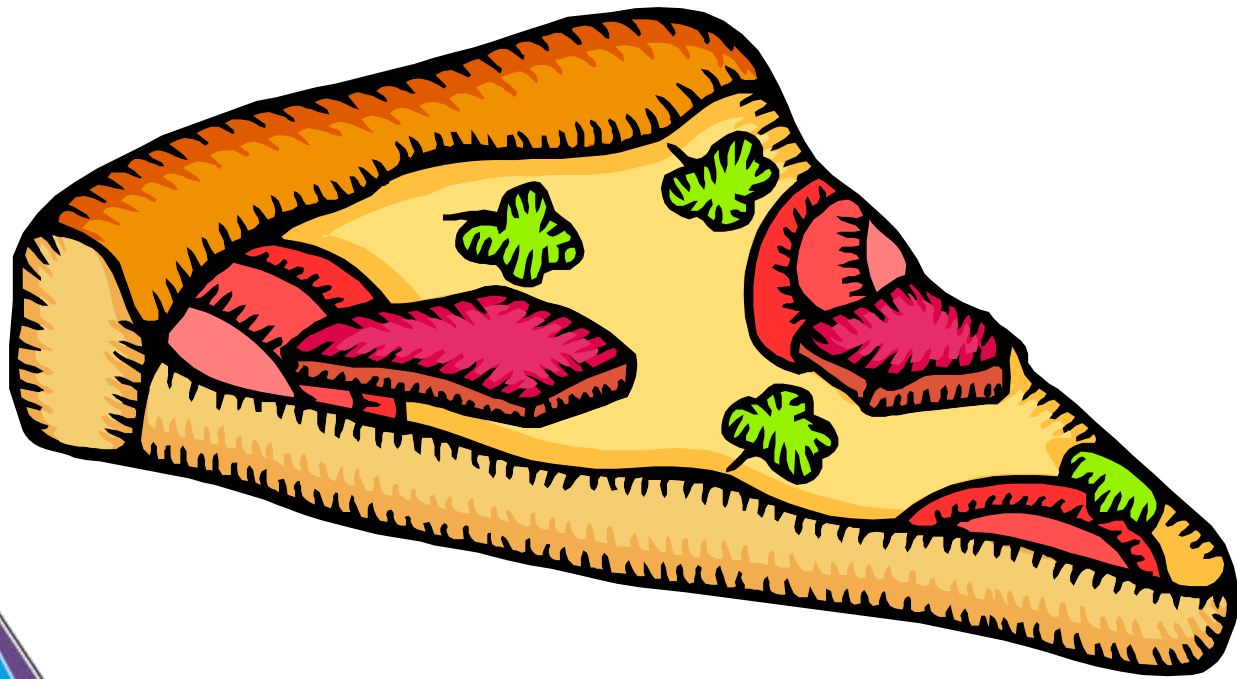


# Cold Pizza for Breakfast

## MyPyramid Food Safety Tips for Teens & Tweens Who Cook



# Tips to teachers BEFORE showing this PowerPoint



- Review PowerPoint in the “slide show” mode before showing it. The slides may appear differently on various computers. **Also, several slides contain animation you’ll miss if not viewed this way first.**
- Divide PowerPoint into more than one presentation, depending on your group. Several “courses” are identified.
- Personalize by adding or deleting slides.

**Slides marked by this symbol were developed so you could use them to ask questions and interact with the class.**





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and the United States Department of Agriculture.**



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Nebraska Department of Education**

The background features a light blue, stylized illustration of a plate, a fork, a knife, and a spoon. The plate is a large circle in the center, with the fork to its left, the knife to its right, and the spoon to its right. The entire scene is set against a white background with a light blue wash.

# **What's on the plate?**

## ***Six short courses***

- 1. Foodborne Illness Facts**
- 2. Clean**
- 3. Separate**
- 4. Cook**
- 5. Chill**
- 6. Game — Keep or Toss?**

**(And ... an extra helping for the teacher:  
additional indepth material!)**

The background features a light blue, stylized illustration of a plate, a fork, and a knife. The plate is a large circle with a smaller circle inside it. The fork is on the left side, and the knife is on the right side. The text is overlaid on this illustration.

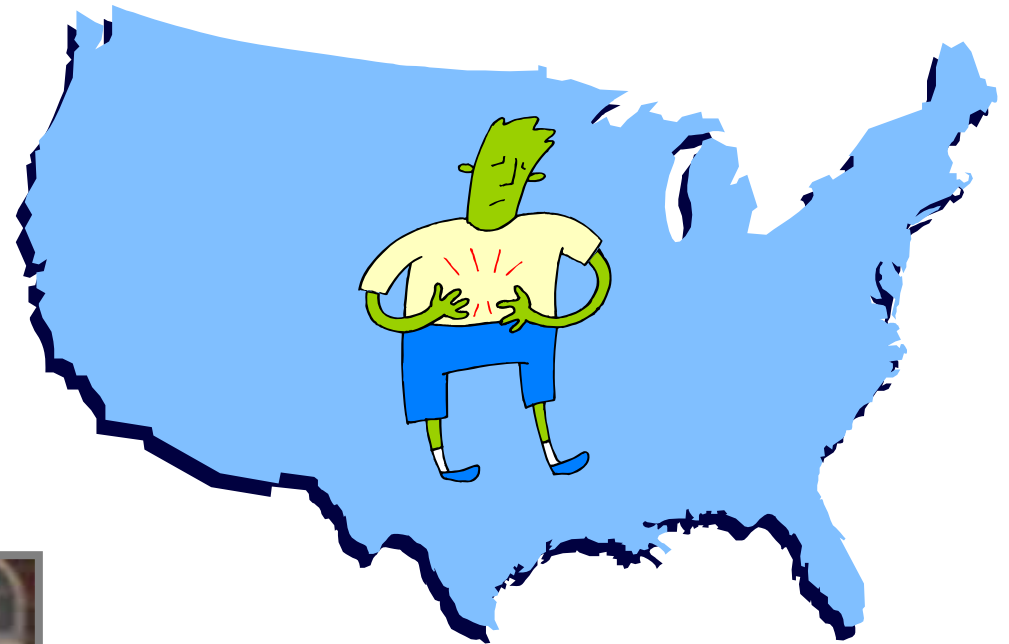
*1st course*

# **Foodborne Illness Facts**



# How many people in the United States get sick each year from food they eat?

- **76 million people become sick from foodborne illnesses**
- **5,000 people die**



You can get sick from a foodborne illness when you eat unsafe food!



# How do you know if YOU have a foodborne illness?





# Some possible signs and symptoms



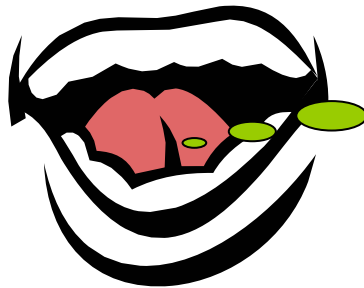
**Upset stomach**



**Fever**



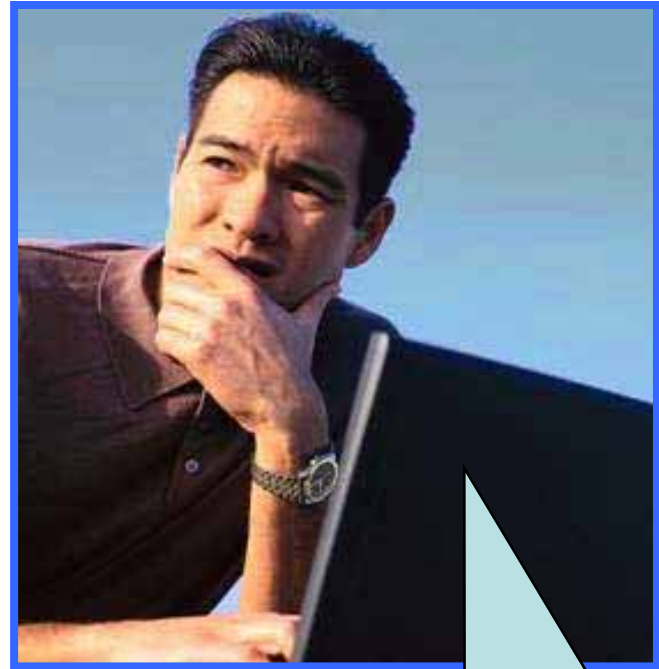
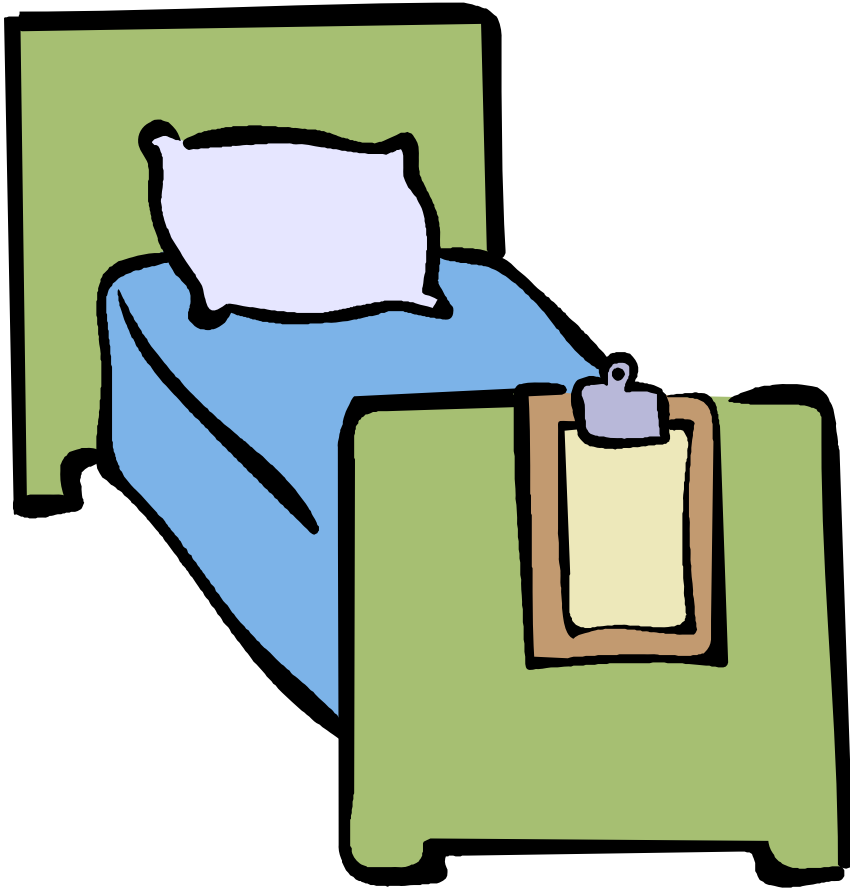
**Diarrhea**



**Vomiting**



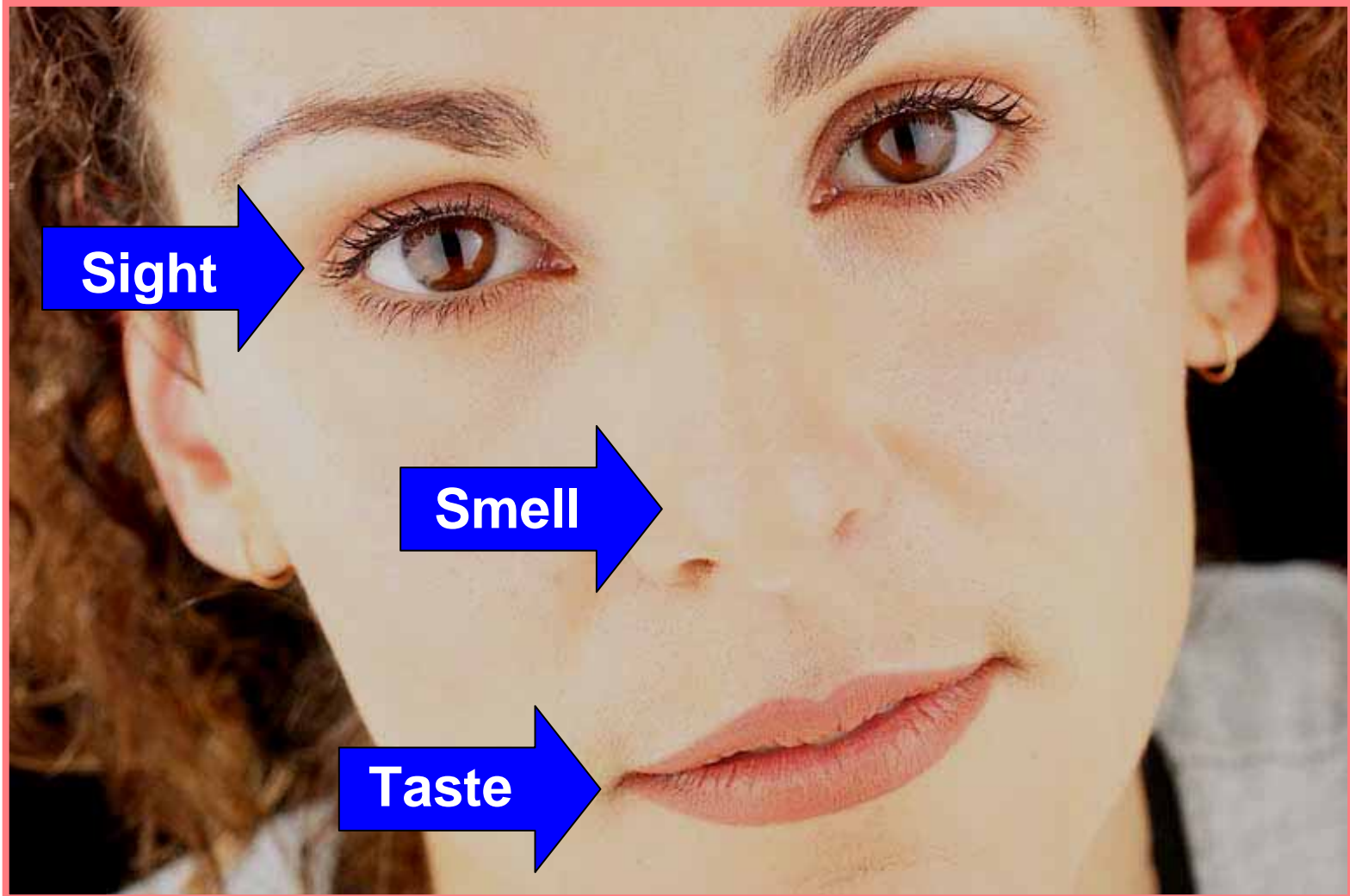
**Dehydration (sometimes severe)  
from losing bodily fluids**



**Sometimes you can become very sick and may have to stay in the hospital a couple of weeks or longer!**

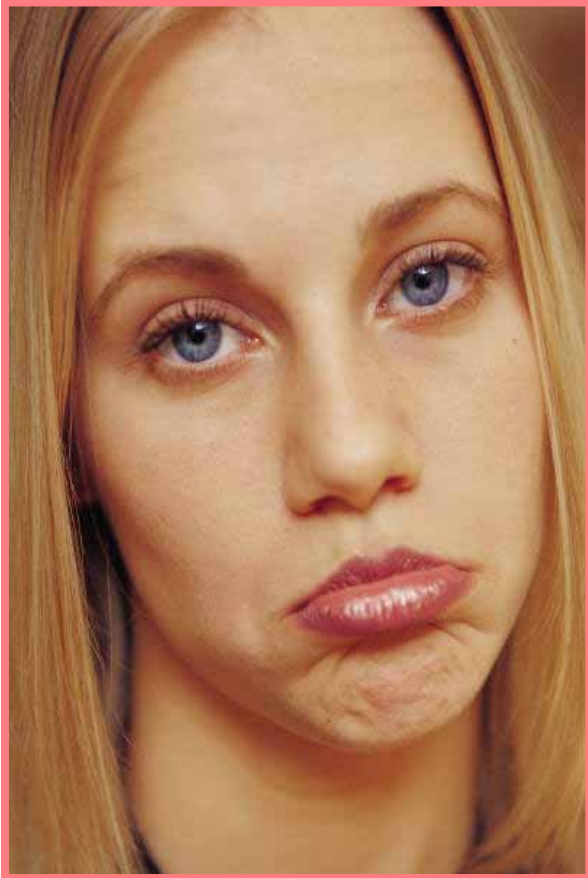


**You can't always spot spoiled food by using these three senses – what are they?**



# Even IF tasting would tell ...

Why risk getting sick?



Yuk!

A “tiny taste” may not protect you ...

... as few as **10 bacteria** could make you sick!



# How long does it take to get sick after eating unsafe food?

Hey guys, I need to throw up!



It can take **1/2 hour to 6 weeks** to become sick from unsafe foods.

You usually feel OK right after eating and become sick later.

**Foodborne illness is NOT a pretty picture!**

# Why risk your friends' health?



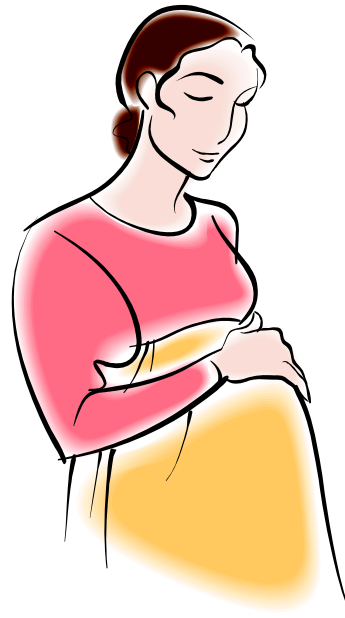
**I'm feeling sick ...  
was it something I ate?  
How come no one else  
feels sick?**

**Not everyone who  
eats the same food  
gets sick.**

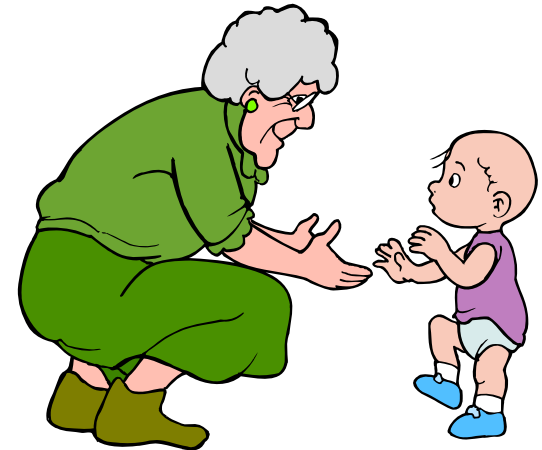
# Some people have a higher risk of foodborne illness



**Infants**



**Pregnant women**



**Young children and older adults**



**People who are already weakened by another disease or treatment for a disease**

**People with a higher risk of foodborne illness should be especially careful to avoid these potentially hazardous foods ...**



- 1. Raw and undercooked meat and poultry**
- 2. Raw or partially cooked eggs and foods containing raw eggs**
- 3. Unpasteurized juices, milk or milk products**
- 4. Raw sprouts**



# It's not fun to have a foodborne illness!



**You got  
that right!**

# Be a winner!

**Increase your  
chances of  
preventing  
foodborne illness!**



# MyPyramid recommends...

- 1. Clean**
- 2. Separate**
- 3. Cook**
- 4. Chill**



# Differences in food safety guidelines

The MyPyramid food safety recommendations are for **home-cooking**.

If you work in **food service**, such as in a restaurant, different guidelines for cooking and refrigerator temperatures may apply. These follow national standards and are set by your health department.



Part of the reason for differences is foods can be delivered, cooked and cooled differently in food service places.

The background is a bright yellow, irregularly shaped area. In the center is a large, thin yellow outline of a plate. To the left of the plate is a yellow outline of a fork. To the right of the plate is a yellow outline of a knife and a spoon. The text "End of 1st course" is centered on the plate.

***End  
of 1st course***



*2nd course*

**Clean**



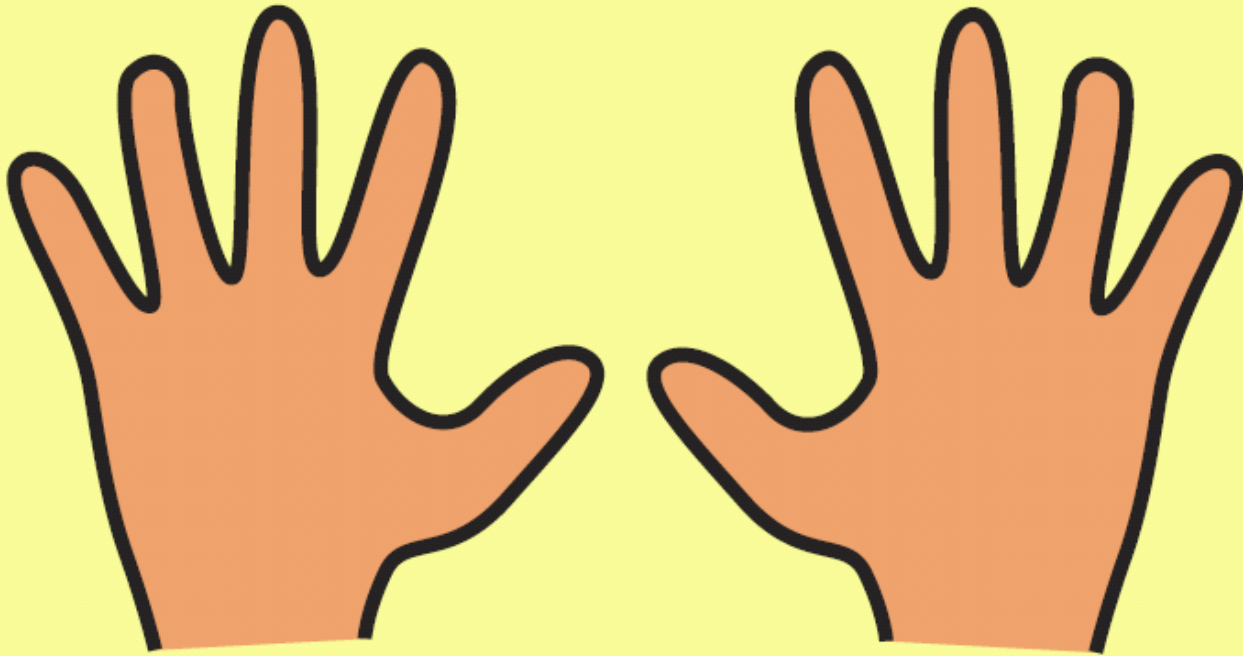
**CLEAN hands,  
food-contact  
surfaces, fruits  
and vegetables.**

**Do this FIRST  
before you start  
to cook!**



# Wash your hands!

## The 10 Most Common Causes of Infection



**Handwashing is the most effective way to stop the spread of illness.**



# How to wash hands

- 1. Wet hands with WARM water**
- 2. Soap and scrub for 20 seconds**
- 3. Rinse under clean, running water**
- 4. Dry completely using a clean cloth or paper towel**



# Wash hands after ...



**Using bathroom or  
changing diapers**



**Handling pets**



**Sneezing, blowing  
nose & coughing**



**Touching a cut or  
open sore**

**AND before ...**

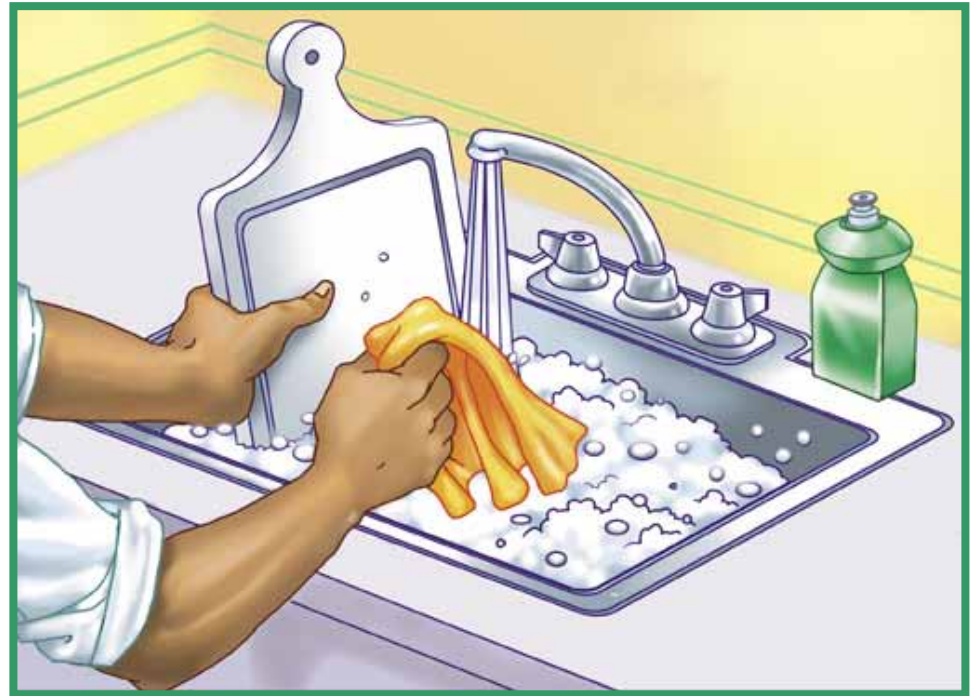


**Handling food**

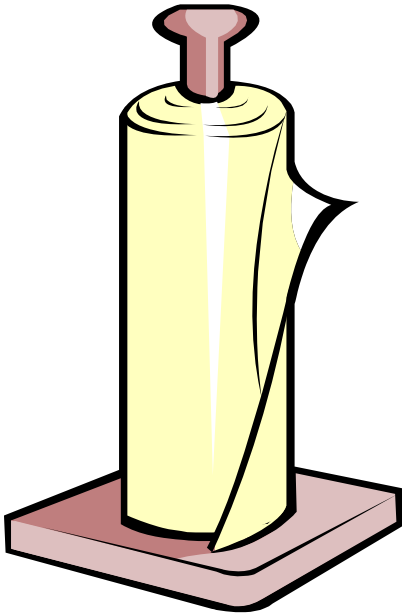


# Clean during food preparation!

Wash **cutting boards, knives, utensils and counter tops** with hot soapy water after preparing each food and before going on to the next.



# Avoid spreading bacteria!



Use paper towels or clean dishcloths to wipe up kitchen surfaces or spills.

Wash dishcloths often on the **hot** cycle of the washing machine and dry in a **hot** dryer.



# Dirty dishcloths spread bacteria



**There are more germs in the average kitchen than the bathroom. Sponges and dishcloths are the worst offenders.**

~ research by Dr. Charles Gerba

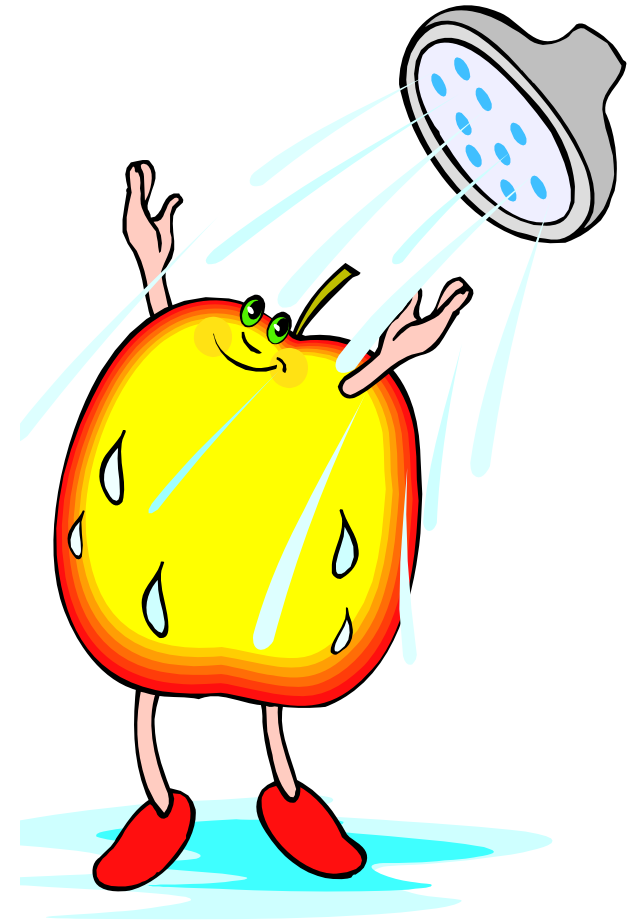
**Bacteria like to grow in wet or damp dishcloths and sponges.**

**Have lots of dishcloths so you can change them frequently!**



# Cleaning **fruits** & **vegetables**

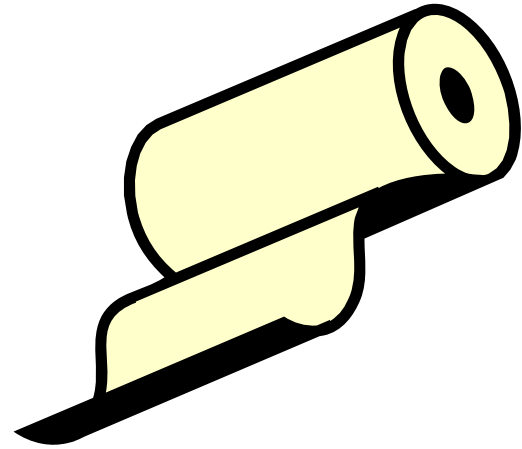
- 1.** Remove and discard outer leaves.
- 2.** Rinse under clean, running water just before preparing or eating.
- 3.** Rub briskly – scrubbing with a clean brush or hands – to remove dirt and surface microorganisms.



**Don't use soap or detergent. Unlike washing dishes, some soap or detergent may remain in fruits and vegetables and make you sick!**

# Cleaning **fruits** & **vegetables**

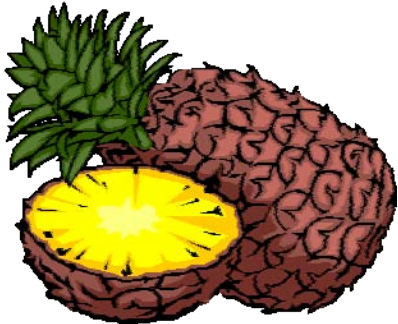
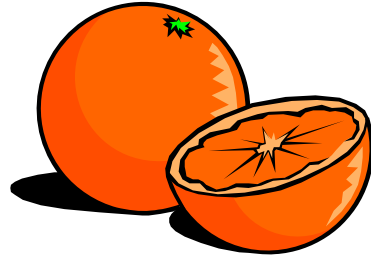
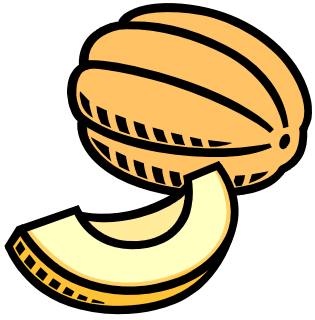
**5.** After washing, dry with a clean cloth or paper towel.



**Moisture left on fruits and vegetables helps bacteria grow. Dry fruits and vegetables if you won't eat or cook them right away.**

**6.** Cut away bruised and damaged areas.

# Wash this produce, too!



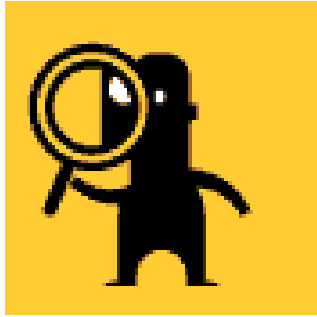
**Bacteria on the outside of fruits can be transferred to the inside when the fruit is peeled or cut.**

**Wash fruits  
– such as  
cantaloupe  
and other  
melons –  
under  
running  
water!**





# Read labels



Read labels on bagged produce to learn if it is **ready-to-eat**.

Ready-to-eat, prewashed, bagged produce can be used without further washing if kept refrigerated and used by the “use-by” date.





# Avoid washing raw meat & poultry ... WHY?

Washing increases the danger of cross-contamination. Bacteria present on the surface of meat and poultry can be spread to ready-to-eat foods, kitchen utensils and counter surfaces.



A yellow background with a central white plate and a fork on the left and a knife and spoon on the right. The text "End of 2nd course" is written in the center of the plate.

***End  
of 2nd course***



***3rd course***

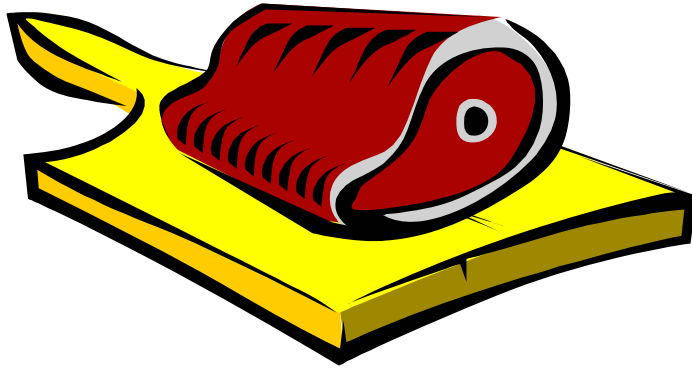
**Separate**

**SEPARATE** raw, cooked, and ready-to-eat foods while shopping, preparing or storing foods.

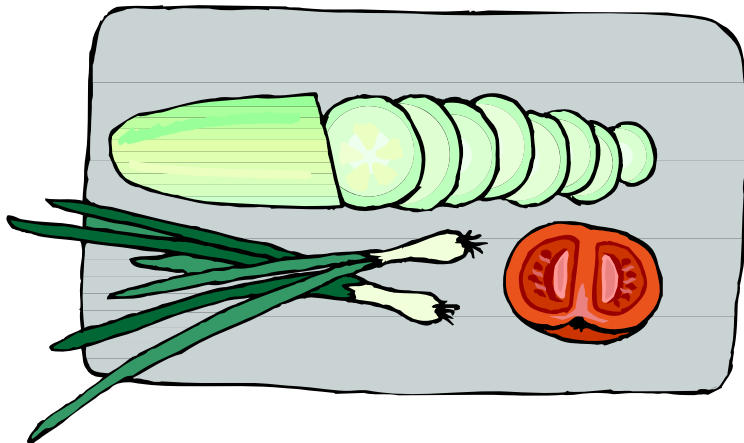


**This prevents bacteria on one food from making another food unsafe to eat!**

# Use different cutting boards



**Use one cutting board for raw meat, poultry and seafood ...**

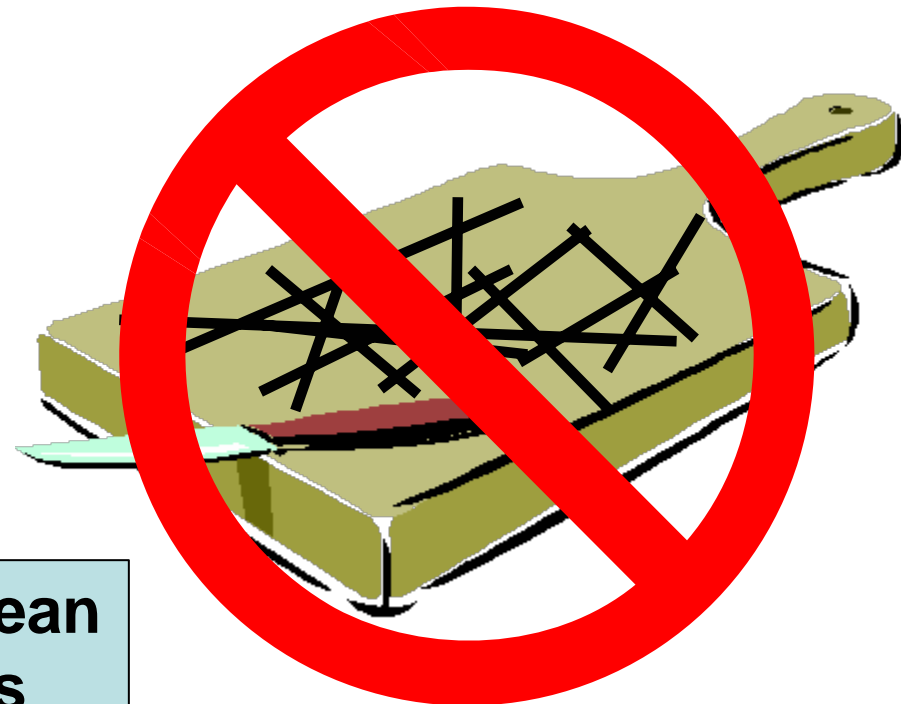


**... and a separate one for fresh produce.**



# When groovy isn't a good thing

Why should you replace cutting boards if they become worn or develop grooves?



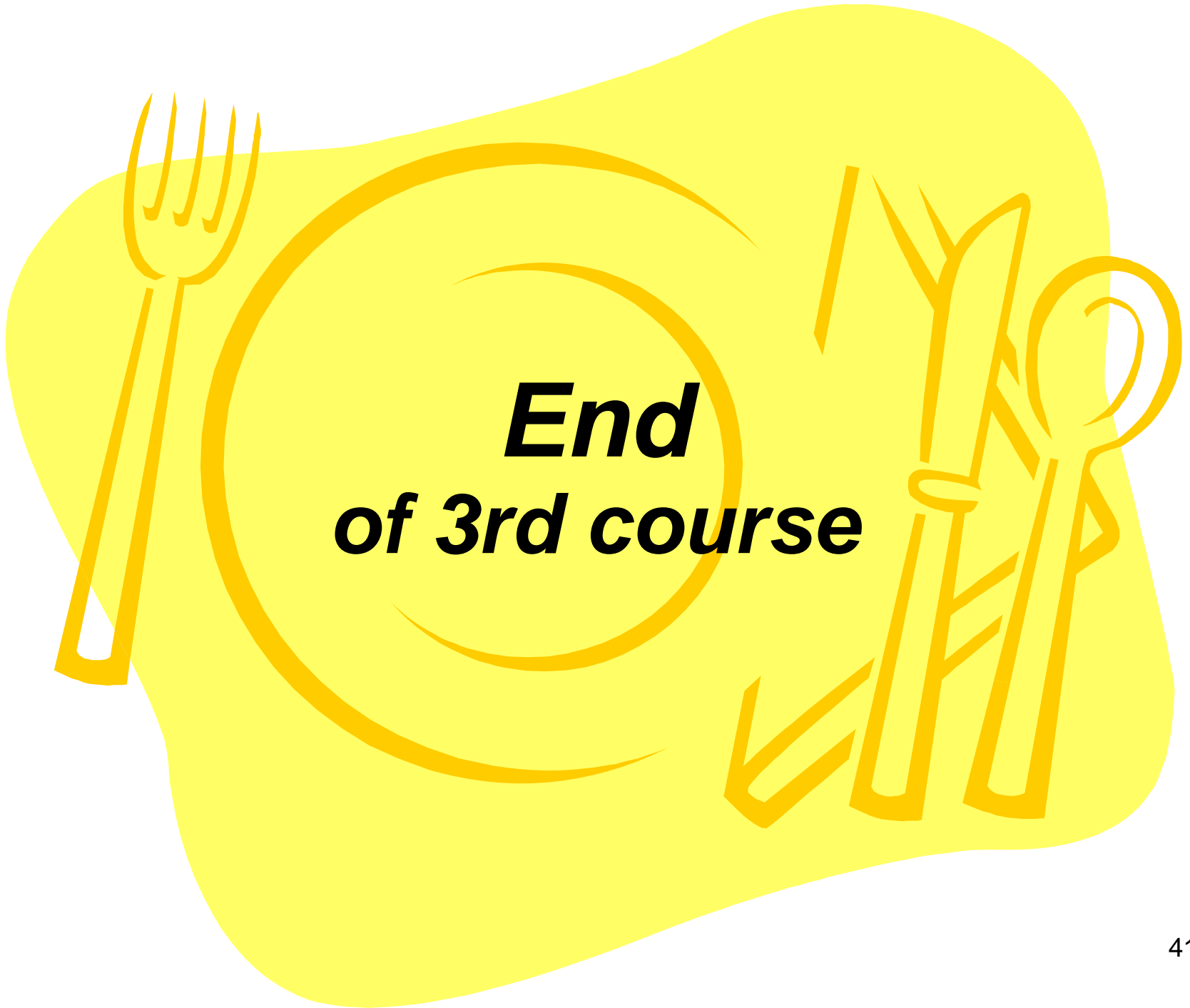
It's harder to clean a board that has grooves where bacteria can hide!

# Use clean plates

**NEVER** serve foods on a plate that previously held raw meat, poultry or seafood unless the plate has first been washed in hot, soapy water.







***End  
of 3rd course***



***4th course***

**Cook**

**COOK** foods to a safe temperature to kill microorganisms.



**“Microorganisms” means things like bacteria.**





**Which ground beef patty is cooked to a safe internal temperature?**

**A**



**B**

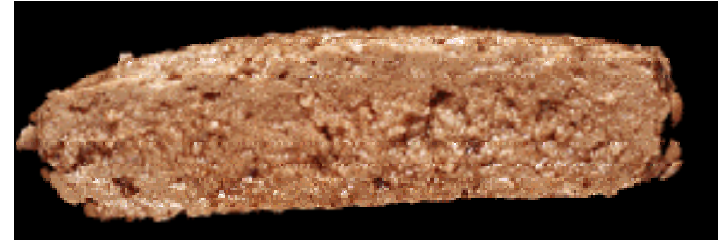


**A**



This **IS** a safely cooked hamburger, cooked to an internal temperature of 160 degrees F, even though it's pink inside.

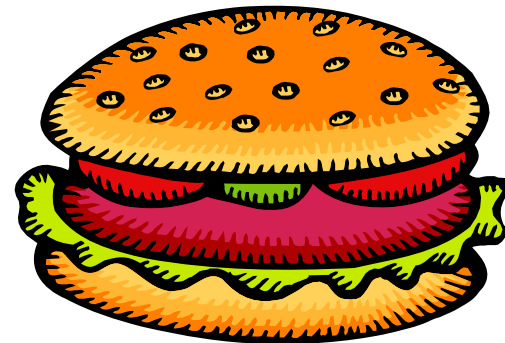
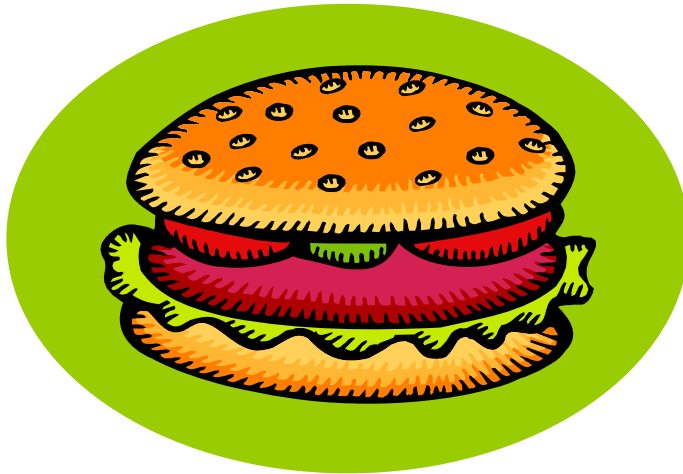
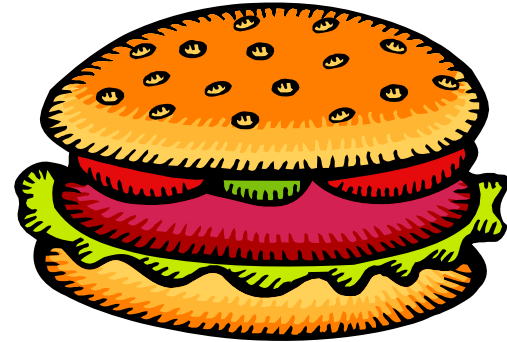
**B**



This is **NOT** a safely cooked hamburger. Though brown inside, it's undercooked.

Research shows some ground beef patties look done at internal temperatures as low as 135 degrees F.

**1 out of 4 hamburgers turns brown before it has been cooked to a safe internal temperature**



Source: United States Department of Agriculture/Food Safety & Inspection Service

[http://www.pueblo.gsa.gov/cic\\_text/food/therm/researchfs.htm](http://www.pueblo.gsa.gov/cic_text/food/therm/researchfs.htm)



**The ONLY way to know food has been cooked to a safe internal temperature is to use a food thermometer!**



# Types of food thermometers



**digital instant-read**



**dial instant-read**



**dial oven-safe**



**oven probe  
with cord**



**thermometer fork  
combination**



**disposable  
temperature  
indicators**



**Read the  
instructions  
for YOUR  
thermometer.**



# Placing a food thermometer



- 1.** Place in the thickest part of food.
- 2.** Do NOT touch bone, fat, or gristle.
- 3.** Begin checking temperature toward the end of cooking, but before the food is expected to be "done."
- 4.** For irregularly shaped food, check the temperature in several places.

**Clean thermometer with hot soapy water before and after each use!**



# Using a thermometer in thinner foods



**Insert a thermometer at an angle or from the side for really thin foods like meat patties, pork chops and chicken breasts.**

**When grilling or frying, to avoid burning fingers, it may be helpful to remove the food from the heat source before inserting the thermometer!**



# Here are the temperatures for cooking some foods ...



# Chicken and turkey



**Cook chicken and turkey (both whole birds and poultry parts, such as wings, breasts, legs and thighs, etc.) to **165 degrees F.****

# Pork, egg dishes, hamburger & ground meats

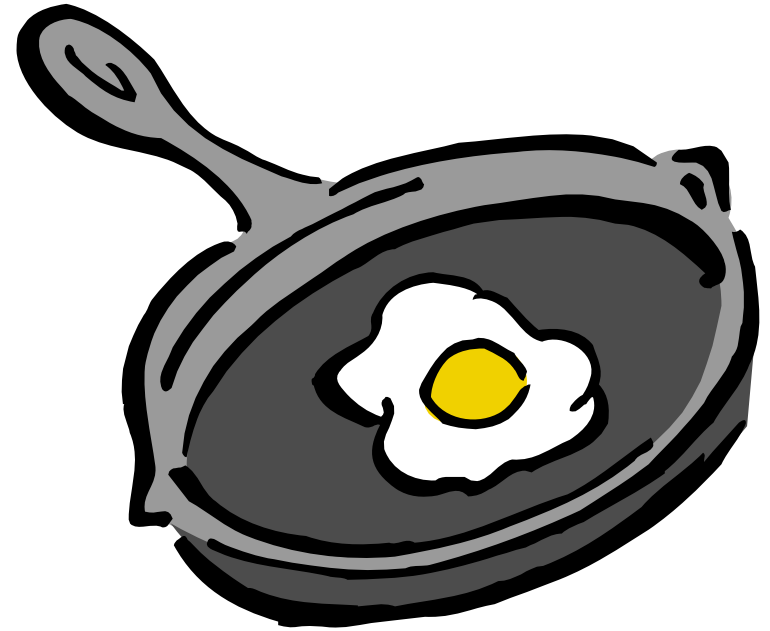


**Cook pork, egg dishes, hamburger and  
ground meats to 160 degrees F.  
Cook ground poultry to 165 degrees F.**



**You can't stick a thermometer into a scrambled or fried egg.**

**How do you know when they're done?**



**Scrambled, poached, fried and hard-cooked eggs are safe when cooked so both yolks and whites are firm, not runny.**

# Leftovers



Reheat leftovers until a temperature of **165 degrees F** is reached throughout the food.



# Beef, lamb & veal steaks



**Cook beef, lamb and veal steaks and roasts to  
160 degrees F for medium doneness  
(145 degrees F for medium rare).**

For more information about using  
food thermometers, visit this Web site ...

“Is it *done* yet?”

You can't tell by *looking*. Use a **food thermometer** to be sure.

### USDA Recommended Safe Minimum Internal Temperatures



Steaks & Roasts  
**145 °F**



Fish  
**145 °F**



Pork  
**160 °F**



Ground Beef  
**160 °F**



Egg Dishes  
**160 °F**



Chicken Breasts  
**165 °F**



Whole Poultry  
**165 °F**

[www.IsItDoneYet.gov](http://www.IsItDoneYet.gov)

USDA Meat & Poultry Hotline: 1-888-MPHotline (1-888-674-6854)

The background is a bright yellow, irregularly shaped area. In the center is a large, thin yellow outline of a plate. To the left of the plate is a yellow outline of a fork. To the right of the plate is a yellow outline of a knife and a spoon. The text "End of 4th course" is centered on the plate.

***End  
of 4th course***



*5th course*

**Chilli**

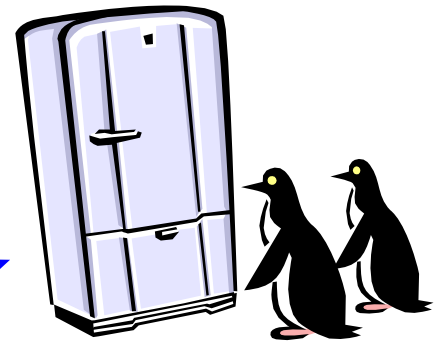
## **CHILL**

**Refrigerate promptly.**



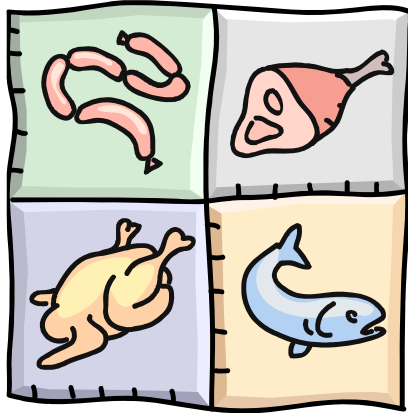
**CHILL (refrigerate)  
“perishable” foods promptly and defrost foods properly.**

**COOL**





# What foods are “perishable” and spoil more readily?



Meat, poultry, fish, eggs, tofu



Pasta, rice, cooked vegetables



Fresh, peeled/cut fruits and vegetables



Dairy products



# Does anyone know the “TWO-hour rule”?



# The TWO-hour rule

**Refrigerate perishable foods  
so TOTAL time at room  
temperature is less than  
TWO hours**

**(Only ONE hour when  
temperature is above  
90 degrees F)**

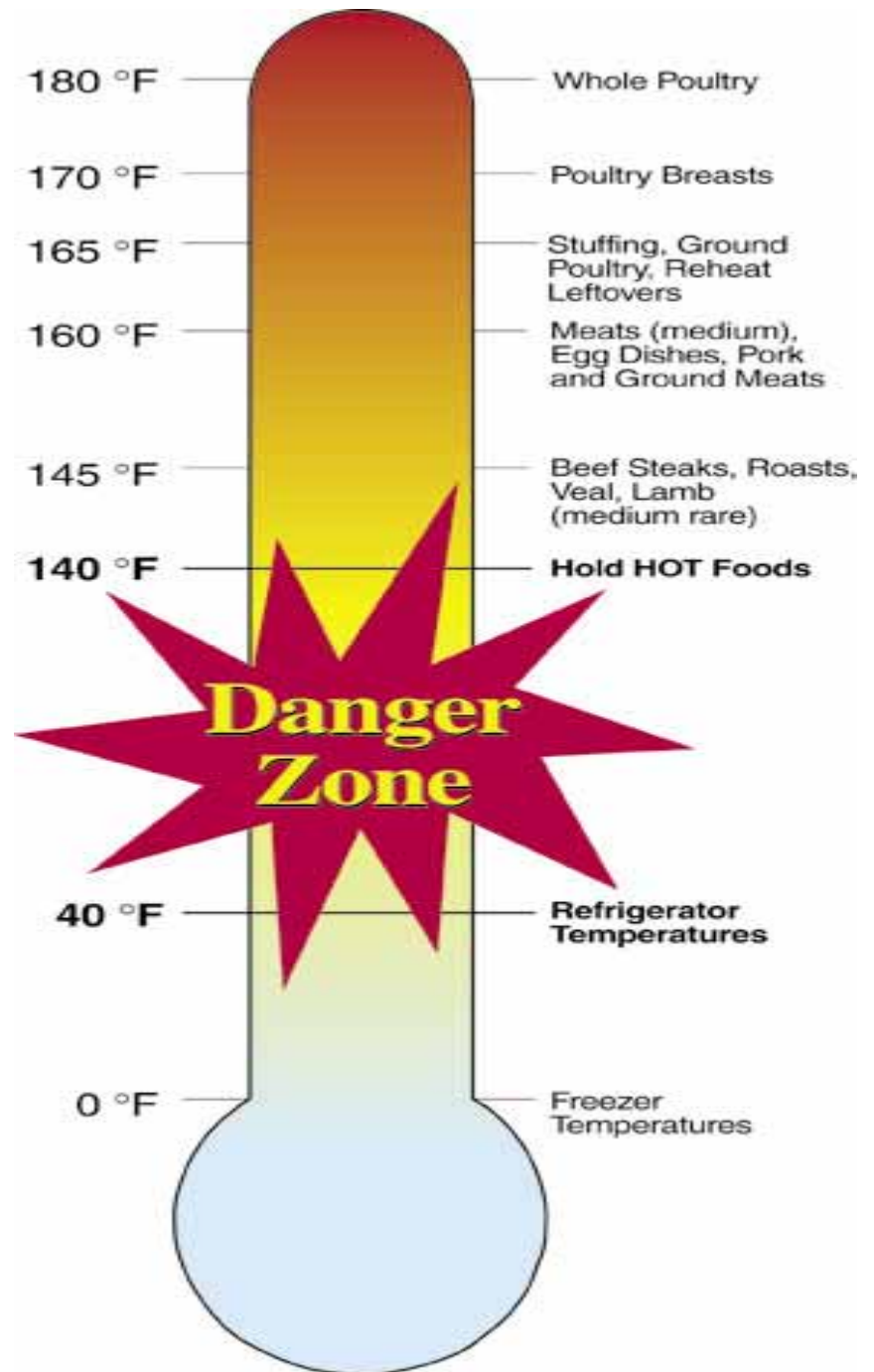






# DANGER ZONE

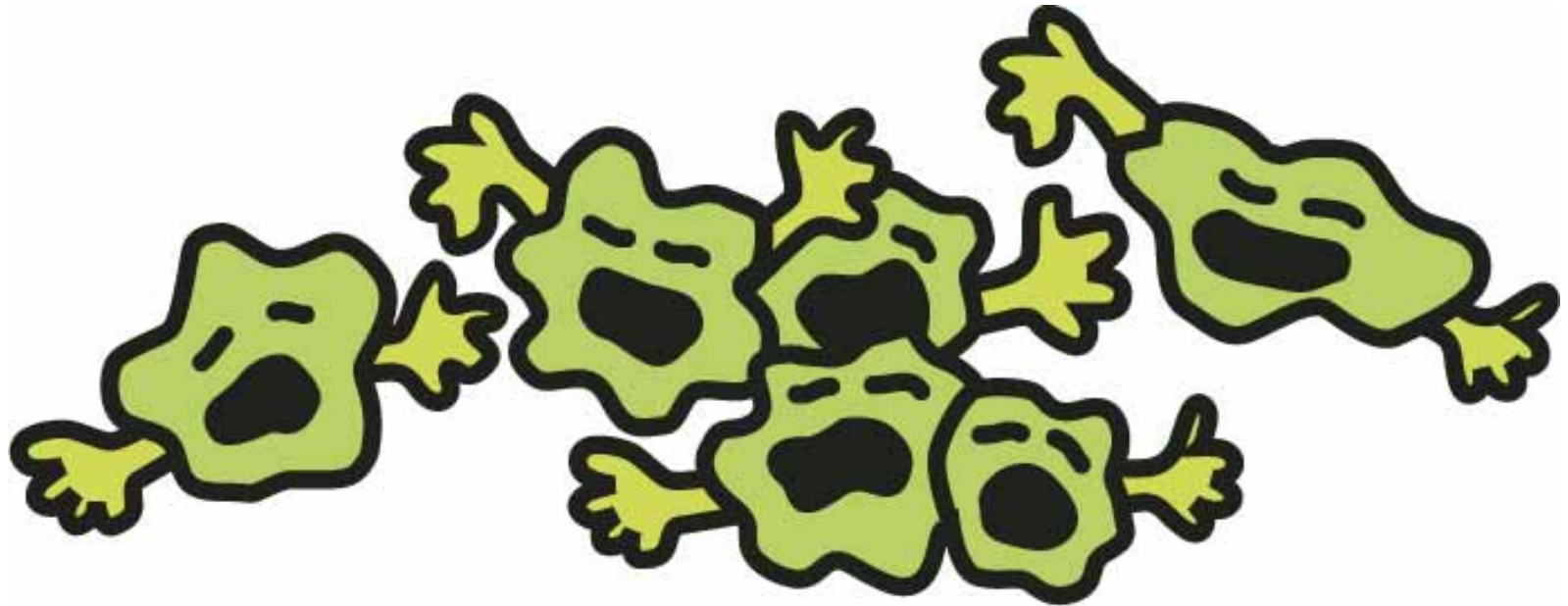
**Bacteria multiply  
*rapidly* between  
40 and 140 degrees F**





# A multiplication quiz

**The number of bacteria can double in 20 minutes!**



How many bacteria will grow from **1 BACTERIA** left at room temperature 7 hours?

**Answer: 2,097,152!**



**Refrigerate perishable foods within TWO hours!**

# How to be cool – part 1

**Cool food in shallow containers.**

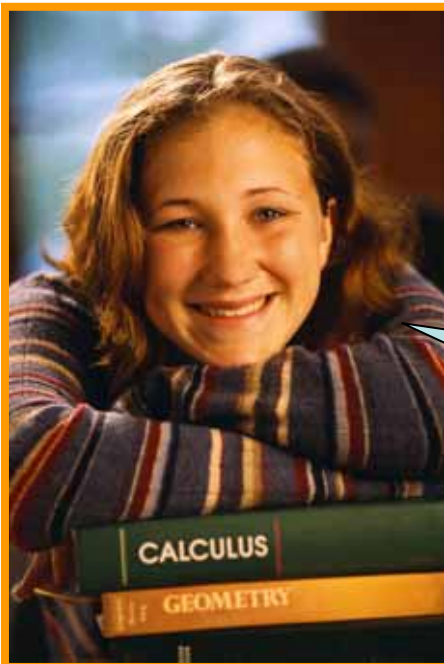
**Limit depth of food to 2 inches or less.**



**Place very hot foods on a rack at room temperature for about 20 minutes before putting them in the refrigerator.**

# How to be cool – part 2

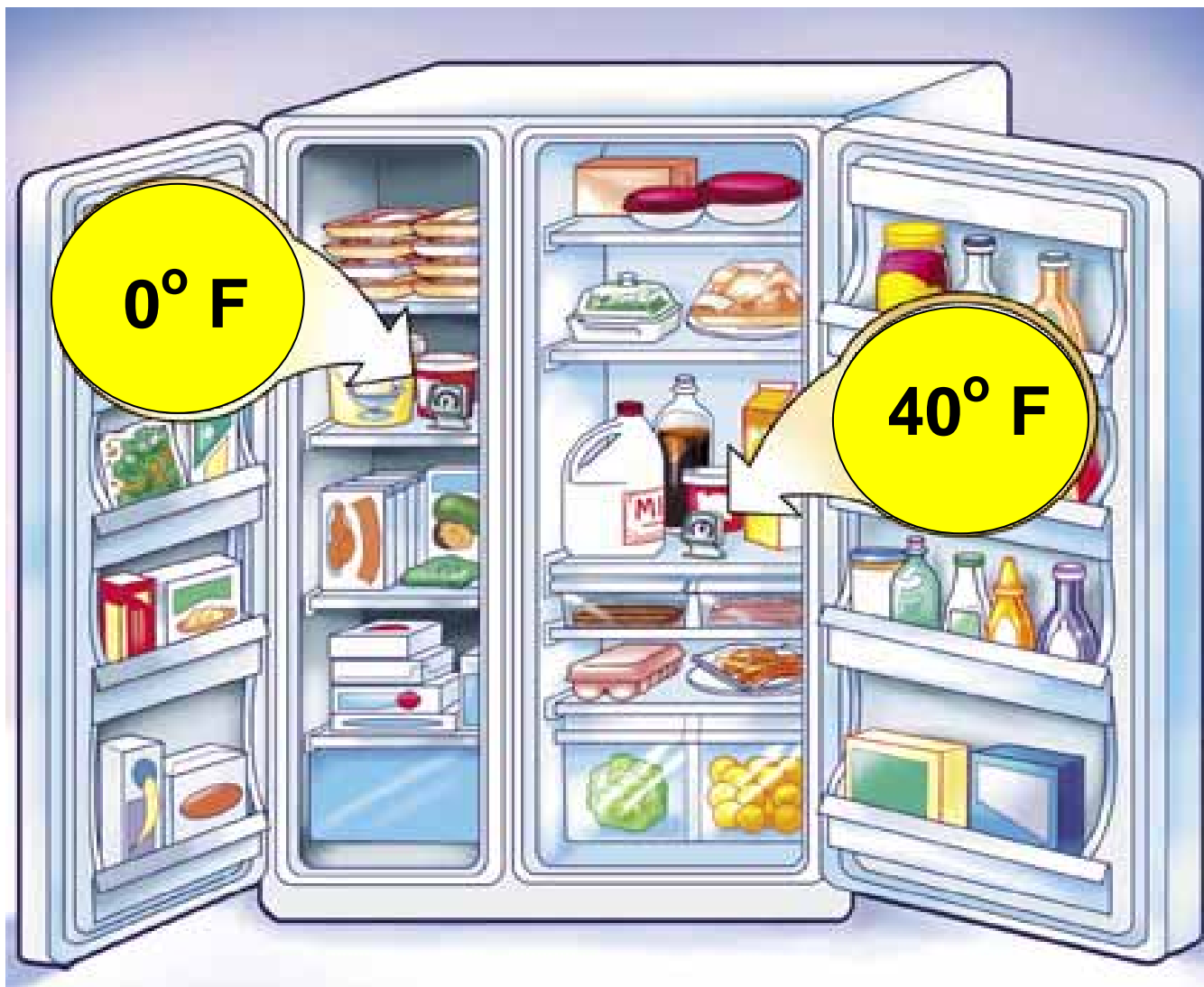
**It's OK to refrigerate foods while they're still warm.**



**Leave container cover slightly cracked until the food has cooled.**



# What temperatures are recommended for refrigerator & freezer?



**Place an appliance thermometer in the refrigerator AND freezer!**



# Monitor refrigerator & freezer temperatures



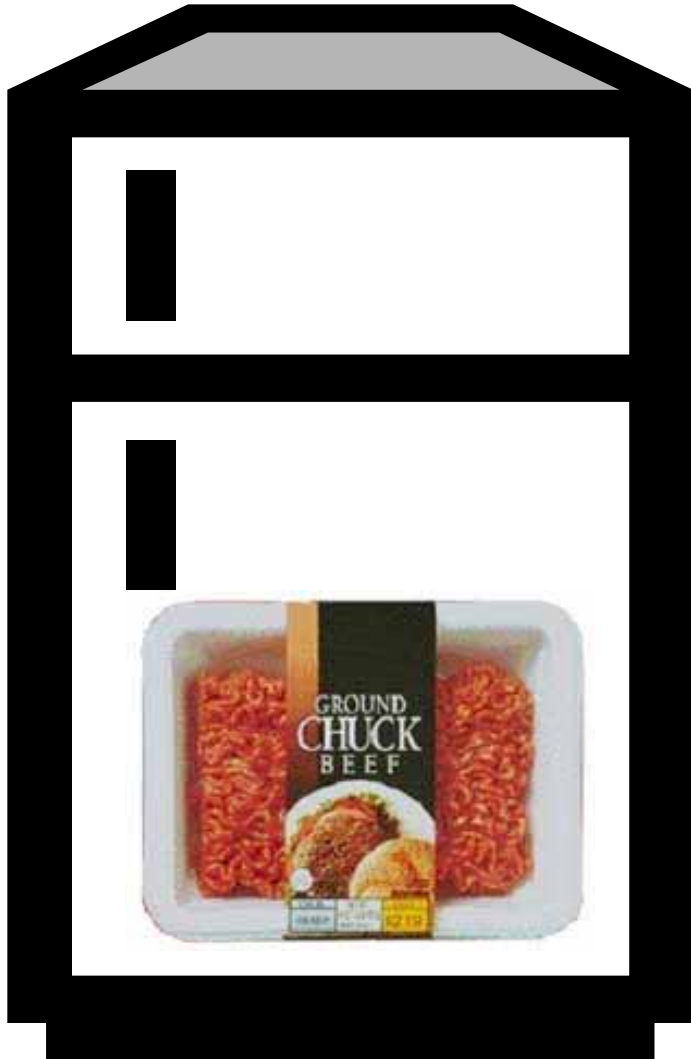
**Place thermometer in the front of refrigerator/freezer in an easy-to-read location.**



**Check temperature regularly  
– at least once a week!**



# The THAW LAW



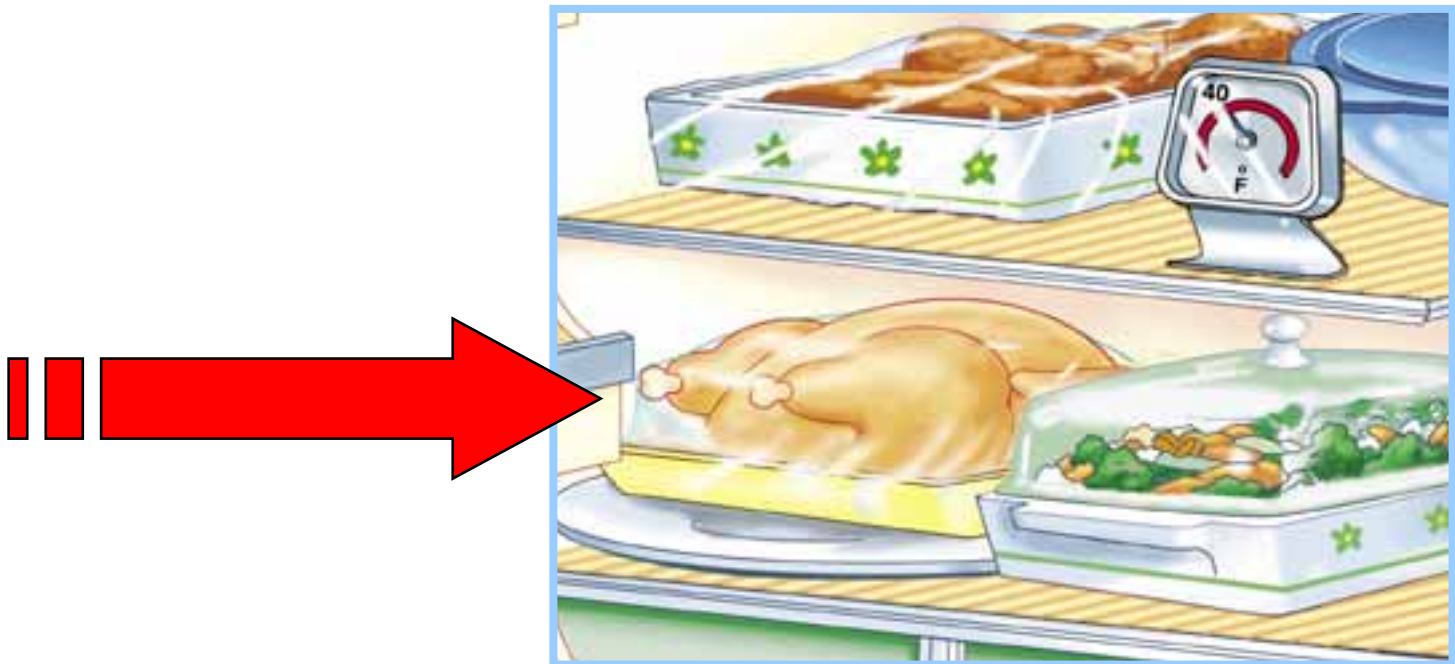
**Plan ahead to defrost foods.**

**The best way to thaw perishable foods is in the refrigerator!**



# Refrigerator storage

Store raw meat, poultry and seafood on the **bottom shelf** of the refrigerator so juices don't drip onto other foods.



**Don't do this, even if your food is kept in the refrigerator!**





# How long should you keep leftover food?

**Refrigerated leftovers may become unsafe within 3 to 4 days.**



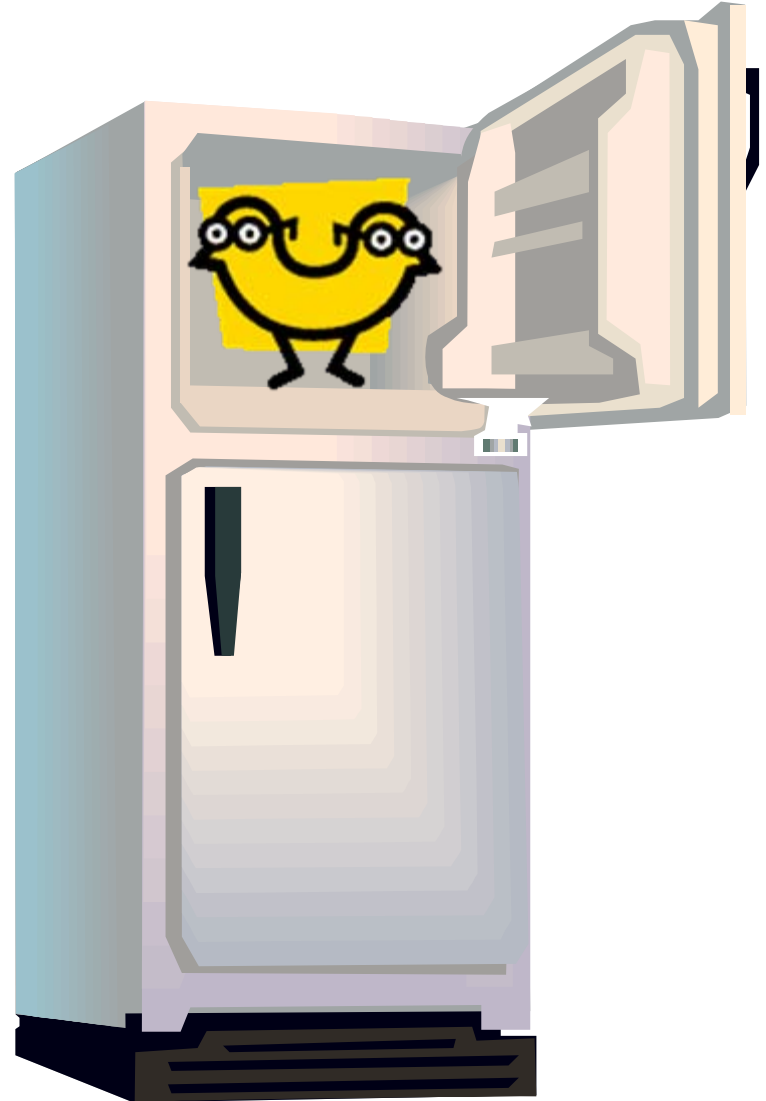
When in doubt,  
**Toss it out!**



# Time to toss ...

“If it walks out,  
let it go!”

~ seen on a refrigerator magnet



A yellow background with a central white plate and cutlery icons. The text "End of 5th course" is centered on the plate.

***End  
of 5th course***



*6th course*

**Game –  
Keep or Toss?**





Let's play ...

Keep or Toss



Should you **KEEP** or **TOSS** ...



**Tacos left on the  
kitchen counter  
overnight?**

# Toss it out!



# Toss it out!



Even if you reheat tacos left out overnight, some bacteria can form a heat-resistant toxin which cooking won't destroy.



A toxin is something that can make you sick. The type of sickness depends on the type of bacteria forming the toxin.





Should you **KEEP** or **TOSS** ...



**Hamburger  
thawed all day  
on the kitchen  
counter?**

# Toss it out!



# Toss it out!



Remember how bacteria may have formed heat-resistant toxins when tacos were left out more than **TWO** hours?



Thaw packages of meat, poultry and seafood on a plate on the bottom shelf of the refrigerator. This prevents their juices from dripping on other foods.

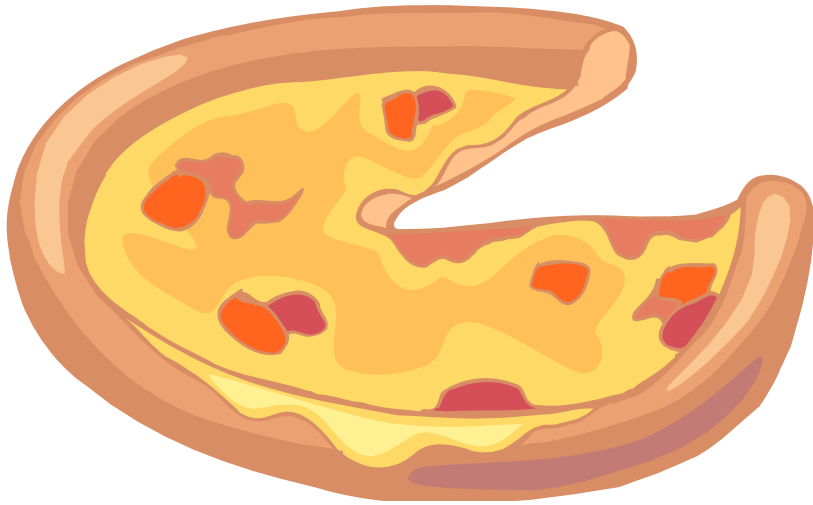


The best place to thaw perishable foods is in the refrigerator!





Should you **KEEP** or **TOSS** ...



**Leftover pizza which was stored in the refrigerator within TWO hours after it was served?**



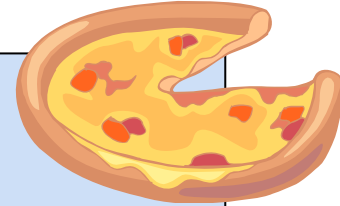
# KEEP IT!



# KEEP IT!



If perishable foods are refrigerated within **TWO** hours after they are served, they should be safe. Just eat them within 3 to 4 days.

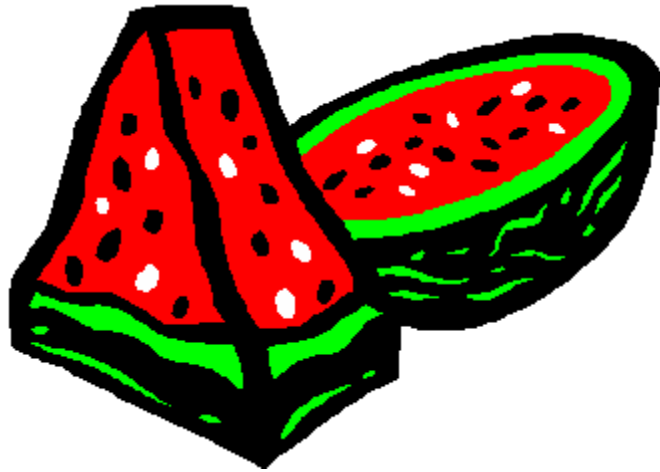


Leftover cold pizza can be a **GREAT** breakfast food — **IF** you handle it safely!





Should you **KEEP** or **TOSS** ...



**Cut or peeled fruits and vegetables left at room temperature for more than TWO hours?**

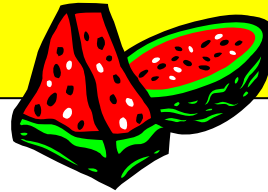
# Toss it out!



# Toss it out!



Once you have cut through the protective skin of fruits and vegetables, bacteria can enter.



Refrigerate cut or peeled fruits and vegetables within **TWO** hours!





Should you **KEEP** or **TOSS** ...



Leftovers kept in  
the refrigerator  
for over a week?

# Toss it out!



# Toss it out!



Even refrigerated leftovers may become unsafe within 3 to 4 days.



You can't always **see** or **smell** if a food is unsafe. You could get sick **tasting** a food!







Should you **KEEP** or **TOSS** ...



**A pot of chili soup  
stored in the  
refrigerator while  
still hot?**

...(can you guess?)

How long would it take a pot of chili to cool to a safe temperature in your refrigerator?



**Would you believe  
... at least 24 hours!**

# Toss it out!



# Toss it out!



**Transfer hot foods to shallow containers to speed cooling!**



**COOL!**



**Remember:**



**When in doubt...**

# Toss it out!



The background is a bright yellow, irregularly shaped area. In the center is a large, thin yellow outline of a plate. To the left of the plate is a yellow outline of a fork. To the right of the plate is a yellow outline of a knife and a spoon. The text "End of 6th course" is centered on the plate.

***End  
of 6th course***



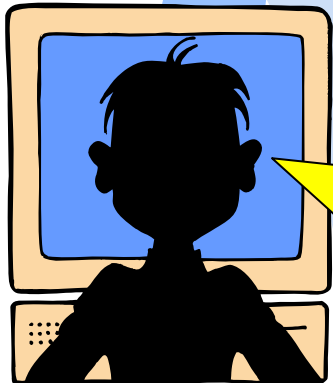
**THE END**

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# *An extra helping for teachers*

- More on types of thermometers
  - Safely cooked seafood



The following slides provide more information than many students need. Insert into the slide set if you feel they would be helpful to your classes.

The background features a light blue, wavy-edged shape containing faint, stylized outlines of a plate, a fork, and two spoons. The text is overlaid on this graphic.

*An extra helping for teachers*

# More on types of thermometers

# DIGITAL instant-read



- Reads in 10 seconds
- Place at least ½ inch deep (or as directed by manufacturer)
- Gives fast reading
- Can measure temperature in thin and thick foods
- Not designed to remain in food while it's cooking
- Check internal temperature of food near the end of cooking time
- Some models can be calibrated; check manufacturer's instructions
- Available in "kitchen" stores

Source: United States Department of Agriculture/Food Safety & Inspection Service

[http://www.fsis.usda.gov/food\\_safety\\_education/Types\\_of\\_Food\\_Thermometers/index.asp](http://www.fsis.usda.gov/food_safety_education/Types_of_Food_Thermometers/index.asp)

# DIAL instant-read



- Reads in 15-20 seconds
- Place 2-2½ inches deep in thickest part of food
- Can be used in roasts, casseroles, and soups
- Temperature is averaged along probe, from tip to 2-3 inches up the stem
- Cannot measure thin foods unless inserted sideways
- Not designed to remain in food while it is cooking
- Use to check the internal temperature of a food at the end of cooking time
- Some models can be calibrated; check manufacturer's instructions
- Readily available in stores

Source: United States Department of Agriculture/Food Safety & Inspection Service

[http://www.fsis.usda.gov/food\\_safety\\_education/Types\\_of\\_Food\\_Thermometers/index.asp](http://www.fsis.usda.gov/food_safety_education/Types_of_Food_Thermometers/index.asp)

# Dial oven-safe



- Reads in 1-2 minutes
- Place 2-2½ inches deep in thickest part of food
- Can be used in roasts, casseroles, and soups
- Not appropriate for thin foods
- Can remain in food while it's cooking
- Heat conduction of metal stem can cause false high reading
- Some models can be calibrated; check manufacturer's instructions

Source: United States Department of Agriculture/Food Safety & Inspection Service

[http://www.fsis.usda.gov/food\\_safety\\_education/Types\\_of\\_Food\\_Thermometers/index.asp](http://www.fsis.usda.gov/food_safety_education/Types_of_Food_Thermometers/index.asp)

# Oven probe with cord

- Can be used in most foods
- Can also be used outside the oven
- Designed to remain in the food while it is cooking in oven or in covered pot
- Base unit sits on stovetop or counter
- Cannot be calibrated



# Disposable temperature indicators (Single-use)

- Reads in 5-10 seconds
- Place approximately ½ inch deep (follow manufacturer's directions)
- Designed to be used only once
- Designed for specific temperature ranges
- Should only be used with food for which the thermometer is intended
- Temperature-sensitive material changes color when the desired temperature is reached



# Thermometer-fork combination



- Reads in 2-10 seconds
- Place at least  $\frac{1}{4}$  inch deep in thickest part of food
- Can be used in most foods
- Not designed to remain in food while it is cooking
- Sensor in tine of fork must be fully inserted
- Check internal temperature of food near end of cooking time
- Cannot be calibrated
- Convenient for grilling



The background is a bright yellow, irregular shape. In the center is a white plate with a double-line border. To the left of the plate is a fork, and to the right is a knife and a spoon, all rendered in a simple, stylized yellow outline. The text "End of thermometers" is written in a bold, black, sans-serif font across the middle of the plate.

***End  
of thermometers***

The background features a light blue, stylized illustration of a plate with a fork on the left and a knife on the right. The plate is centered, and the text is overlaid on it. The overall style is clean and modern.

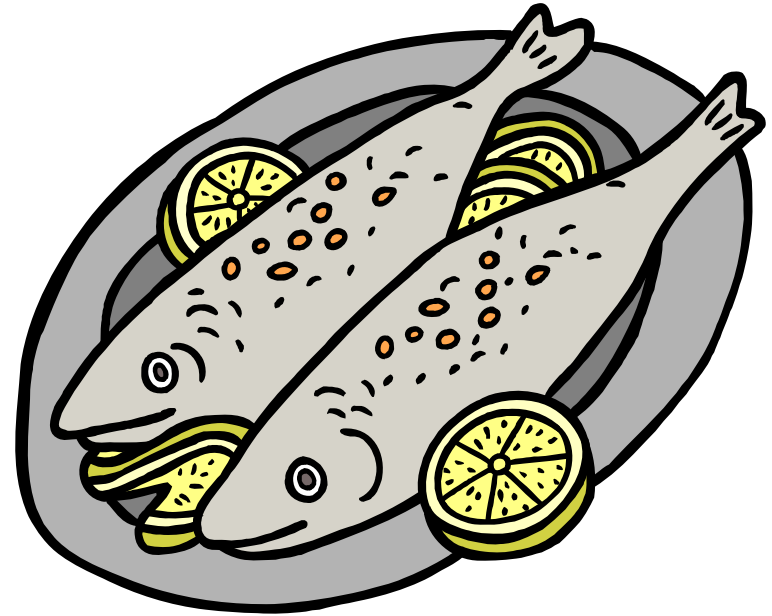
*An extra helping for teachers*

# **Safely cooked seafood**

# Signs of safely cooked seafood:

## Fin Fish

- Slip point of sharp knife into flesh; pull aside.
- Edges should be opaque, the center slightly translucent with flakes beginning to separate.
- Let stand 3 to 4 minutes to finish cooking.



Fin Fish

# Signs of safely cooked seafood: Shrimp, lobster & crab

Turn red and  
flesh becomes  
pearly opaque.



**Shrimp**



**Lobster**

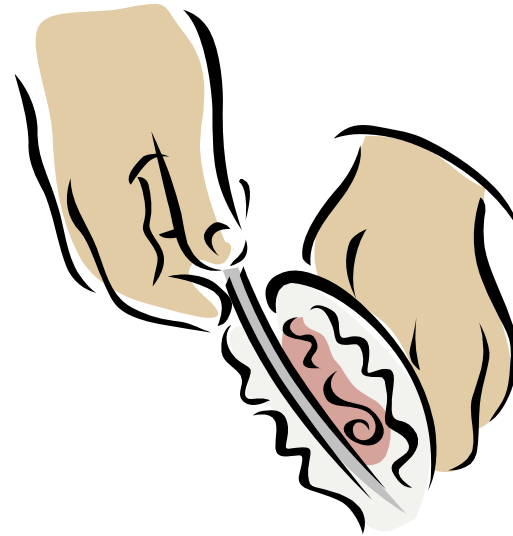


**Crab**

# Signs of safely cooked seafood:

## Scallops

**Turn milky  
white or  
opaque and  
firm.**



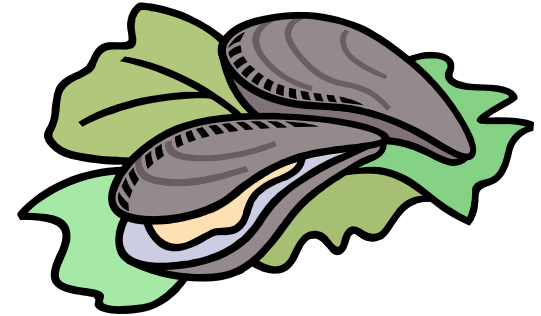
# Signs of safely cooked seafood:

## Clams, mussels & oysters

Watch for their shells opening to know they're done.



Clams



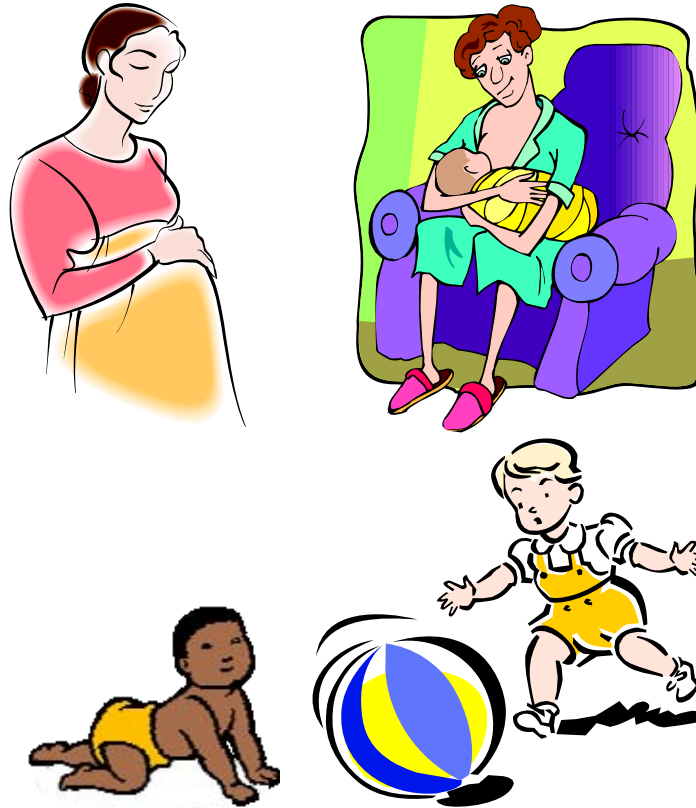
Mussels

Toss those that stay closed.



Oysters

# Specific group recommendations for seafood safety



These groups should **avoid some types of fish** and eat types **lower in mercury**:

- Pregnant women and those who may become pregnant
- Nursing mothers
- Young children

For more information:

<http://www.cfsan.fda.gov/seafood1.html>

or call 1-888-SAFEFOOD

The background is a bright yellow, irregular shape. In the center is a white plate with a double-line border. To the left of the plate is a white fork icon. To the right of the plate is a white knife and spoon icon. The text "End of seafood" is written in the center of the plate in a bold, black, italicized font.

***End  
of seafood***



