE, DO NOT DISCARD”

CH 2: Biological Contamination – Main Sources

Type	Major Source(s)	How to Control
Bacteria	Dirty hands Improper cooking	Bacteria – general control: <ul style="list-style-type: none"> • Time/Temperature control • Wash hands • No bare-hand contact - Ready-to-Eat food
❖ <i>Salmonella typhi</i>	People	Personal hygiene & hand washing
<i>Salmonella</i> NTS (non-typhoidal)	Poultry	Cook poultry to 165°F
❖ <i>Shigella</i>	Fecal - flies	Control flies
❖ <i>E. Coli</i> (O157:H7)	Ground beef, produce	Cook ground beef to: 155°F (FDA) 160°F (USDA)
<i>Clostridium botulinum</i>	Canned food, foil-wrapped potatoes, garlic/oil	Do not use dented or bulging cans Time-temperature control
<i>Listeria monocytogenes</i>	Lunch meat, hot dogs	Lives in cold temps - risk in pregnancy
<i>Staph. aureus</i>	"Staph = Staff"	Personal hygiene & hand washing
Viruses Need "living host"	Dirty hands	<ul style="list-style-type: none"> • Personal hygiene & hand washing • No bare-hand contact - Ready-to-Eat food
❖ Hepatitis A	Sick workers	** Not destroyed by normal cooking
❖ Norovirus	Shellfish	<ul style="list-style-type: none"> • Do not work if sick (Hep A – jaundice) • Buy seafood from approved source
Parasites Need "living host"	Seafood	Buy seafood from approved source
	Wild game	Cook to proper temperature

- ❖ **6 highly contagious/severe illness = "HESSNS"**
Hepatitis A, **E**. Coli, **S**almonella (2 types),
Shigella, **N**orovirus



CH 2: COMMON FOOD ALLERGENS - THE "BIG 8"

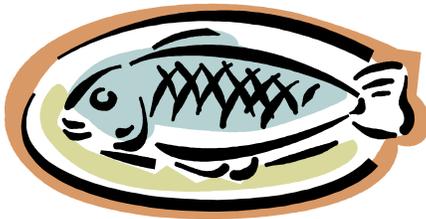
Milk and Dairy



Soy Products



Fish



Wheat



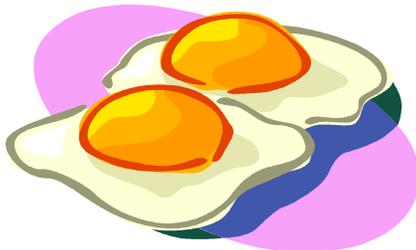
Shellfish



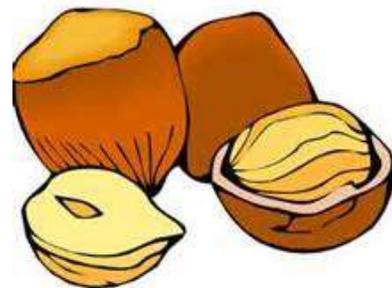
Peanuts



Eggs



Tree Nuts



Activities for Chapters 1-2

High-Risk Groups: What does each letter stand for?

P _____

I _____

E _____

+

P _____

I _____

FAT-TOM: What does each letter stand for?

F _____

A _____

T _____

T _____

O _____

M _____