

Tools and Equipment





Measuring Tools

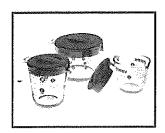








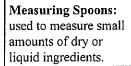
Liquid Measuring Cup



• Used to measure liquids ingredients.

Measuring Cups Measuring Spoons

Measuring Cups: used to measure dry ingredients.



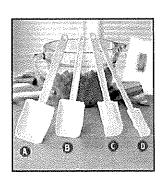


Straight Edge or Leveling Spatula

 To level off ingredients or spread frostings.



Rubber Scraper



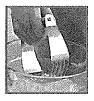
 Used to scrape ingredients from bowls and jars.

Sifter



- 1. Mix dry ingredients
- 2. Break up clumps
- 3. Add air to ingredients

Preparation Equipment













Electric Mixer



 Used to beat and mix ingredients for baked products.

Mixing Bowls

 Used to hold ingredients during food preparation.



Custard Cups



To hold small amounts of ingredients during food preparation.

Pastry Blender



 Used to "cut in" or blend solid fats (butter or shortening) with dry ingredients.

Wisk



 Used to mix or beat eggs and sauces.

Rolling Pin

- 1. Roll out pastry dough
- 2. Break up cookies/crackers for crumbs



Tongs



 Used to pick up large foods such as meat, hot dogs, corn on the cob...

Food Turner



 To flip foods such as pancakes, eggs, hamburgers.

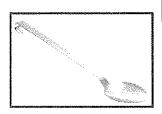
Wooden Spoons



Used to stir on the range.

Slotted Spoon

• Used to separate a solid from a liquid



Ladle



· Used to serve soups.

Cutting Board

- Used to cut foods on.
- Prevents the knife from slipping
- Prevents the counter from getting scratched

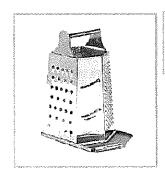


Peeler



 Used to remove the skin from fruits/vegetables.

Grater



• Shreds cheese, chocolate, vegetables, etc...

Paring Knife

Used to remove the skin from fruits and vegetables.



Chef Knife

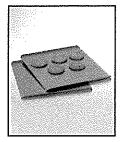


Used for chopping vegetables.

Range Equipment

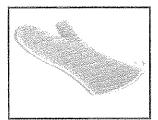




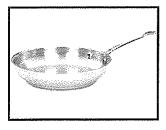


Pot Holders/Oven Mitt

 Protects hands from hot pots and pans.



Skillet



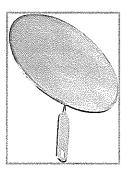
 Used to cook meat, bacon, vegetables, etc.

Omelet Pan

 A dark coated, pan used to cook eggs and omelets.



Splatter Screen



• Used to cover pans when cooking with grease (ex: bacon).



Griddle

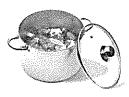
 Used to make pancakes, grilled cheese, French toast...

Sauce Pan

- Used to cook foods on the range: sauces, vegetables, pasta, etc.
- Small, medium, & large



Stock Pot



- A large sauce pan.
- Used to cook foods on the range.

Colander

 Used to drain liquids from solid foods (ex: spaghetti)



Cake Pan



- To bake cakes in
- Comes in various sizes and shapes.

Loaf Pan



• To bake loaf breads in (ex: banana bread).

Pie Plate



To bake pies in; comes in glass or metal.

Baking Pans

To bake brownies coffee cakes, etc. in. Comes in glass or metal. 8x8, 9x9, 9x13

Bundt Pan

To make some cakes and coffee cakes.



Tube Pan

 Used to make angel food cake.

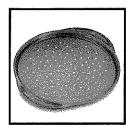


Spring Form Pan

• Used to make cheese cake.

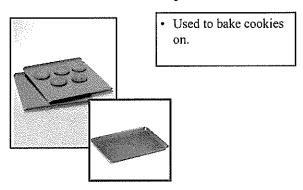


Pizza Pan



• To bake pizza on.

Cookie Sheet/Jelly Roll Pan



Muffin Tin

• Used to bake muffins and cupcakes in.



Cooling Rack



- Used when cooling hot pans or foods.
- Cookies, cakes, etc...

Food Safety and Lab Procedures

be food safe.









clean. separate. cook. chill.

www.befoodsafe.org

Sanitation

• The protection of health by keeping area free from dirt or bacteria.



Contamination vs. Crosscontamination

Cross-contamination

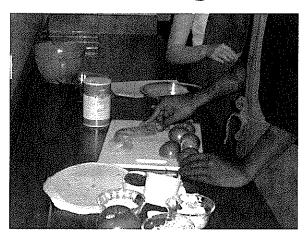
 When harmful substances are transferred from one surface or food to another

Contamination

 The presence of harmful substances not originally present in the food

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What is wrong here??



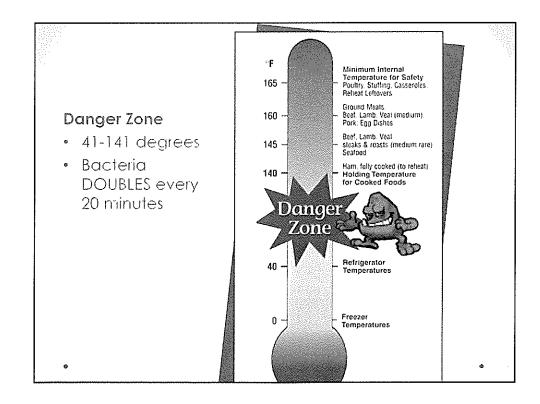
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3 Main Ways Food Can Become Unsafe

- Timetemperature abuse
- 2) Crosscontamination
- 3) Poor personal hygiene







Physical Food Safety Hazard

- Most common, but least likely to cause illness
- Consists of foreign objects that accidentally get into food

HOW MANY CAN YOU COME UP WITH?

Chemical Food Safety Hazard

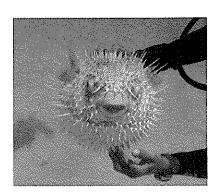
- Can include the following chemicals
 - Pesticides
 - Food additives
 - Preservatives
 - Cleaning supplies
 - Toxic metals that leach from cookware and equipment



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Biological Food Safety Hazards

- Causes 90% of food borne illness
- Includes bacteria, viruses, parasites and fungi
- Certain foods (plants, mushrooms and fish) can carry harmful toxins

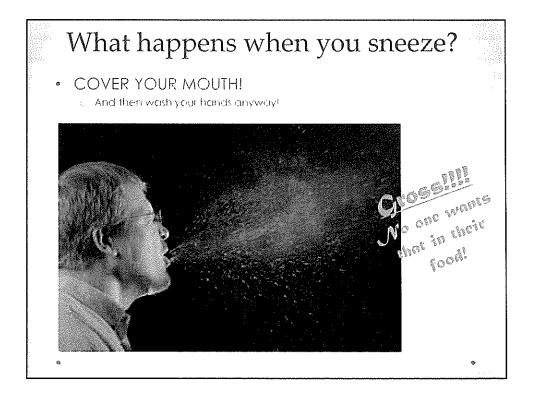


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Biological Food Safety Hazards continued.....

- Bacteria
 - Found everywhere
 - Reproduce by cellular division (double every 20 minutes)
 - Needs moisture, food, and the proper temperature to reproduce
 - a <u>ex.</u> e. coli, salmonella





Food Allergies

 8 Most Common Food Allergies

Peanul

Tree Nutr

 (walnut almond, hazelnut cashew pidachio etc.)

Milk

Egq

Wheat

Sov

Fish

Shellfish

 (shrimp, crab, lobster, clams mussels bysters scattops etc.)

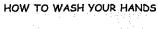
- Nearly ANY food is capable of causing an allergic reaction!!!
- Account for 90% of all food-allergic reactions in the U.S.

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Hand Washing

- Wash frequently
 - After raw eggs, raw meat, sneezing, etc.
- Use hot water
- · Clean towel for drying
- 20 seconds of washing

ABC's or Happy Birthday





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Lab Set Up: what you need to know!

Sanitation Supplies

- Located on the ledge in between kitchens.
 - Bleach, dish soap, hand soap
 - Sanitation Bucket sanitation cloth (1) wash cloth (1)
 - dish towel (2)
 - Garbage Bowl collects garbage during lab

How to Sanitize

- Sanitation Bucket (red)
 - Fill 5 way with **HOT** water.
 - Add I cap of bleach.
 - Use a sanitation cloth clean your counters and surface areas.
 - Empty and refill as it gets cold.

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Dish Washing Process Scrape rinse, wash rinse, and dry Soak as needed This process helps to maintain clean water Hot Water! Keep the water clean! Wash cleanest dishes first Change water as needed Dry! Dry! Dry! Use a clean towel Air dry if possible - more sanitary Moisture = bacteria

REMEMBER!

To prevent food from becoming unsafe you can:

- Wash hands (not just once, but several times while handling tood, and always after handling raw meats!)
- Wear your hair net!
- Roll sleeves up
- Wear gloves if you have a cut/band-aid
- Keep refrigerated food cold as long as possible
 Sneeze into your elbow, then wash hands
 Don't lick your fingers, touch your face, fix your hair, etc. while handling food

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Abbreviations and Equivalents



Abbreviations:

Teaspoon <u>t.</u> or <u>tsp.</u>

Tablespoon <u>T.</u> or <u>Tbsp.</u>

Cup <u>c.</u>

Pint pt.

Gallon gal.

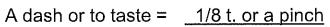
Ounce <u>OZ.</u>

Pound _lb.

Package <u>pkg.</u>

Weight wt.

Equivalents:



3 t. = 1 T.

16 T. = <u>1 c.</u>

12 T. = $\frac{34 \text{ c.}}{}$

 $8 \text{ T.} = \frac{1}{2} \text{ c.}$

 $4 \text{ T.} = \frac{\frac{1}{4} \text{ c.}}{}$

2 T. = 1/8 c.

2 c. = <u>1 pt.</u>

2 pt. = <u>1 qt.</u>

Equivalents con't.

4 c. = <u>1 qt.</u>

4 qt. = <u>1 gal.</u>

8 fl. oz. = 1 c.

1 lb. = <u>16 oz.</u>

1 stick butter = ½ c. butter

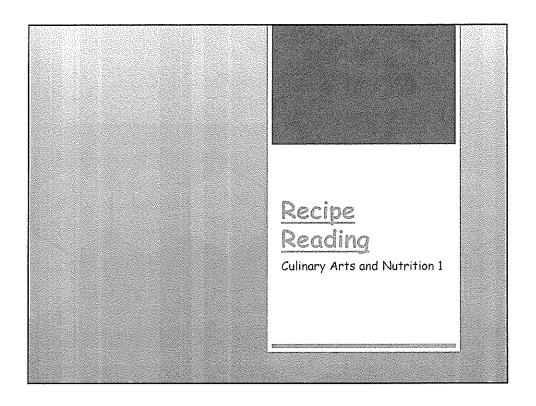
2 sticks butter = 1 c. butter

Using the picture on your sheet, shade in 1/3 c. of butter:



Using the picture on your sheet, shade in ½ c. of butter:

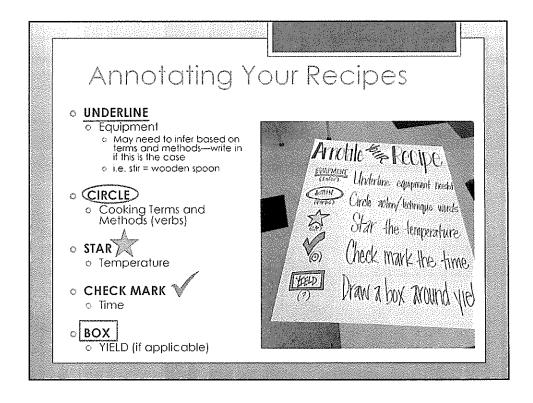




Course Book pg. 17

Parts of a Standard Recipe

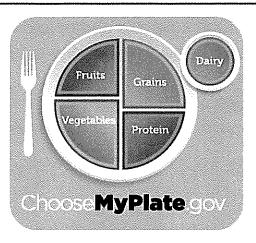
- o Product Name: the name of the recipe.
- <u>Yield:</u> the number of servings or portions the recipe produces.
- Ingredient Quantity: the measured portion of each ingredient.
- <u>Preparation Procedures:</u> the step by step directions to produce the recipe. This includes how you will prepare the food (ex: dice, sauté, boil, etc.)
- <u>Cooking Temperatures</u>: used for range tops and ovens. Preheating may be required.
- Cooking Time: how long the food product needs to be cooked for. This must be followed.



The following steps are a guide to how to use a recipe effectively...

- Read the recipe from top to bottom.
- 2 Make sure that you know all of the steps and cooking methods.
- Wash your hands, put on your hair net, and apronbefore any food preparation begins.
- 4 Gather all the equipment needed.
- 5 Measure all of the ingredients.
- Preheat the oven if necessary.
- 7 Prep all ingredients as directed in the recipe.
- 6 Cook the food product as directed.
- Serve and Eat!

ChooseWyPlate.gov



When looking at the foods you eat regularly, where do they fit into MyPlate?

Food Groups



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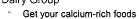
- Make at least half your grains whole
- Whole grains contain fiber which may reduce constipation.

Vegetable Group

- Vary your veggies
- Helps reduce blood cholesterol levels.

Fruit Group

- Focus on FruitsMay reduce risk for heart disease.
- Dairy Group



Improves bone health reduces the risk of osteoporosis.



Protein Foods Group

Go lean with protein

 Proteins function as building blocks for bones, muscles, cartilage, skin, and blood. Related Topics:

- Oils
- Empty Calories
- Physical Activity
- Recipes



http://www.choosemyplate.gov/foodgroups/index.html

Empty Calories

- Calories from solid fats and/or added sugars.
- They add calories to your body but little to no nutrients.
- Foods high in empty calories:
 - [®] Cake, pizza, ice cream, soda, and cheese.







Some changes to make to improve healthy eating...

Food with some empty calories

- Sweetened applesauce (contains added sugars)
- Regular ground beef (contains solid fats)
- Fried chicken (contains solid fats from frying and skin)
- Sugar-sweetened cereals (contain added sugars)
- Whole milk (contains solid fats)

Food with <u>few or no</u> empty calories

- Unsweetened applesauce
- Extra lean ground beef (95% or more lean)
- Baked chicken breast without skin
- Unsweetened cereals
- Fat-free milk

Other Important Info

- Balancing Calories
 - Enjoy your food, but eat less
 - Avoid oversized portions (restaurants)
- Foods to Increase
 - Make half your plate fruits & vegetables
 - * Make at least half your grains whole grains
 - Switch to fat-free or low-fat (1%) milk
- Foods to Reduce
 - * Compare sodium in foods like soup, bread, & frozen meals
 - Drink water instead of sugary drinks

Other Considerations...

- Eat WHOLE foods
 - Fruits, vegetables, oats, rice (preferably brown rice), corn tortillas
- **READ labels!**
 - "real fruit"
 - "whole grains"
 - "no high-fructose corn syrup"
- Look for hidden sugars →
- At least 61 names for hidden sugars
- Drink more WATER!
 - Roughly ½ your body weight in water per day

- Eat foods with 5 ingredients or fewer
 - Make sure you can read and pronounce these (generally, NOT ALWAYS, means its "cleaner" or "healthier") →

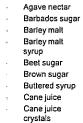
MyPlate





61 Names for Sugar





Cane sugar

Carob syrup

Castor sugar

Coconut palm

Coconut sugar

Caramel

Confectioner's sugar Corn sweetener Corn syrup

Corn syrup solids Date sugar Dehydrated cane luice Demerara sugar Dextrin Dextrose Evaporated cane juice Free-flowing brown sugars

Fructose Fruit juice Maple syrup Fruit juice Molasses concentrate Muscovado

Glucose Palm sugar Glucose solids Panocha Golden sugar Powdered sugar

Golden syrup Raw sugar Grape sugar Refiner's syrup Rice syrup HFCS (High-Fructose Corn Syrup) Saccharose Honey Sorghum Syrup Icing sugar Sucrose Invert sugar Sugar (granulated) Malt syrup Sweet Sorghum Maltodextrin Syrup Maltol Treacle Maltose Turbinado sugar Mannose Yellow sugar



Let's Practice...

- For breakfast, Jason had an omelet with ham, cheese and vegetables, a glass of vitamin D milk, and white toast.
 - How could Jason make his meal healthier?
- For lunch, Andrea had a turkey sandwich on whole wheat bread. The sandwich had cheese, lettuce and mayonnaise on it. She also had French fries and a Diet Pepsi.
 - How could Andrea improve her meal?

Cooking Methods

Students in Culinary Arts & Nutrition 1 should be able to identify and perform the following...

3 Cooking Methods

- Dry Heat Cooking
 - bake
- 2. Moist-Heat Cooking
 - ∗ boil
 - simmer
 - steam
- 3. Cooking with fat
 - sauté



Dry-Heat Cooking

• Cooking food uncovered without added liquid or fat.





Dry Heat Cooking - Bake

- Bake

- Cook food by surrounding items with hot, dry air in an oven.
- Placement of the food should be centered in the oven for even baking unless stated otherwise in the given recipe.
- Oven needs to be preheated to the required temperature.





Moist-Heat Cooking

- Cooking food in a type of liquid.
 - Water, stock, steam, etc.







Moist Heat Cooking - Boil

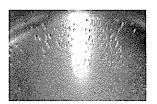
- Boil
 - Cook food submerged in a liquid that has reached the boiling point (212°F).
 - What it looks like:
 - Air bubbles continuously rise, break the surface, and escape as steam.
 - · Sometimes referred to as a rolling boil.



Moist Heat Cooking - Simmer

> Simmer

- Cook food completely submerged in a liquid below the boiling point $(185^{\circ}F 205^{\circ}F)$.
- What it looks like:
 - · Air bubbles rise slowly and just barely break the surface





Moist Heat Cooking - Steam

- Steam

- Cook food over, but not directly in, boiling liquid in a covered pot.
- · What it looks like:
 - · Steamer basket/insert suspends food above boiling liquid





Cooking with fat-Sauté

- Cooking with fat typically utilizes a dry heat source (stove/oven) with a type of fat.
 - Butter, oil, etc.
- Sauté
 - Cook quickly in small amounts of fat.
 - Fat must be hot when food is added to pan.





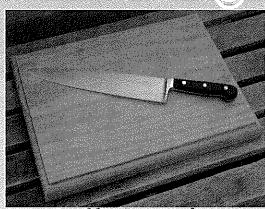
Knife Safety and Skills

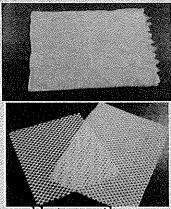
CULINARY ARTS AND NUTRITION 1

Cutting Boards

- Types
 - Plastic/Polypropylene
 - Wood
 - Glass (Do NOT Use—easily breakable)
- Replace when:
 - Deep cuts, grooves (bacteria-health concern)
 - Warped (safety)

Setting Up Your Cutting Station





A rubber mat or a damp paper towel between the counter top and cutting board helps ensure a stable cutting surface

Our Cutting Boards

- In your kitchen, you should have...

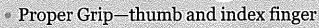
 - Used for: produce (fruits and vegetables)
 - ired
 - Used for: "meat" (anything meat/poultry related)
- What should you do if you're missing a cutting board?
 - Ask Mrs. Sl

Knife Safety

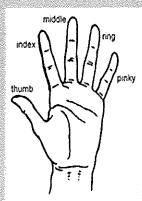


- Do not run, skip, joke, yell, etc. while using knives.
- Wash them separately!
 - Do NOT put knives in the bottom of the sink.
 - They cannot be seen and group members may cut themselves when they stick their hands in the soapy water.
 - Tell your manager when a knife is ready to be washed!
 - Dry with the blade facing AWAY from your palm!
- Use the proper grip and hand position.
 - This will decrease the risk of cuts.
 - This will be reviewed in a demo over the next two days.

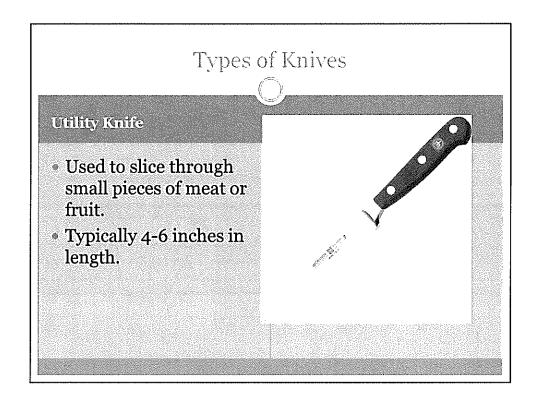
Safety Tips



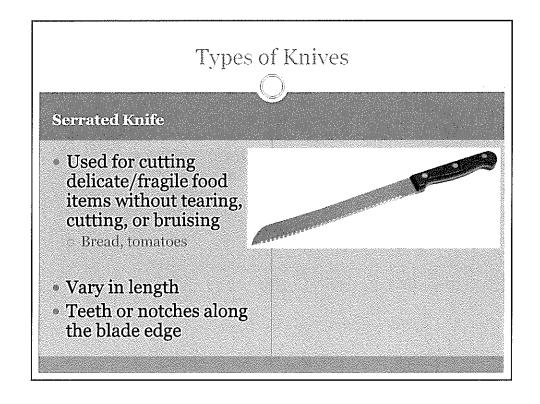
- Better control of knife
- Less strain on hands
- · Bear Claw with guide hand
 - Protect fingers
 - Protect food!
- Rolling Technique
 - Less likely to cut yourself
 - o Do NOT "chop!"

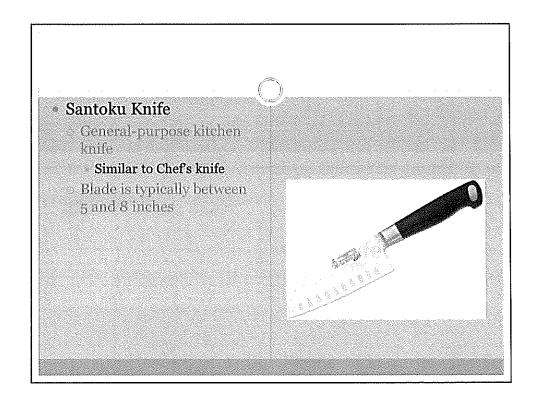


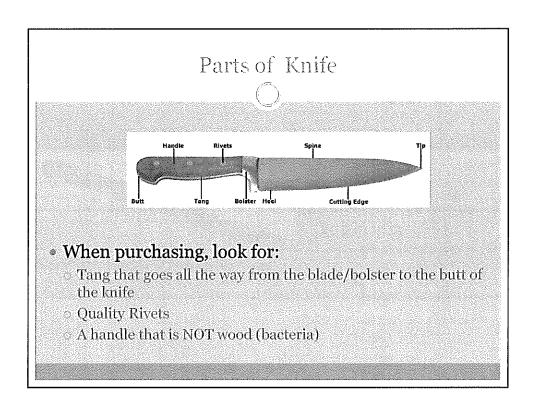
Chef's Knife Also known as the workhorse due to its many uses. Can be used for almost any cutting task. Often for cutting larger items such as potatoes or onions. Used for cutting/mincing garlic. Most common size in the home is 8 or 10 inches in length.

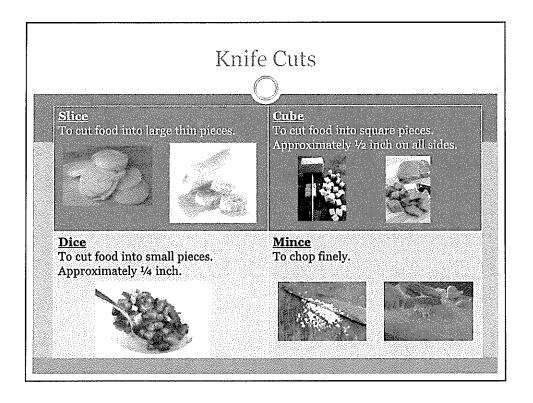


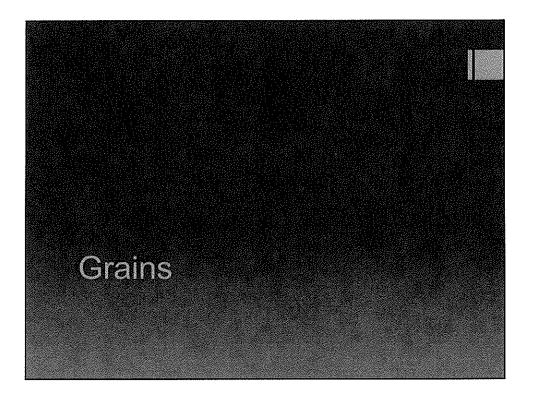
Types of Knives Paring Knife Used for peeling and slicing small fruits and vegetables. Peeling—carrots, apples, etc. Cutting—bananas, strawberries, etc. Also for removing stems, seeds, and brown spots. Typically 2-4 inches in length.

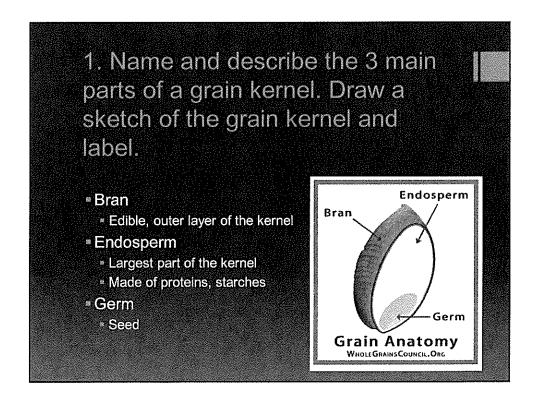


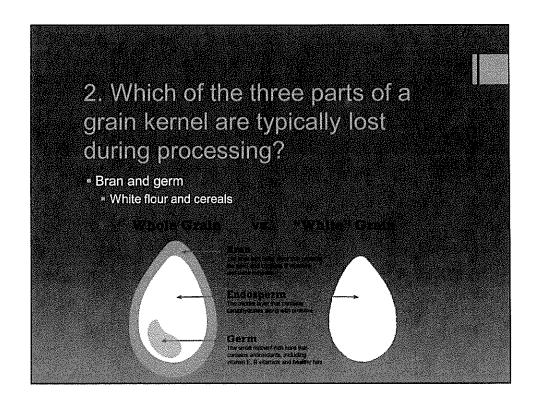


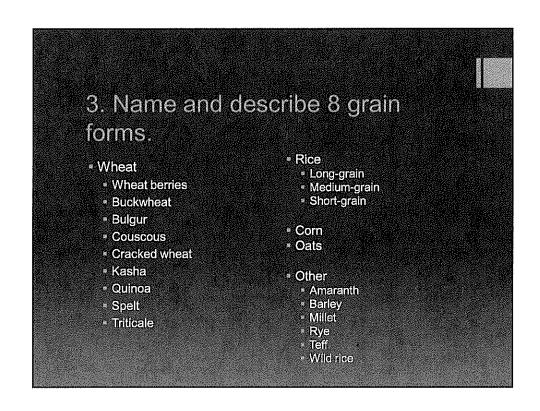












4. Why are whole grain products nutritious?

- Made of the entire grain kernel so they contain most of the original nutrients
- Removing the bran and germ (white flour, cereals, etc.) removes most of the vitamins, minerals, phytochemicals and dietary fiber.

5. What are some ways that grains can be combined with other foods to produce tasty dishes?

- Plain or topped with vegetables, seasonings, and sauces
 - Spaghetti
- * Used in side dishes, casseroles, soups, and baked goods
- Added to soups and stews to thicken them
- Cooked and eaten as hot breakfast cereals
 - Oatmeal, pancakes, etc. with fruit
- * Cooked into desserts by adding sweeteners or fruits
 - Raspberry/strawberry oat bars ©

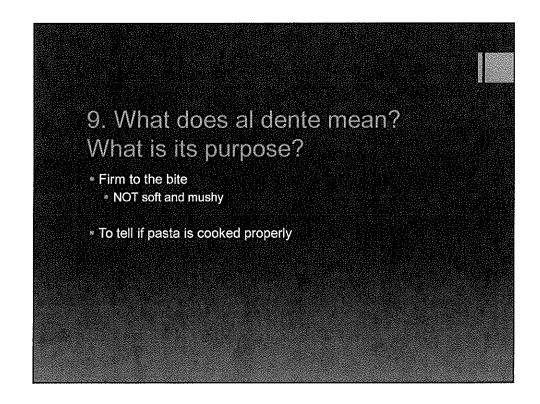
6. Why can dried pasta be stored in a cupboard while fresh pasta must be stored in the refrigerator?

- Dried pasta has been preserved so it can be stored in a cool, dry place
- Fresh pasta contains oil (and eggs) and will spoil at room temperature

7. If you buy wheat bread with a brown color, is it whole grain? Explain.

- * Not necessarily.
- Unless the label lists whole wheat or another whole grain first, the bread is made mostly of white flours.
 - Pumpernickel bread is brown in color but made with white and rye flour then colored with caramel or molasses.

8. Why should whole-grain products be stored in the refrigerator? * Whole grain products contain oil and can spoil at room temperature if not used quickly



10. Provide 2 tips to someone who is going to boil pasta.

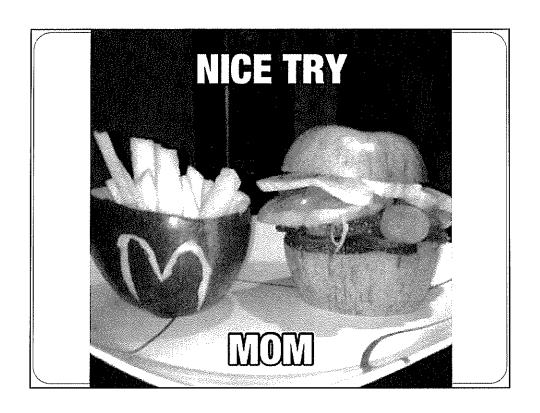
- Choose a pot large enough so the water does not boil over
- Boil water first, then add pasta
 - If boiling stops, pasta sticks together
- Do not add oil
 - Prevents sauce from sticking to noodle
- Drain pasta immediately after cooking
- Do not rinse
 - Removes nutrients @
- Have pasta finish cooking when you are ready to serve

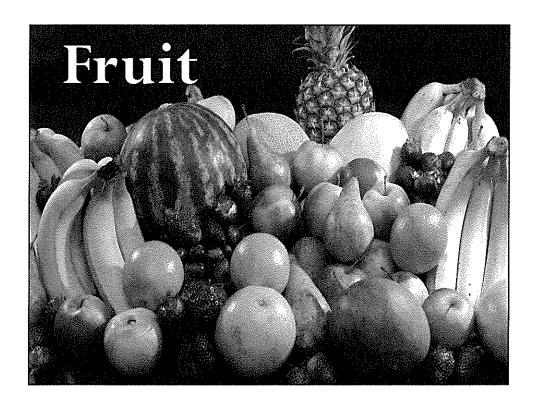
11. How do you cook rice (be specific)? Why should rice not be stirred?

- Bring cooking liquid to a boil.
 - Milk, juice, or broth
- Add rice.
- Cover.
- Bring to a boil again.
- * Reduce heat to gentle simmer.
- Keep pan covered.
- Stir as little as possible.
 - Stirring scrapes off the starch and makes rice sticky.

Benefits of Whole Grains (using whole wheat flour, etc.)

- ∗ Fiber
- Prevents heart disease and high cholesterol
- Reduces constipation
- Helps with weight management





Definition

- Fruit
 - The part of a plant that holds the seeds
 - They are colorful, flavorful, and easy to prepare!

Categories

- Pomes
 - Apple, pear
- Drupes
 - Peach, apricot, avocado, cherry
- Berries
 - Strawberry, blueberry, raspberry, grape
- Melons
 - Watermelon, cantaloupe, Crenshaw
- Citrus
 - Lemon, lime, grapefruit
- Tropical
 - Banana, pineapple, kiwi, fig



Did you know???

**Fruits are often organized by category in the grocery store.

Nutrients

- Dietary fiber
- Carbohydrates
- Vitamin C
- Potassium
- Beta carotene
- Fat free
- Low in calories
- Low in sodium
- Great snacks!

Selecting and Buying

Mature Fruit

- Reached its full size and color
- Not ready to eat
- Any MATURE fruit needs to be stored at room temperature

Ripe Fruit

- Has reached its peak of flavor
- Tender and pleasant aroma
- Ready to eat!
- Most RIPE fruits can be stored in the refrigerator

Selecting and Buying: what to look for

- Condition (kitchen 1)
- Denseness (kitchen 2)
- Color (kitchen 3)
- Aroma (kitchen 4)
- Size (kitchen 5)
- Shape (kitchen 6)

See page 438 in your textbook.

Fruit Purchasing

Frozen Canned Dried Frozen Canned Can

Winter Fruits

- Include apples and citrus fruits

Tropical Fruits

Summer Fruits

- Are named for the climatic conditions of where they are grown.
- Include figs, dates, star fruit pomegranates, and bananas

Storage

- The best option is away from vegetables
 - Some fruits omit a gas that can cause vegetables to spoil
- Don't wash before storing, wait until it will be used
- Use the refrigerator bin when available—keeps the humidity down
- Avoid tightly closed bags builds up moisture = bacteria and spoilage

Preparing

Cleaning

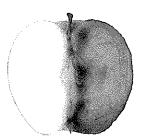
- Should be the first step in preparing fruit.
- Use cold water and a gentle touch to avoid bruising the fruit.
- Fragile berries should be lightly rinsed to avoid damage.

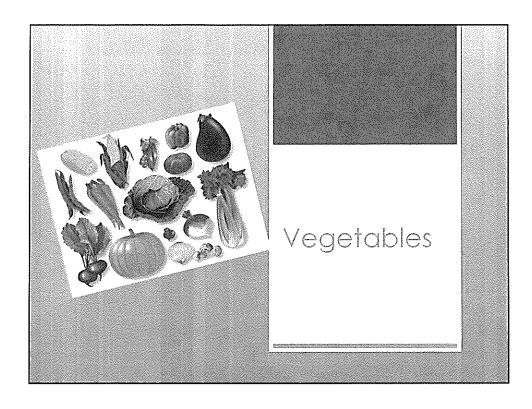
Preparing

- Remove
 - Skins
 - Cores, pits, and seeds
 - Stems
 - Bruises and imperfections

Enzymatic Browning

- Occurs when oxygen comes in contact with the flesh of the fruit
- To prevent this coat the fruit with some sort of acid once the fruit is cut
 - Lemon juice, lime juice, pineapple juice, etc.





- What is long white or green and comes in the spring?
 - Asparagus!
- What is the only vegetable that will make you cry?
 - Onion!
- I am a crunchy vegetable with a lot of vitamin C. Kids think I look like a tree!
 - o Broccoli!
- What did the father tomato say to the baby tomato whilst on a family walk?
 - o Ketchup!

Vegetables come from different parts of plants...

Seeds Roots
Flowers Bulbs
Fruits Stems
Leaves Tubers

See page 450 in your text book.

Definition Edible portions of a given plant. Nutrient Content Fiber Carbohydrates Vitamins Antioxidants

Purchasing

- Options
 - o Fresh, frozen, canned, and dried

When shopping look for:

- Condition
- Color and Texture
- o Size
- Shape
- Ripeness

Storing

- Most vegetables can be stored in the refrigerator in a plastic bag, air tight container, or crisper.
- There are exceptions to this:
 - o Onions cool/dry place
 - Potatoes cool/dark/dry place

Don't put onions and potatoes together because onions absorb moisture from the potatoes and onions cause the potatoes to sprout faster.

Cleaning and Preparing

Cleaning

- Run under water that is a little warmer than the vegetable
 - This will remove any dirt on the outside
 - Wash before peeling...why?
- Some vegetables have layers that need to be pulled back to ensure proper washing
 - Ex: celery and lettuce

Preparing

- Remove when needed
 - Skins
 - Seeds
 - Stems
 - Bruises and imperfections

Cooking and Eating

- o Vegetables can be cooked or eaten raw.
- Cooking Options
 - o Examples?

Dairy and Béchamel

Culinary Arts and Nutrition

Nutrients in Dairy Products

Nutrients

Profeir

Calcion

Vitamin ()

Magnesium

Daily Recommendation

3 c per day

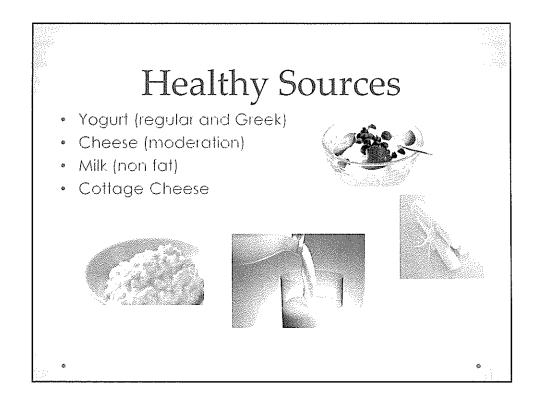
- Glass of milk
- Cheese stick
- Ec. vagiont

WARNING!

Some dairy products are high in saturated fat and sodium! Be careful when choosing dairy sources!

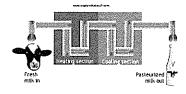


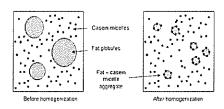
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Treatment of Milk

- Pasteurization
 - Heat freatment that has taken place to kill harmful enzymes and bacteria





- Homogenization
 - Milk has been processed so the fat breaks into small particles and distributed equally.
 - Fat would separate with out this process

*

Types of Milk

- Whole
- Reduced Fat
- Fat Free
- Buttermilk
- Kefir
- Flavored
- Evaporated
- Sweetened Condensed
- Lactose Free

Olitea Produces Yogand Benten Cream Ica Gream Chease

0

Types of Cheese

Fresh Cheese

- Has not been ripened or aged
- · High perishable
- Mild flavors
- Examples include:

Cottage cheese Farmer's cheese Cream cheese Ricotta

Ripened Cheese

- · Also called aged cheese
- Agents have been added:

Basteria mala vecit

- Have very distinctive flavors
- Grouped by texture:

Firm Termicati

Milto

Him Veitied

•

Cooking

Milk

· Sensitive to heat

- Use medium temperatures
- : Short amounts of time
- Stir frequently to avoid scorething and overheating.
- If skin develops over the top sfit back into milk



Cheese

- Cook with care!
- Cheese can over cook easily becoming tough and rubbery
 - Low temperatures Short time traines
 - uncill piecer



Ø.

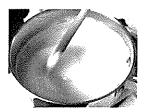
Forthed America, Rice, or Soy Max Bolt Creat Text and Lineary Total Total

Béchamel



What is a Béchamel?

- Also called white sauce, it frequently forms the base for other sauces, and is called by the French a mother sauce.
- · A roux is a combination of butter and flour.
 - When milk is added to the roux and cooked for a few minutes, it becomes bechamel sauce.







5

Ratios to Use

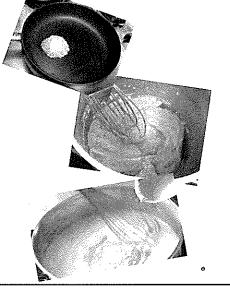
Туре	Liquid	Elmor	Eat	Salti	Uses
Thin	1 cup	1 T.	1 T.	1/4 t.	Sings
19101	rcup	•	1.1.		annha
Medium	1 cup	2 T.	2 T,	¼ t.	Sauces, gravy
Thitek	1 cup	3 T.	3 T,	1⁄2 t.	Soutilés
Very thick	7	461	ATT I	16.4	Croquettes
Very unter	1 cup	41.	+1,	72 1,	Croquenes

0

Preparing a Béchamel

- 1. Melt fat in saudepan or skillet
- Add flour and salt. Blend until smooth
- 3. Pemove from heat
- Add milk in <u>small</u> portions and blend thoroughly after each addition until all milk has been added
- Place over direct heat. Stir constantly, bring to a boil for 1 minute or until the sauce thickens.

**After the sauce is thickened, other ingredients, such as cheese are added to form a soup, sauce, gravietc, "

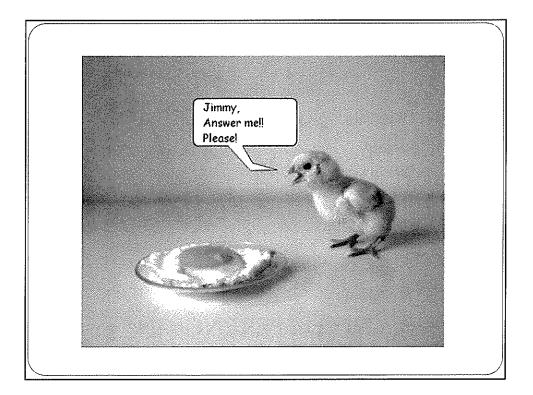


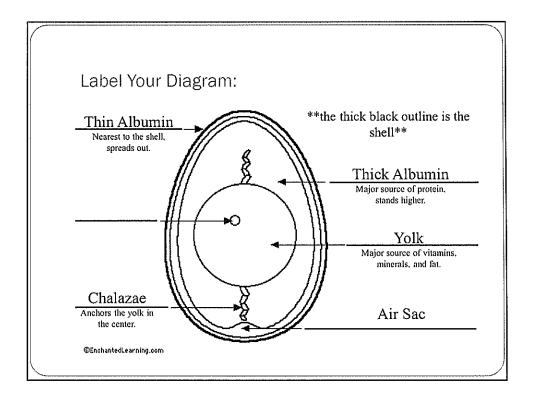
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Eggs

Hard-Boiled Egg "demo" PP Lab Prep

LAB: Wednesday (tomorrow) & Thursday
Wednesday: Overnight Baked French Toast; discuss omelet
Thursday: Heat Toast; Make Omelets; Eat

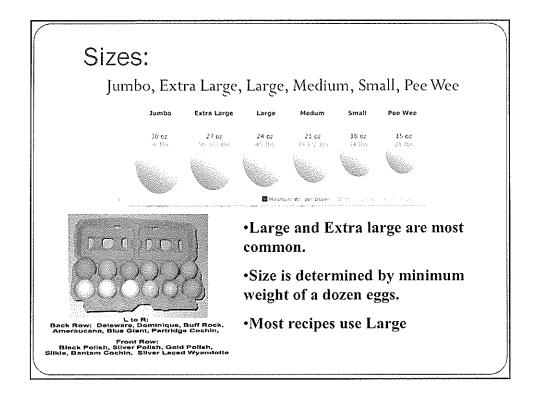


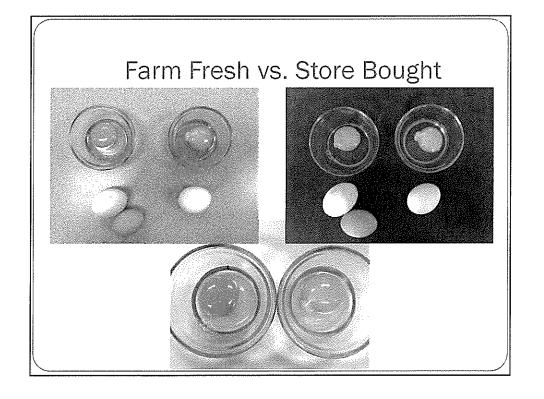


Grades

- AA—Most common in stores
- A—Thicker white, used when appearance is important
 - Deviled eggs
 - Over easy eggs (eggs with a dipping yolk)
- B—Used when appearance isn't important
 - Omelets
 - Scrambled eggs

NO DIFFERENCE IN NUTRITIONAL VALUE!





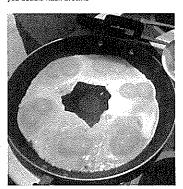
Nutrients

- Protein
- B₁₂
- Vitamins A and D
- Iron
- Riboflavin

EggYolks 😂 : saturated fat and cholesterol

15. Six eggs cracked into a pan, and all of them had double yolks.

Now that's a rare and hearty breakfast! Now, if only you could find a packaging error that gives you double hash browns



Storing Eggs

- Refrigerate immediately in carton
 - \bullet Store them in the BACK of the refrigerator
 - * It is coldest here—helps keep eggs fresh
- Throw away any cracked or dirty eggs
- Do not wash it removes the protective coating that prevents bacteria from getting inside the shell
- Eggs stay fresh for up to 4 weeks if stored properly

Egg Science

Coagulation

- Becomes firm
- Changing from a liquid state to a semisolid or solid state
- Helps bind and thicken

• Emulsifiers

- Hold together 2 ingredients that normally wouldn't stay mixed
- Oil and water

• Foams

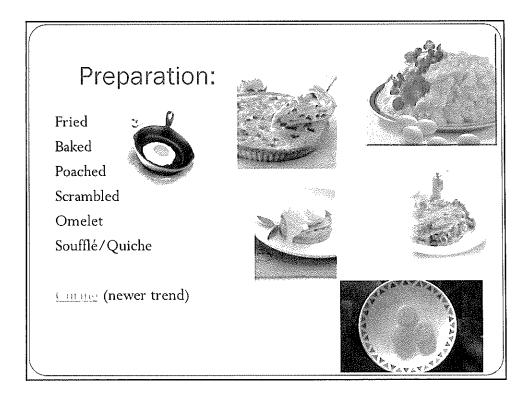
- When you beat egg whites, a foam forms
- Air is incorporated into the mixture
- Continued beating thickens the foam
- Adds volume and lightness to baked products

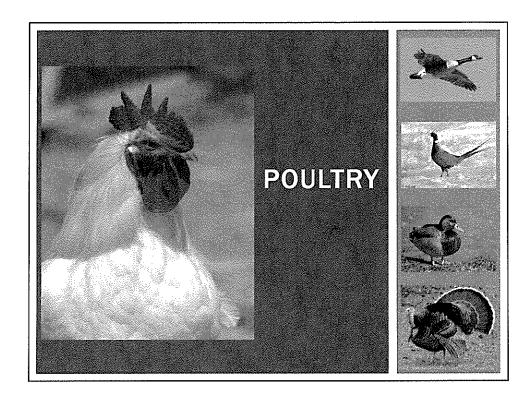
Using Eggs:

- Adds richness and flavor
- · Binds ingredients together
- · Can be used for thickness
- Help baking products rise (when beaten)







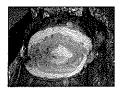


TYPES OF POULTRY

- Chicken—"Most popular poultry in the U.S."
- **Turkey**
- Duck
- **■** Goose
- Pheasant
- Others??



■ Turducken!!



■ Poultry has a MILD FLAVOR

HEALTH INFO

■Nutrients:

- PROTEIN
- Vitamins B6 and B12
- Calcium
- Niacin
- Phosphorus
- □ Iron

■ Relatively low in fat

■ Most fat is under skin (removing skin takes away some fat → healthier)

LIGHT VS. DARK MEAT

Light Meat

■ Less exercised part of bird

Leaner

■ Milder flavor

Dark Meat

■ More exercised part of bird

■ Contains more fat (flavor)

PURCHASING OPTIONS— FORMS OF POULTRY

- **U.S. Department of Agriculture**
 - Grades and inspects poultry (eggs)
- **Grade A**
 - Most commonly found in supermarkets
- **Giblets**—Edible poultry organs
 - Liver, heart, gizzard
 Often removed, bagged and replaced in the bird for purchase (Turkeys on Thanksgiving)

Parts

Processing adds to cost Halves, quarters, or parts Bone-in/Boneless

Ground Poultry Can substitute for ground beef

Processed Poultry
Turkey bacon and ham

Convenience Forms
Canned, frozen precooked (chicken strips), deli meat

COOKING METHODS

- The AGE of the bird determines the tenderness and the type of cooking method selected
 - Younger Bird
 - More tender → Dry heat cooking method
 - Older Bird
 - Tougher → Moist Heat Cooking Method

Dry Heat Cooking Metho	ds Moist Heat Cooking Methods
Bake	Boil/Simmer
Roast	Braise (dry + moist)
Grill*	the product of the the page as well as

All poultry needs to be cooked to an internal temperature of AT LEAST **165°F to reduce risk of Salmonella.

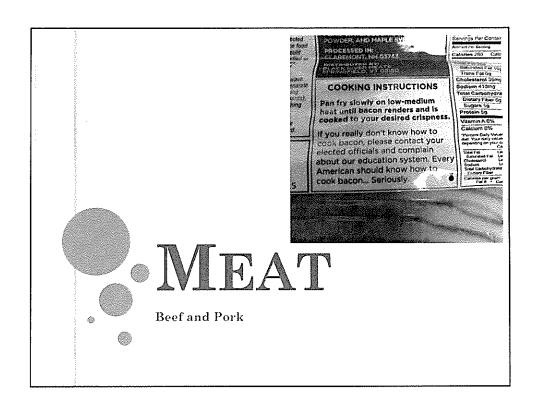
DUCK AND GOOSE

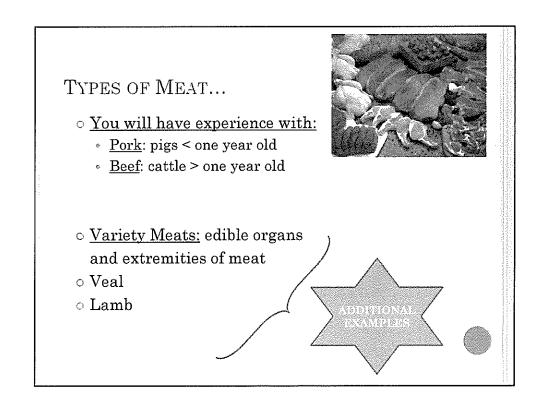
- Usually young birds
 - Tender
- Best roasted because of fat level (greasy)



ADDITIONAL INFO COOKING & STORING INFO

- Keep refrigerated to prevent bacteria growth
 - Use within 1-2 days of placing in refrigerator OR freeze
 - Moisture and warmer temperatures = Bacteria
- Cooking Methods
 - · Broil, Grill, Roast, Fry, Braise, Slow-Cook, Microwave
- **™** Cook until WELL DONE
 - No pink meat (should be whitish in color)
 - * Juices run clear
 - Internal temperature is at least 165°
- Internal cooking temperatures for different parts:
 - * 180 degrees—whole poultry, thighs, legs, wings
 - 170 degrees—chicken & turkey breasts
 - 165 degrees—stuffing & ground turkey





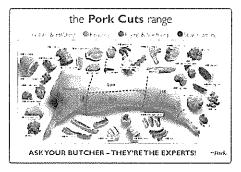
COMPOSITION OF MEAT

- o Muscle Tissue
- o Connective Tissue
- o Fat
- *Meat is edible muscle of the animal.
 - The toughest cuts of meat are found in the parts of the animal where the muscles are worked the most.



CUTS OF MEAT

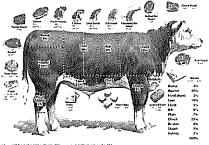
o Wholesale Cut: Large cuts that are sold to supermarkets



o Retail Cut:

Supermarket divided, smaller cuts you buy at the store.

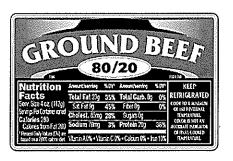
Comes from the wholesale cut

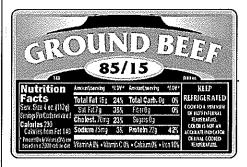


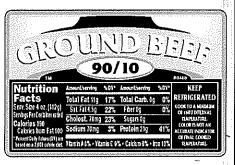
NUTRIENT COMPARISON

	noi – teo. Troidicoi	Pouls - A 222 poulson
Fat *choose lean meats when possible (4.5)	11g g saturated)	4.5g (1.5g saturated)
Protein	24g	22g
Carbohydrates	0g	lg
Calories	200	140

^{*}Both are a good source of iron and zinc.

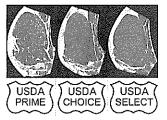






GRADES OF MEAT - BEEF

Marbling: small white flecks of fat within the muscle tissue



*Pork is not graded by the USDA as it comes from younger animals that have been bred and fed to produce more uniformly tender meat.

Beef is graded by the USDA according to:

- Amount of marbling
- Age of the animal
- Texture and appearance of the meat.
- Prime: Higher priced,
 Sold to fine restaurants,
 Greatest marbling,
 Tender, Flavorful
- **Choice:** Most common, Less \$, Less marbling
- <u>Select:</u> Least marbling, Not as tender

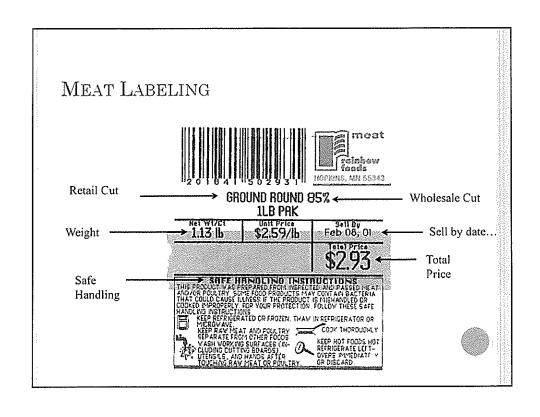
PURCHASING

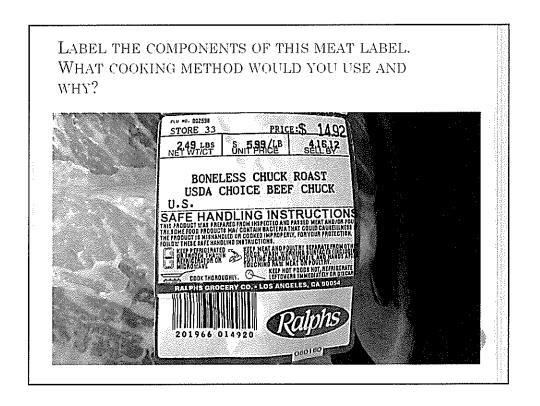
Parth

- Cuts with a small amount of fat over the outside
- o Meat that is firm
- o Grayish pink in color
- Small amount of marbling
- o Weight

Best

- o Red in color
- o Marbling
- o Fat content
- Weight





MEAT MATH

- Weight x Price Per Pound = Total Cost
- \circ 1.5 lbs. x \$1.00 per pound = \$1.50

COOKING METHODS LESS TENDER CUTS

- Less tender cuts (arm/shoulder)
 - * need to be tenderized
 - o before the cooking process by marinating.
 - o during the cooking process by using a moist heat cooking method – simmering, stewing, and sauté
- o Moist Heat Purpose
 - breaks down collagen making the meat tender

COOKING METHODS TENDER CUTS

- Tender cuts primarily come from the center of the animal (ribs/loin/belly)
- Due to the tenderness of the meat dry heat cooking methods can be used
 - Grilling and Roasting
 - · Shortens cooking time

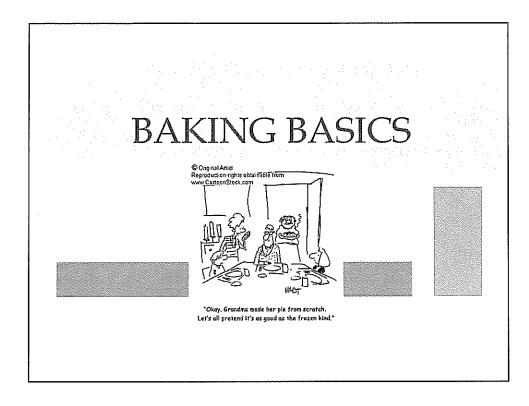
INTERNAL TEMPERATURE

Beef

Posts

o 165° F

- o 145° -- 160° F
- Followed by a 3 minute rest



THE BAKING PROCESS

- Choose oven temperature
 - Always preheat the oven (unless otherwise noted in the recipe)
- Choose and prepare the pans
 - Grease and flour, spray with cooking spray or line with parchment paper



Opening the oven to check on your food like





KEEP IT CLOSED!!!!

INGREDIENT FUNCTIONS

₱ Flour

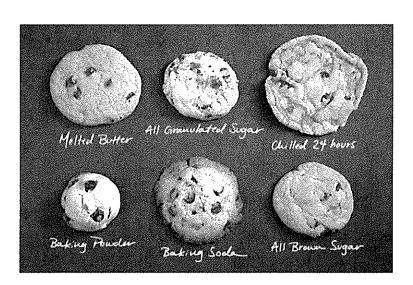
Structure (GLUTEN)

Leavening Agents

- Chemical reaction that makes baked products rise
- Liquid
 - Chemical Reaction and moisture
- Fats
 - <u>Solid Fats</u>: butter, margarine, shortening, lard
 - Add volume by trapping air
 - Oils: com, canola, olive, vegetable
 - Add moistness and density, rather than volume
- Eggs
 - Flavor, binding, richness, sets structure, volume
- Sweeteners/Flavorings



WHY INGREDIENTS MATTER



TYPES OF BATTERS & DOUGHS

- Pour batters: equal amounts of liquid and flour
 Creates a thin and flowing pour

 - Cakes, pancakes, waffles
- <u>Drop batters</u>: Twice as much flour as liquid
 Dropped by spoonfuls onto pan

 - Quick breads, cookies
- <u>Soft dough</u>: One part liquid to 3 parts flour
 Sticky but moldable

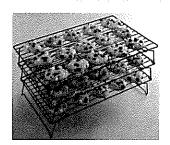
 - · Yeast breads, rolled biscuits
- Stiff dough: One part liquid to 6-8 parts flour
 - Easiest to handle
 - · Pie crusts, some rolled cookies





STORAGE

- Cool completely before storing WHY?
- Keep in a sealed container at room temperature











QUICK BREADS



QUICK BREADS

- Are leavened by agents that allow immediate baking
 - Agents such as air, steam, baking soda, baking powder
- Most quick bread are made by one of two different mixing methods:
 - · Muffin Method or Biscuit Method

MUFFIN METHOD OF MIXING

- Lightly mixing liquid ingredients into dry ingredients, creating a product with a course yet tender texture.
- AVOID OVERMIXING!!!
 - Baked products can become chewy or have tunnels inside and peaks on top



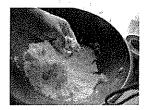


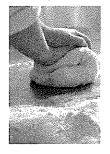


BISCUIT METHOD OF MIXING

- Solid fat is added to the dry ingredients before the liquids are lightly mixed in.
- Kneading: work dough with hands to combine ingredients and develop gluten
- Biscuits are either rolled or dropped







Pie!

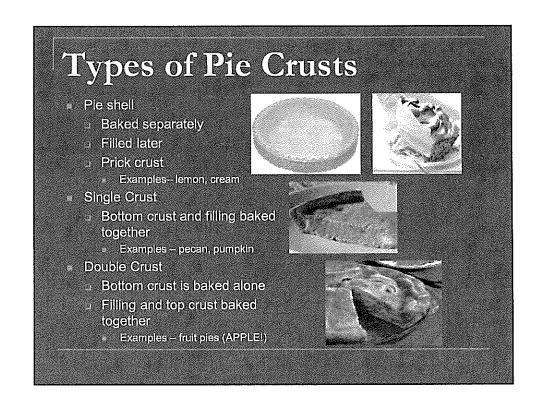


Flaky and Flavorful!!

Mini Apple Pie ©

Definition of Pie

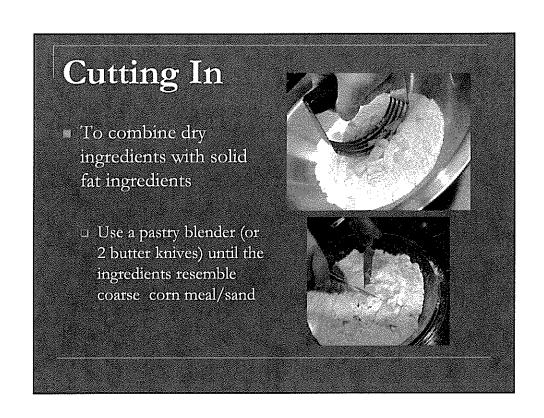
- A pie is a flaky crust filled with either a sweet or savory mixture.
- The sweet pies are filled with fruit, custard, or cream and are served as a dessert.
- The savory pies are filled with meat or a custard and vegetable mixture and are generally served as a main dish.



Main Ingredients and Functions

- Plout
 - Simulation
- Salt
 - ☐ Flavor (helps to bring out sweetness)
- Fat
 - Tendemess
- Liquid
 - Hold together
 - Moisuure

Critical Factor... Chilled butter/shortening is best Bigger pieces = flakier crust



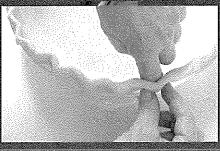
Rolling Your Pastry Dough! Always begin rolling from the CENTER to the OUTER edge, LIFTING it up at the edge. It should be at least 1" — 2" larger than the inverted pie plate. Stretching the dough will cause the dough to SHRINK.

What if my pie crust tears or cracks?!?!

- Moisten with little water, press dough over it.
- Sprinkle with little flour and continue rolling out.
- Roll out dough between pieces of wax paper to prevent damage to crust.

Finishing the Edges of Your Pie Crust

 Fluting – crimping the edge to prevent spillage and for beauty



Rolling Out Pie Dough-Mini Video Review

Tips for Baking





- Place cookie sheet under pie tins/pans to catch drips
 - Keeps your oven clean ©



