

Unit 2 Nutrition



WHAT IS A CALORIE??

- **Calorie:** The basic measure of energy in food.
 - The more calories a food has – the more energy it contains
- **Metabolism:** Is the process by which your body breaks down food to release energy as well as the use of energy for the growth and repair of body tissue.
- **Nutrients:** Substances your body needs to regulate functions, promote growth, repair body tissues, and obtain energy.

IMPORTANT TERMS & INFO CONT...

RDA- Recommended Daily Allowance

FDA – Food & Drug Administration

Empty Calorie: a food that contains calories but **has little or no nutritional value**

- Examples: **Sodas, Candy**
- It takes you brain **20 minutes** to realize that we have begun eating.
- 1 pound (lb) of fat is equal to **3,500** calories



IMPORTANT TERMS & INFO

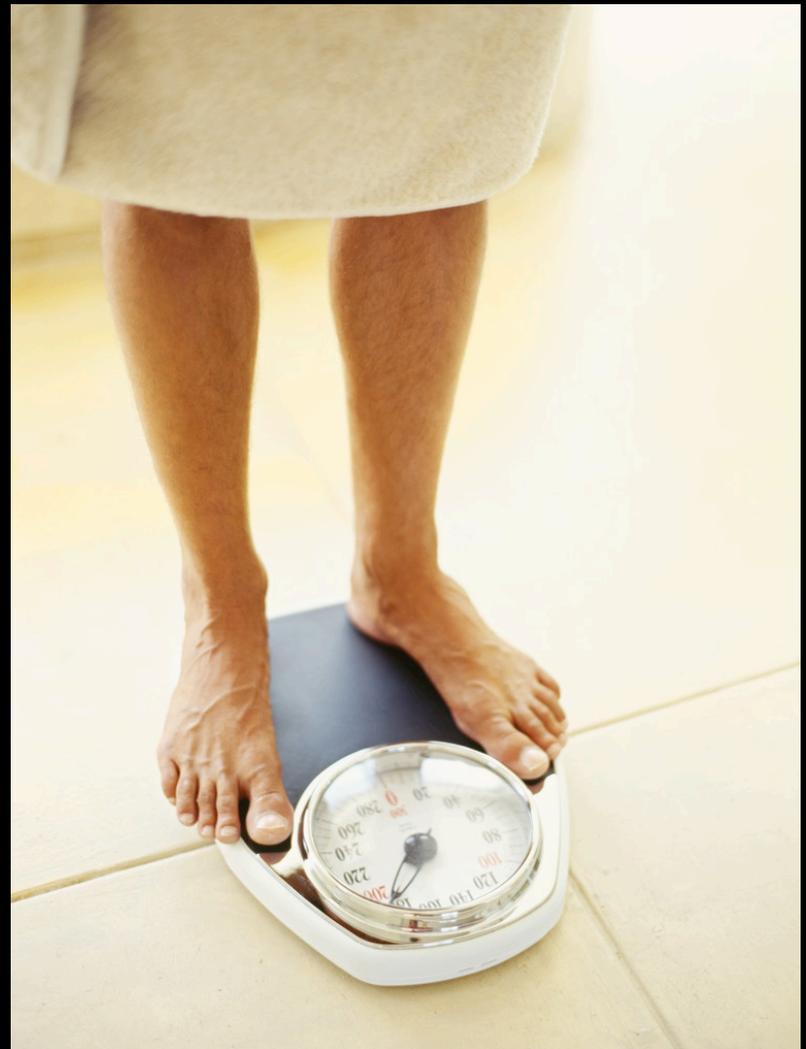
- **How many calories per gram???**
 - 1 gm Carbs – **4 calories**
 - 15g carbs = 60 cal
 - 1 gm Protein – **4 calories**
 - 10g protein = 40 cal
 - 1 gm Alcohol – **7 calories**
 - 1 gm Fat – **9 calories**
 - 30g fats = 270 cal
- **1 pound of fat= 3,500 calories**

THE CALORIE EQUATION

Maintain Weight:
Calories in = Calories Used

Gain Weight:
Calories in > Calories Used

Lose Weight:
Calories in < Calories Used



CALORIES, CALORIES, CALORIES

Calorie

- The more calories a food has, the more energy it contains.

How many calories do you use?

- Sleeping : 50/hour
- Talking on phone: 65/hour
- Cleaning : 200/hour
- Karate : 365/hour
- Jump Rope : 550/hour

**Math Time: How many hours of talking on the phone would it take to equal one hour of karate?

Calorie-Burning Chart for Various Activities

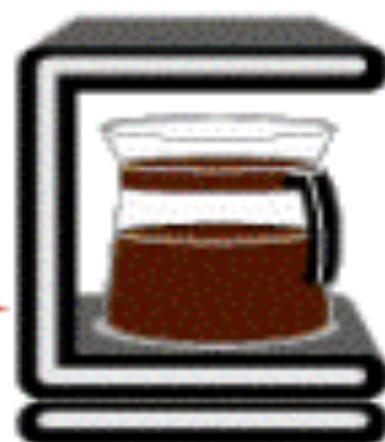
Approximate calories burned, per hour, by a 150-pound woman

<i>Exercise</i>	<i>Calories/hour</i>	<i>Exercise</i>	<i>Calories/hour</i>
Sleeping	55	Water Aerobics	400+
Eating	85	Skating/blading	420+
Sewing	85	Dancing, aerobic	420+
Knitting	85	Aerobics	450+
Sitting	85	Bicycling, moderate	450+
Standing	100	Jogging, 5mph	500+
Driving	110	Gardening, digging	500+
Office Work	140	Swimming, active	500+
Housework, moderate	60+	Cross country ski machine	500+
Golf, with trolley	180	Hiking	500+
Golf, without trolley	240	Step Aerobics	550+
Gardening, planting	250	Rowing	550+
Dancing, ballroom	260	Power Walking	600+
Walking, 3mph	280+	Cycling, studio	650
Table Tennis	290+	Squash	650+
Gardening, hoeing etc.	350+	Skipping with rope	700+
Tennis	350+	Running	700+

The Calories in these items could:



5 lbs of spaghetti



Brew a pot of coffee



1 piece of cherry cheesecake



Light a bulb for 1.5 hours



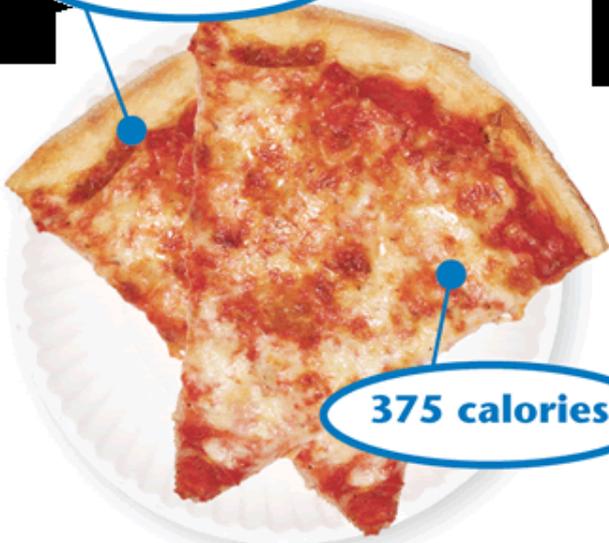
217 Big Macs



Drive a car 88 miles

WHICH LUNCH WOULD YOU EAT?

A



375 calories

375 calories

TOTAL:
750 calories

This option, labeled 'A', shows two slices of pizza on a white plate. Each slice is individually labeled with a callout bubble indicating it contains 375 calories. A dashed orange line connects the two slices to a total box at the bottom.

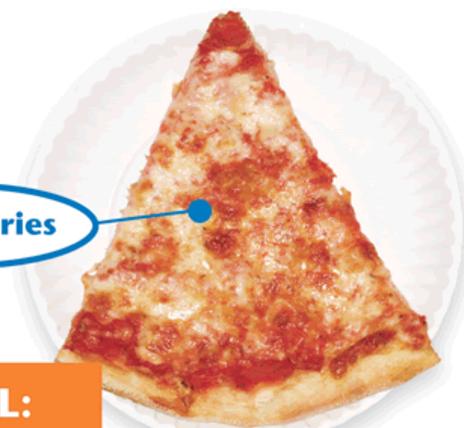
B



110 calories

85 calories

180 calories



375 calories

TOTAL:
750 calories

This option, labeled 'B', shows a salad bowl and a fruit. The salad bowl is labeled with 180 calories. Next to it are an apple and an orange, labeled with 110 calories and 85 calories respectively. A dashed orange line connects these items to a total box at the bottom.

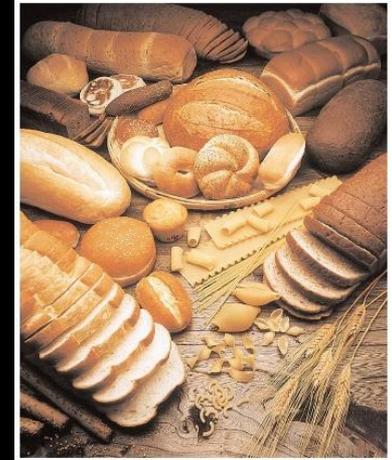
SERVING SIZES

- Helpful Measuring Hints:
 - A fist: **one cup (cereals)**
 - A handful: **1-2 ounces (snacks)**
 - A thumb (base of tip): **one ounce (cheese)**
 - Tip of thumb: **one teaspoon (spreads)**
 - Palm of hand: **3 ounces (chicken, meats)**
- Americans usually eat 4-6 oz in one sitting of chips.
(almost 5 times the suggested serving size)
- Most restaurants size portions are **3 times** the amount of a suggested serving size.



6 BASIC NUTRIENTS

1. Carbohydrates (breads, pasta)
2. Protein (chicken, seafood)
3. Fat (seeds, oils)
4. Minerals (zinc, calcium)
5. Vitamin (examples: A,D,E,K,B' s,C)
6. Water



What percent of your diet should come from?

This is what everyone
Has been taught:

Carbohydrates: 55-60%

Fat: No more than 30%

Protein: 10-15%

This is what we
should follow:

Carbohydrates: 20-30%

Fats: (The latest
science suggests
healthy fat) 50-65%

Protein: 15%



CARBOHYDRATES

- Come in 3 varieties: Simple, Complex, Dietary Fiber

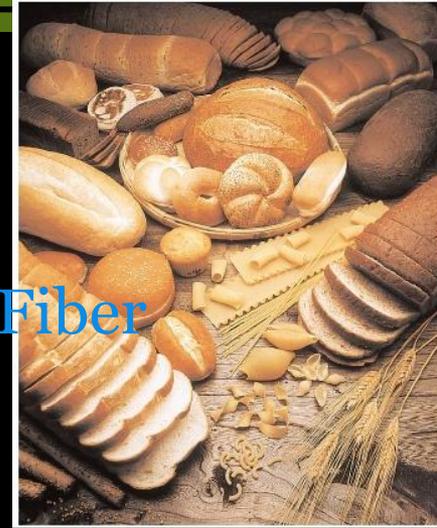
Two main types:

Simple Carbohydrates:

- Candy, cookies, sodas, fruit sugars (fructose), milk sugars
 - The body converts all sugars into glucose

Complex Carbohydrates:

- Starches (pastas), potatoes, grains, rice
- Veggies
- ** A majority of your carbs should come from veggies and rice. Try to limit grain intake. Grains can be very irritating to the bowels for many and cause excess calorie intake as well with little nutritional value.



CARBOHYDRATES CONT...

- Excess glucose can be stored for future use either in the form of **FAT** or **GLYCOGEN**.
- **Glycogen** is used as a reserve energy source.
The liver easily converts glycogen to **glucose** for circulation throughout the body.

Sugar and Artificial Sweeteners

**** You Actually Gain Weight by Using Artificial Sweeteners****

- Real sugar allows your body to accurately determine that it has received enough calories, thereby activating satiety signaling.
- Without the calories, your appetite is activated by the sweet taste of artificial sweeteners, but as your body keeps waiting for the calories to come, sensations of hunger remain

FIBER

Where is fiber found?

- **Tough stringy parts of vegetables, fruits & grains.**
- *Technically, FIBER is NOT a nutrient because it cannot be broken down and absorbed into the bloodstream.*

Foods that contain fiber?

- 1. Fruits (especially the skins)**
- 2. Veggies**
- 3. Whole grain products**
- 4. Seeds**
- 5. Beans**



FIBER CONT...

Why is Fiber so important for our diets?

- 1. Helps prevent constipation**
- 2. May help reduce the risk of colon cancer**
- 3. May help prevent heart disease**

Can Fiber be digested?

- NO!**

A food with more than _____ grams of fiber is considered a good fiber source

- 3**

Fiber

Watermelon (1 slice)

Total Carbs 22 g

Sugars 18 g

Starches 3 g

Fiber 1 g

Wheat Bread (1 slice)

Total Carbs 15 g

Sugars 1.5 g

Starches 12.0 g

Fiber 1.5 g

Pasta (1 cup)

Total Carbs 40 g

Sugars 1 g

Starches 37 g

Fiber 2 g

PROTEIN

- In our bodies protein can be found in **Muscle, Bone, Teeth, Skin, & Blood**
- Proteins are made up of building blocks called: **Amino Acids**
- Why do we need protein? **Most important function is to build and repair body tissue**
- Sources high in proteins: **Fish, Eggs, Chicken, Milk, and Nuts**



MORE PROTEIN...

Amino Acids

- Building blocks of protein
- 20 total
- 9 “essential” amino acids that must come from your diet/protein – your body can manufacture the rest

****Math Time:** Which has more protein per ounce: beefsteak or cheddar cheese?

How Much Protein Is in Your Refrigerator?

Broiled beefsteak (6 oz)	49.9 grams
Cheddar cheese (1 oz)	7.1 grams
Corn (1 ear)	2.0 grams
Egg (1 large)	6.3 grams
Fried chicken (1 drumstick)	13.2 grams
Orange juice (1 cup)	2.0 grams
Peanut butter (2 Tbsp)	8.0 grams
Refried beans (1/2 cup)	6.9 grams
Salmon (6 oz)	37.6 grams
Tofu (1/2 cup)	10.3 grams
Whole milk (1 cup)	7.9 grams

TYPES OF PROTEIN

- Complete Proteins

- Animal sources: called **complete** proteins because they contain all the essential amino acids in amounts large enough to meet the body's needs.



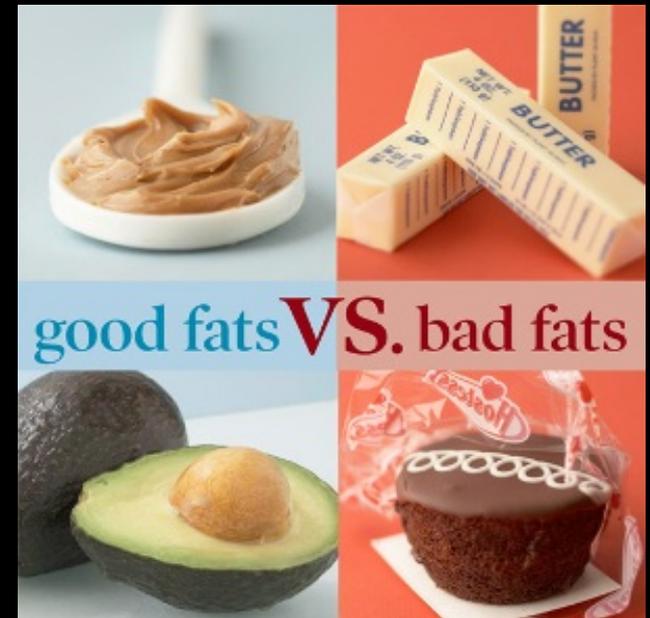
- Incomplete Proteins

- Plant sources: called **incomplete** proteins because they are low in one or more essential amino acids.



FATS

- The Scientific Name for a fat is a “LIPID”
- The two types of Fats are:
 1. SATURATED
 2. UNSATURATED



SATURATED FATS

- Usually solid at room temperature
- * has been labeled as “Bad Fat”
- Our bodies need saturated fat for many processes of the body:
 - Provide building blocks for cell membranes, hormones, and hormone-like substances
 - Mineral absorption, such as calcium
 - Carriers for important fat-soluble vitamins A, D, E, and K
 - Help to lower cholesterol levels
- Examples:
 - Animal Fats
 - Dairy Products



UNSATURATED FATS

- Usually liquid at room temperature
- Good (in moderation)
 - Should be consumed cold
 - Cooked at high heats these fats can cause free radicals and cause cell damage and cancer.
- 2 Types: Monounsaturated & Polyunsaturated
- Examples:



Monounsaturated

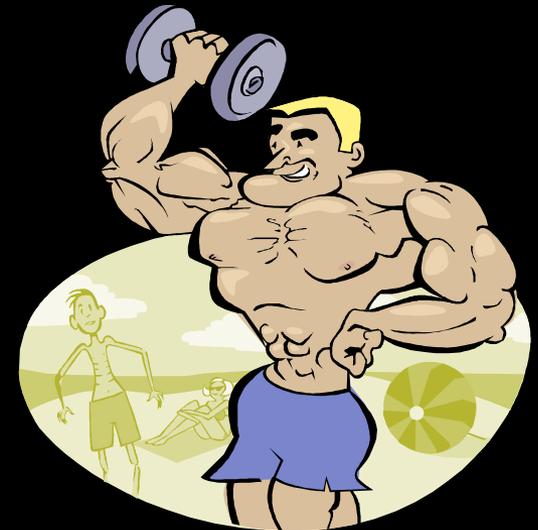
- Olive oil *** best one
- Peanuts

Polyunsaturated

- Corn
- Soybean oil
- Seafood
- LIMIT OR ELIMINATE THESE

Why do we need fat on our bodies?

1. Insulation
2. Energy For Muscles
3. Cushions/Pads Organs



GREAT FATS YOU SHOULD BE EATING!

- Olives/Olive Oil
- Coconuts/Coconut Oil
- Butter made from Raw Grass-fed organic milk
- Raw nuts such as almonds and pecans
- Organic pastured egg yolks
- Avocados
- Grass Fed Meats
- Palm Oil
- Unheated organic nut oils

TRANS FATS

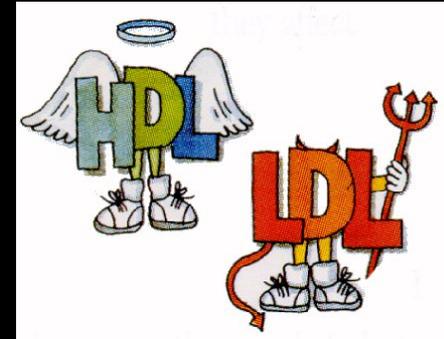
- Trans Fats are made when manufacturers add hydrogen to the fat molecules in vegetable oils
- Food that contain trans fats usually stay fresh longer than saturated fat foods
- Bad News:
 - They have **few** of the **benefits** of unsaturated fats
 - They have **many** of the **negatives** of saturated fats
- Examples
 1. Margarine
 2. Chips
 3. Commercially Baked Goods (store cookies)
- **FACT:** Trans Fats are now included on Food Labels

CHOLESTEROL



- What is it?
 - A waxy **fat-like substance** produced in liver of all animals.
 - We make it, not necessarily part of our diet
- When circulating with the blood, deposits called PLAQUE form on walls of blood vessels
 - **Atherosclerosis**: hardening of artery wall due to plaque buildup
- Too much plaque blocks the blood flow and can lead to a heart attack
- Dietary cholesterol (food you eat that contains cholesterol) does not raise your cholesterol level.
- Eating foods with trans fats (hydrogenated/partially hydrogenated oils) like processed foods and fried food are responsible for plaque build-up in the arteries.

CHOLESTEROL CONT...

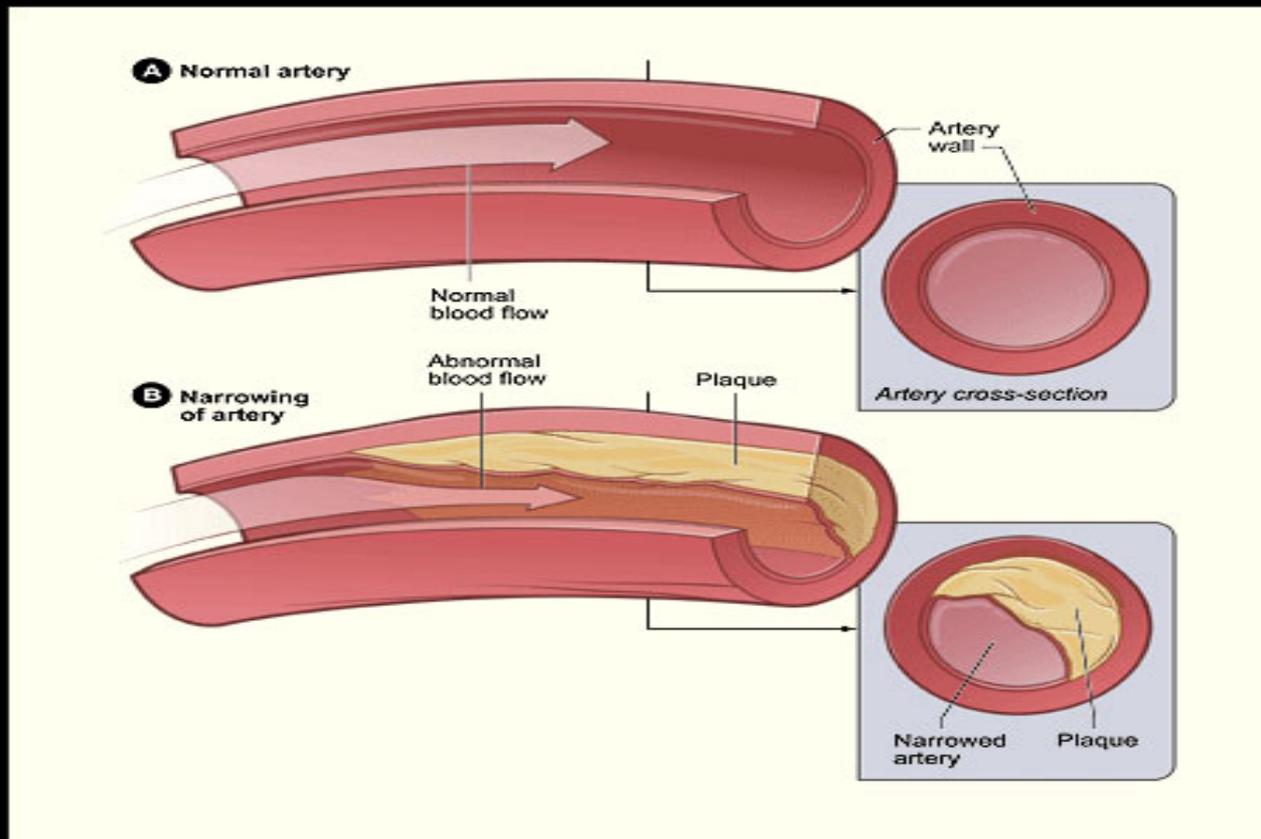


- Bad Cholesterol is abbreviated as “**LDL**” meaning?
 - **LOW DENSITY LIPOPROTEIN**
 - Sticks to walls of blood vessels, which can lead to heart disease
- Good Cholesterol is abbreviated as “**HDL**” meaning?
 - **HIGH DENSITY LIPOPROTEIN**
- Blood Cholesterol combined should be:
 - less than **200 mg**



Too much cholesterol can:

1. Clog arteries
2. Cause Atherosclerosis



What are 3 things you can do to lower your cholesterol levels?

- 1. Reduce processed food intake which is high in sugar and trans fats.**
- 2. Reduce trans fat intake**
- 3. Exercise**

Over time....plaque that accumulates in the artery walls will cause Atherosclerosis.



Cholesterol

- The liver makes cholesterol
 - The liver makes 800 to 1500 mg of cholesterol everyday, much more cholesterol than in food.
 - In healthy people the body makes less cholesterol if dietary intake is high, and it makes more cholesterol if dietary intake is low.



VITAMINS

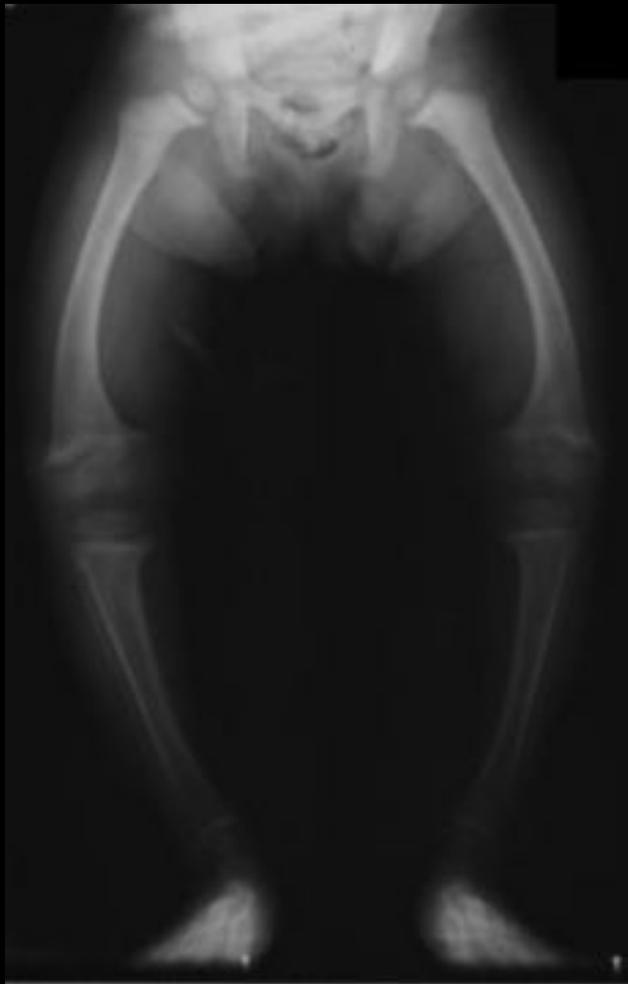
- Water Soluble: All of the **B' s & C' s**
- Fat Soluble: **A, D, E, K** (“all dogs eat kittens”)
- What is the difference between water soluble and fat soluble vitamins?
 - **Water** – Must be supplied daily or they will be excreted.
 - **Fat** – Stored until they are needed.
- Can taking large amounts of vitamins be harmful?
 - **YES!!!!**



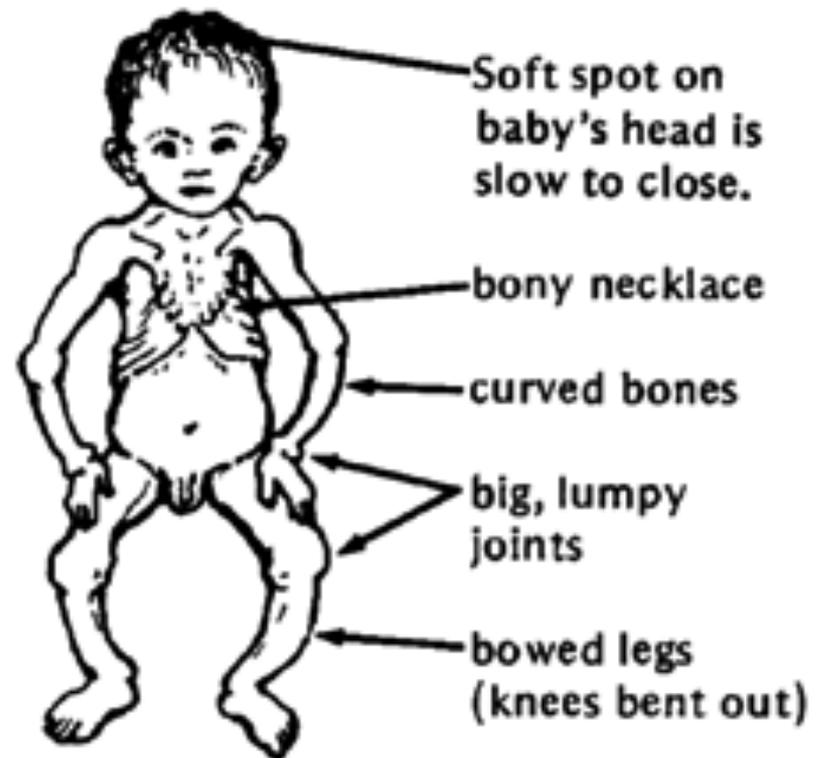
VITAMINS DEFICIENCIES

Vitamin	Deficiency is called	What might happen?
Vitamin C	“Scurvy”	Bleeding Gums & Noses, Tooth loss
Vitamin D	“Rickets”	Weak muscles, delayed tooth development, slow wound healing
Vitamin K	None	Blood may not clot
Vitamin A	“Night Blindness”	From not eating enough A (carrots)

RICKETS



SIGNS OF RICKETS



Fat-Soluble Vitamins

Vitamin	Good Sources	Main Functions
A	Liver; eggs; cheese; milk; yellow, orange, and dark green vegetables and fruit	Maintains healthy skin, bones, teeth, and hair; aids vision in dim light
D	Milk; eggs; liver; exposure of skin to sunlight	Maintains bones and teeth; helps in the use of calcium and phosphorus
E	Margarine; vegetable oils; wheat germ; whole grains; legumes; green, leafy vegetables	Aids in maintenance of red blood cells, vitamin A, and fats
K	Green, leafy vegetables; potatoes; liver; made by intestinal bacteria	Aids in blood clotting



Water-Soluble Vitamins

Vitamin	Good Sources	Main Functions
B1 (Thiamin)	Pork products; liver; whole-grain foods; legumes	Aids in carbohydrate use and nervous system function
B2 (Riboflavin)	Milk; eggs; meat; whole grains; dark green vegetables	Aids in metabolism of carbohydrates, proteins, and fats
B3 (Niacin)	Poultry; meat; fish; whole grains; nuts	Aids in metabolism
B6 (Pyridoxine)	Meat; poultry; fish; whole-grain foods; green vegetables	Aids in metabolism of carbohydrates, proteins, and fats
B12 (Cobalamin)	Meat; fish; poultry; eggs; milk; cheese	Maintains healthy nervous system and red blood cells



Water-Soluble Vitamins

Vitamin	Good Sources	Main Functions
Pantothenic acid	Organ meats; poultry; fish; eggs; grains	Aids in metabolism
Folate (Folic acid)	Green, leafy vegetables; legumes	Aids in formation of red blood cells and protein
Biotin	Organ meats; poultry; fish; eggs; peas; bananas; melons	Aids in metabolism
C (Ascorbic acid)	Citrus fruits; green vegetables; melons; potatoes; tomatoes	Aids in bone, teeth, and skin formation; resistance to infection; iron uptake



How About Vitamin Overload?

Too much:

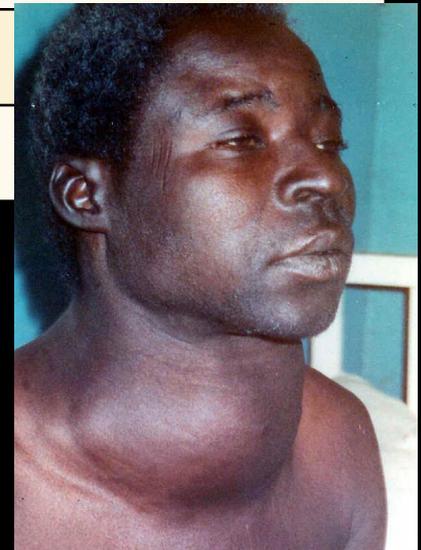
- Vitamin C – faintness, dizziness, fatigue
- Vitamin D – nausea, constipation, vomiting
- Vitamin A – liver problems, diminished bone density, birth defects

MINERALS

- **Minerals**: Inorganic substances that the body can not manufacture
- **Trace Minerals**: Minerals needed in small amounts

Minerals

	Deficiency Name/ or what might happen
Not enough Calcium **Vitamin D needs to be present in order for our bodies to absorb calcium	Osteoporosis <i>Fact: 85% of teenage girls do NOT get enough calcium in their diets</i>
Not enough Iron	Anemia
Not enough Iodine	Goiters
Too much sodium (salt) can cause	High blood pressure



WATER

- Most important nutrient!!!
 - Your body is made up of **60 – 70% water**
 - Girls (age 14-18) need about **10 (8oz)** cups per day.
 - Boys (same age) need **14 (8oz)** cups per day.
 - You get zero energy (calories) from water
 - Dehydration: a serious reduction of the body's water content
- **You can lose 4 cups of water (32 ounces) during every hour of intense exercise ****



FUNCTIONS OF WATER

1. Carries nutrients to the cells and transport waste from the cells
 2. Lubricates the joints and mucous membranes
 3. Enables you to swallow and digest food
 4. Absorb Nutrients
 5. Eliminate waste
- Our bodies use about 10-girls, 14-boys cups of water each day!



BENEFITS OF WATER



75% of Americans are
chronically dehydrated.
(Likely applies to half the world
population.)

Water



In 37% of Americans, the thirst mechanism is so weak that it is mistaken for hunger.



Water

Even MILD dehydration will slow down one's metabolism by 3%.



Water

Lack of water...the #1 trigger of daytime fatigue.



Water

Preliminary research indicates that 8-10 glasses of water a day could significantly ease back and joint pain for up to 80% of sufferers.



Water

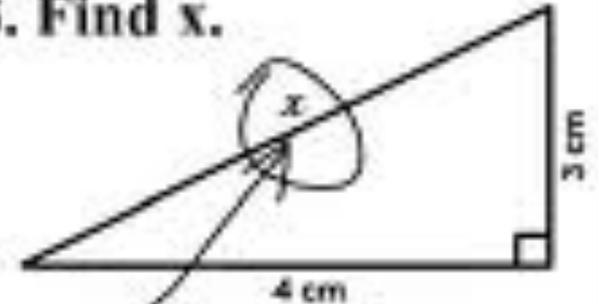
A mere 2% drop in body water can trigger fuzzy short-term memory, trouble with basic math, and difficulty focusing on the computer screen or on a printed page.

**3 OUT OF 2
PEOPLE
HAVE
TROUBLE
WITH
FRACTIONS**



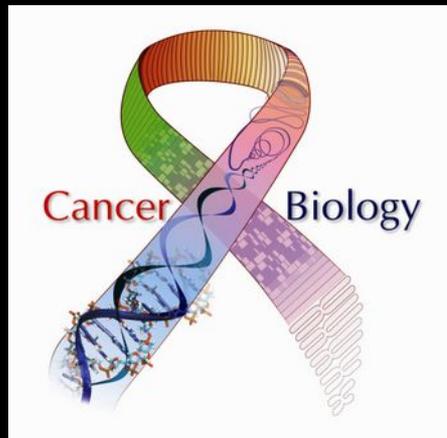
Water

3. Find x .



Here it is

Drinking five glasses of water daily decreases the risk of colon cancer. It can reduce the risk of breast cancer, and one is less likely to develop bladder cancer.



Water

Are you drinking the amount of
water you should drink every
day?



Water



Apples



An apple a day...
That's 5 oz. of pure water.

How about “eating” your water?

Broccoli



Broccoli is about 90% water.



How about “eating” your water?



Cucumbers



A single cucumber contains
almost 10 oz. of water.

How about “eating” your water?

Nonfat yogurt

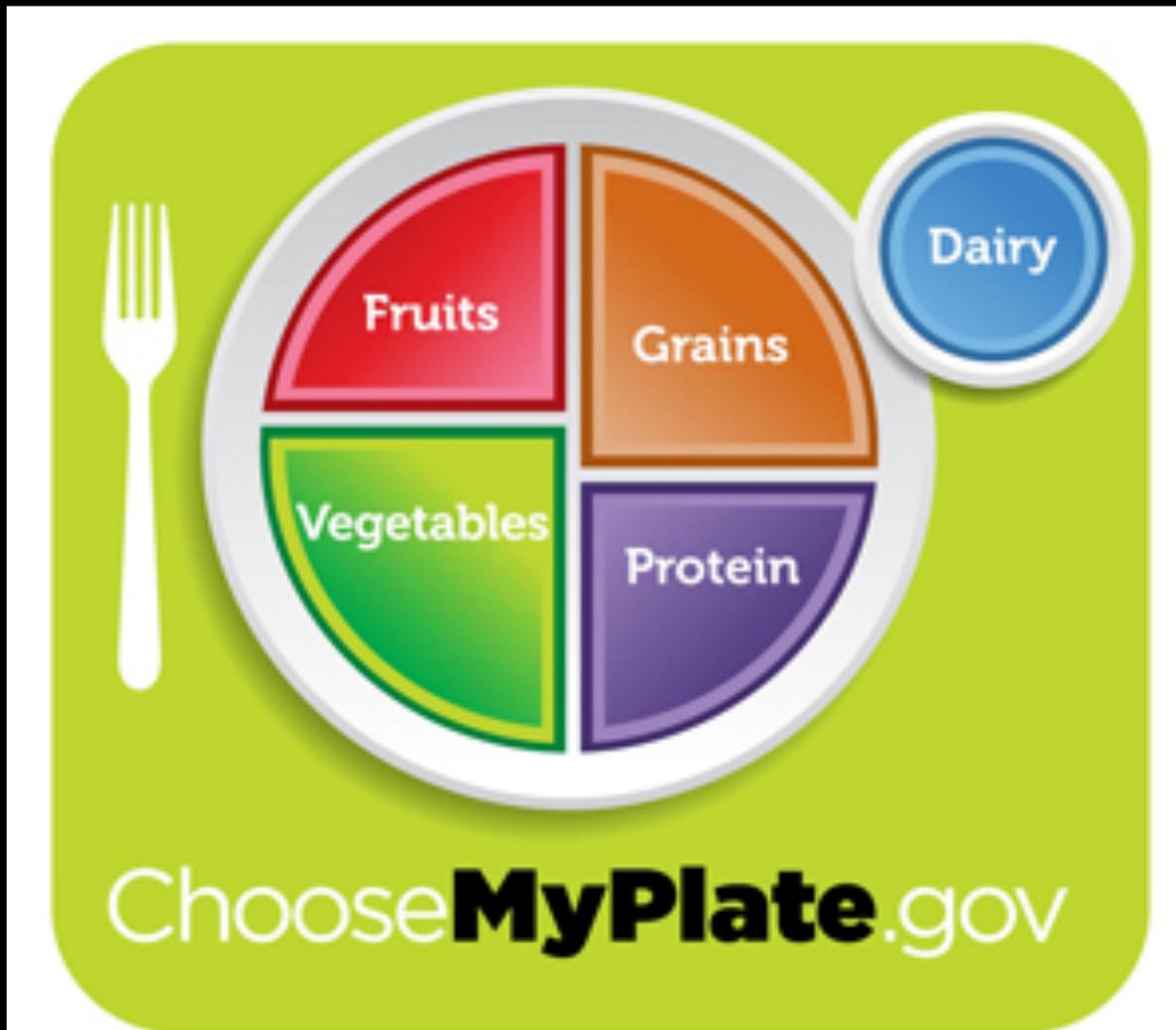


For every 8 oz. of yogurt,
you're getting 6.5 oz. of water



How about “eating” your water?

New as of June 2011...My Plate



MY PLATE

- The website features practical information and tips to help
- Americans build healthier diets.
 - It features selected messages to help consumer focus on key behaviors.
 - Enjoy your food, but eat less.
 - Avoid oversized portions.
 - Make half your plate fruits and vegetables.
 - Switch to fat-free or low-fat (1%) milk.
 - Make at least half your grains whole grains.
 - Compare sodium in foods like soup, bread, and frozen meals—and choose foods with lower numbers.
 - Drink water instead of sugary drinks.
 - Choose **MyPlate.gov** includes much of the consumer and professional information formerly found on MyPyramid.gov.

Let's Eat for the Health of It The 2010 Dietary Guidelines brochure

This brochure contains practical strategies to make healthy food choices. The Brochure highlights themes from the Guidelines such as *Balancing Calories*, *Foods to Reduce*, and *Foods to Increase*.



**Let's eat
for the health of it**



Start by choosing one or more tips to help you...



Build a healthy plate



Cut back on foods high in solid fats, added sugars, and salt



Eat the right amount of calories for you



Be physically active your way

10 tips Nutrition Education Series

choose MyPlate

10 tips to a great plate



Making food choices for a healthy lifestyle can be as simple as using these 10 Tips.

Use the ideas in this list to *balance your calories*, to choose foods to *eat more often*, and to cut back on foods to *eat less often*.

1 balance calories

Find out how many calories YOU need for a day as a first step in managing your weight. Go to www.ChooseMyPlate.gov to find your calorie level. Being physically active also helps you balance calories.

2 enjoy your food, but eat less

Take the time to fully enjoy your food as you eat it. Eating too fast or when your attention is elsewhere may lead to eating too many calories. Pay attention to hunger and fullness cues before, during, and after meals. Use them to recognize when to eat and when you've had enough.



3 avoid oversized portions

Use a smaller plate, bowl, and glass. Portion out foods before you eat. When eating out, choose a smaller size option, share a dish, or take home part of your meal.

4 foods to eat more often

Eat more vegetables, fruits, whole grains, and fat-free or 1% milk and dairy products. These foods have the nutrients you need for health—including potassium, calcium, vitamin D, and fiber. Make them the basis for meals and snacks.



5 make half your plate fruits and vegetables

Choose red, orange, and dark-green vegetables like tomatoes, sweet potatoes, and broccoli, along with other vegetables for your meals. Add fruit to meals as part of main or side dishes or as dessert.

6 switch to fat-free or low-fat (1%) milk

They have the same amount of calcium and other essential nutrients as whole milk, but fewer calories and less saturated fat.



7 make half your grains whole grains

To eat more whole grains, substitute a whole-grain product for a refined product—such as eating whole-wheat bread instead of white bread or brown rice instead of white rice.

8 foods to eat less often

Cut back on foods high in solid fats, added sugars, and salt. They include cakes, cookies, ice cream, candies, sweetened drinks, pizza, and fatty meats like ribs, sausages, bacon, and hot dogs. Use these foods as occasional treats, not everyday foods.

9 compare sodium in foods

Use the Nutrition Facts label to choose lower sodium versions of foods like soup, bread, and frozen meals. Select canned foods labeled "low sodium," "reduced sodium," or "no salt added."



10 drink water instead of sugary drinks

Cut calories by drinking water or unsweetened beverages. Soda, energy drinks, and sports drinks are a major source of added sugar, and calories, in American diets.

VEGETARIANISM

- **Vegans:** Eat no animal products at all
- **Ovo-Vegetarians:** No animal, but eats eggs
- **Lacto-Vegetarians:** No meat, but dairy products
- **Ovo-Lacto Vegetarians:** No meat, but eats milk & eggs
- People may choose a vegetarian lifestyle because of:
 1. Religion
 2. Treatment of animals
 3. Doctor recommended diet

FOOD SENSITIVITIES

- **Food Allergy:** The body's immune system overreacts to substances (proteins) in foods.
- Common foods that cause allergies:
 1. Peanuts or other nuts
 2. Eggs
 3. Milk
- **Food Intolerance:**
 - An inability to digest a particular food or food additive
 - Common foods:
 1. Milk Products
 2. Chocolate
 3. Wheat
 - More common than food allergies
 - How do people get them?
 - Can be born with it or grow into or out of them.

DIETING

Fad Diets

- Are popular diets that may help a person lose weight but without proper regard for nutrition.
- Examples:
 - Liquid Diets
 - High Protein
 - Cabbage Diet



EXAMPLES OF FAD DIETS

Liquid Diets

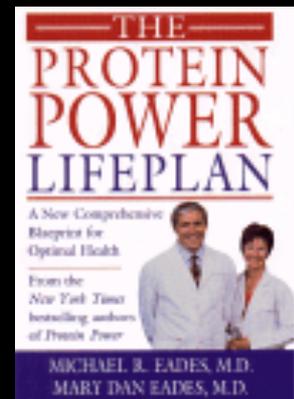
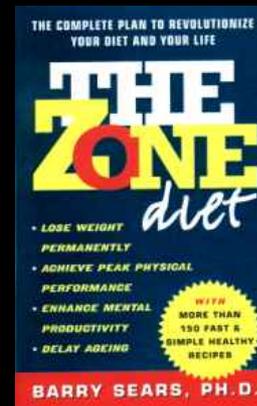
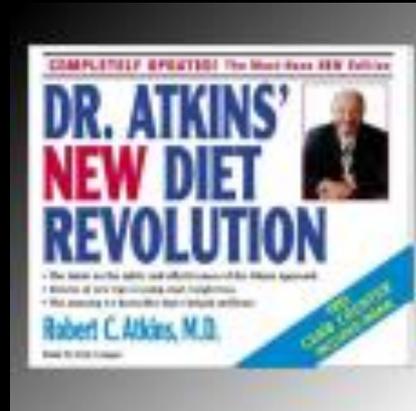
- Examples: Slim Fast / Nestles Sweet Success
- Replace 2 meals per day / a shake and eat 1 balanced meal
- **Pros:** convenience and get nutrients from shakes
- **Cons:** not much variety, stay on it or weight will return



EXAMPLES OF FAD DIETS

High Protein

- Examples: Dr. Atkins, Protein Power Plan, The Zone
- Cut out carbs and eat all protein and fat (only cheese, meat & seafood)
- **Pros:** Quick loss, can eat desirable foods, and can eat at restaurants with little modification.
- **Cons:** Can't eat "on the go", can be expensive, and foods tend to be high in saturated fats.



EXAMPLES OF FAD DIETS

Cabbage Diets

- Sheds water weight by consuming cabbage, soup, or small portions of other specific foods.
- **Pros:** short, sheds water weight quickly
- **Cons:** very strict, weight doesn't stay off, soup taste and smell is unappealing to many



FAD DIETS



- Why don't fad diets work?
 - They are not **LIFESTYLE CHANGES**
- What are some healthy ways to lose weight & cut calories
 1. **Recognize Eating Patterns** (*record & analyze what you eat*)
 2. **Plan Helpful Strategies** (*see next slide*)
 3. **Exercise** (*cutting calories without exercise can just lower your metabolism*)
 4. **Read labels** (*fat free doesn't mean get skinny*)

Weight-Loss Strategies

- Eat smaller portions.
- Eat your food slowly to enjoy its taste.
- Try not to eat while watching TV or reading.
- Take a walk instead of eating when you are bored.
- If you overeat occasionally, do not become upset. Just return to your sensible eating habits.

Did You Know

- –The reason you are hungry after a large meal the night before is because that meal makes your system work over-time, raising your blood sugar.
- Once your meal is digested – usually while you sleep – your blood sugar drops, triggering greater secretions of insulin, which further gives you the early morning hungries.

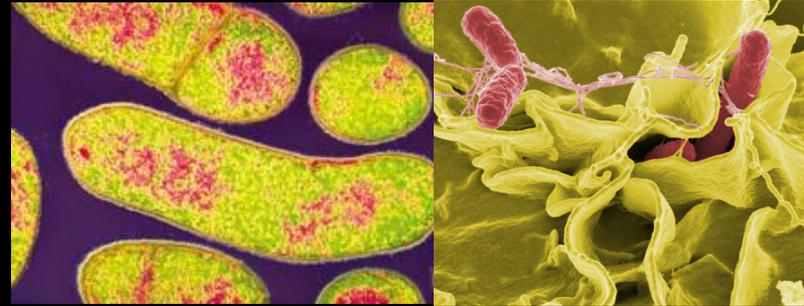
FOOD SAFETY

- Foodborne Illness: Results from consuming a food or drink that contains either a poison or disease-causing micro-organism
 - Bacteria and Viruses cause the most common foodborne illnesses
 - Examples: **E. coli, Salmonella**
- **How does it usually spread?**
 1. When food is undercooked
 2. When raw food touches cooked food
 3. When people preparing food transfers the microorganisms onto their hands, countertops, or utensils
 - **AVOID CROSS-CONTAMINATION**



FOOD POISONING

- **Salmonella**
 - Often found in poultry & eggs
 - Cook all foods that contain eggs (even cookie dough 😊)
- **E. coli**
 - Can live in beef
 - Prevention: properly cook meat, refrigerate properly
- **Botulism**
 - Very serious and deadly
 - Can live in canned food
 - Look for swollen or dented cans



IS IT SAFE?

1. Your mom is fixing burgers and she takes the burgers out to the grill and brings them in on the same plate once cooked.

NO – Cross Contamination

2. At home you grab a dented, bulging, or swollen canned good....

NO – Botulism

3. If a portion of bread is molding is it OK to cut off the mold and eat the rest of the bread?

NO – bread is very porous. If there is mold on a part, there are spores throughout.

4. It is recommended that you wash your hands with soap for 20 seconds?

YES – taking your time when washing your hands is important

5. Hot dogs that have been stored unopened in the refrigerator for over 7 days.

YES – unopened, means no air borne contaminates & refrigeration prevents the growth of bacteria

IS IT SAFE?

6. A bruised piece of fruit.

YES – bruising is not mean the whole thing is bad

7. Frozen ham that was thawed on the counter.

NO! exposing it to room temperature for a long period of time, even unopened allows bacteria already present to multiply rapidly. Thaw in fridge or microwave!

8. Meat loaf that's pink in the middle after cooking.

NO – pink or blood usually means it is not cooked long enough

9. Is it OK to cut raw vegetables on the same cutting board after you've cut raw chicken?

No – Cross Contamination

10. You sneeze, you have an open cut, or your hair gets into the food, can this contribute to food-borne illnesses?

No - Contamination

Health Stats: What health trend do these statistics reveal?

In 1965, **4.6 %** of teens were overweight.

In 1980, **5.0 %** of teens were overweight.

Today, **16.1 %** of teens are overweight.

What changes might help reverse this trend?
How successful do you think the changes would be?

DIET AND NUTRITION FACTS FROM THE AMERICAN DIETETIC ASSOCIATION:

- Americans spend over 40 Billion Dollars per year on Diet and Fitness Related Products
- 80% of American Women are on Diets
- 45% of Teen Girls think they are overweight and need to diet when they really are not
- About 90% of all Diet Plans DO NOT WORK!
- The average American woman actually wears a size 12 to 14
- Women need a fat level of approximately 22% of their body weight in order for their body to menstruate normally

Myth Eating disorders affect only females.

Fact Eating disorders affect females more than males, but males do develop eating disorders. Because of this myth males are even less likely than females to seek help for an eating disorder.

What factors other than gender might keep someone from seeking help for an eating disorder?

EATING DISORDERS

- A mental disorder that reveals itself through abnormal behaviors related to food
- 2 Main Types
 - Anorexia Nervosa
 - When a person does not eat enough food to maintain a healthy weight
 - Bulimia
 - When a person has uncontrolled eating binges (consuming a large amount of calories in a short time) followed by purging (vomiting).

ANOREXIA NERVOSA

- What things may lead to this disorder?
 - Outside pressures
 - High expectations
 - The need to achieve
 - The need to be accepted
- Typical Behaviors
 1. Extremely low caloric intake
 2. Obsession with exercise
 3. Emotional problems
 4. Unnatural interest in food
 5. Distorted body image
 6. Denial of problem

ANOREXIA CONTINUED...

What physical symptoms may occur?

1. Extreme weight loss
2. Constipation
3. Hormonal changes
4. Heart damage
5. Impaired immune function
6. Lower heart rate
7. Menstrual cycle stops
8. Can result in death

EATING DISORDERS

- **Bulimia Nervosa:** Cycles of overeating (bingeing) are followed by cycles of clearing digestive tract (purging). Many Bulimics will follow a restrictive diet between these cycles.
 - **Bingeing or Binge eating:** is eating large amounts of food in one sitting.
 - **Purging:** a behavior that involves self-induced vomiting or misusing laxatives to rid the body of food.
 - *In some extreme cases a person with Bulimia can consume as many as 20,000 calories in binges that last as long as 8 hours.*

BULIMIA

Typical Behaviors

1. Unable to control eating binges
2. Eating too much food too quickly
3. Eating in private
4. Cycles of weight gain and loss
5. Bathroom visits right after eating
6. Hoarding or storing food

BULIMIA CONTINUED

Physical Symptoms

- Vomiting leads to:
 - Dehydration
 - Kidney damage
 - Irregular heartbeat
 - Eroded tooth enamel / decay
 - Damage tissues in stomach / throat mouth
- Laxative abuse can lead to damage of blood composition
- Laxative abuse interferes with nutrients absorbing into system
- Death

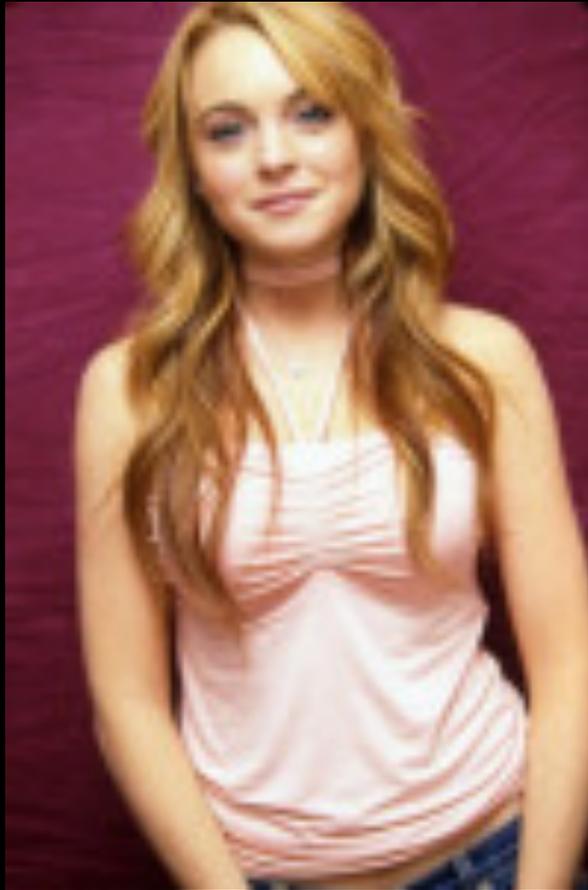
BINGE EATING DISORDER

- People with binge eating disorder regularly have an uncontrollable urge to eat large amounts of food.
- They usually do not purge after a binge.

Treatment

- People with binge eating disorder need help in learning how to control their eating.
- They often need to address underlying emotional problems.

How Thin is Too Thin???



How Thin is Too Thin???



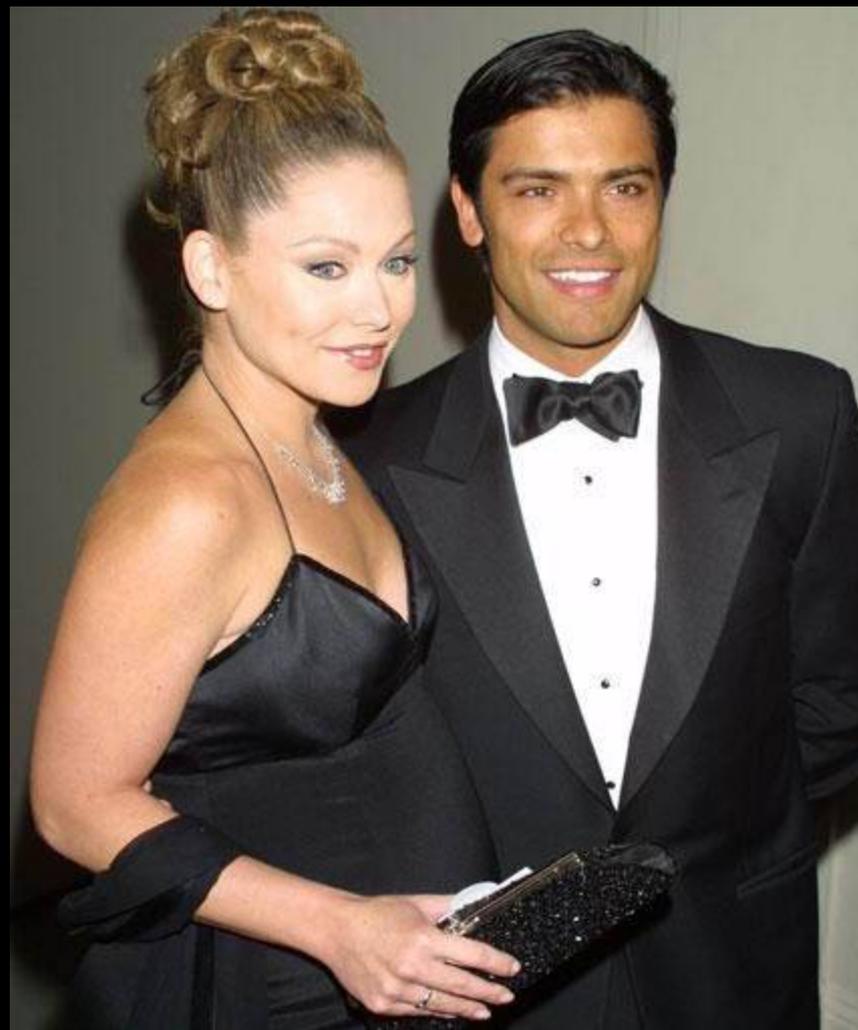
How Thin is Too Thin???



How Thin is Too Thin???



How Thin is Too Thin???



How Thin is Too Thin???



How Thin is Too Thin???

**KATE
BOSWORTH**



How Thin is Too Thin???

**NICOLE
RICHIE**



How Thin is Too Thin???



DEMI MOORE

How Thin is Too Thin???



**KEIRA
KNIGHTLEY**

How Thin is Too Thin???



**VICTORIA 'POSH'
BECKHAM**

THE END!

