What is food?

- Fuel?
- Reward?
- Medicine?
- Drug?

Assessing eating behaviors

- Hunger
- Lack of basic foods needed to provide necessary energy and nutrients
- Appetite
- Learned desire to eat, may or may not have anything to do with feeling hungry
- Nutrition
- Science that investigates the relationship between physiological function and essential elements of the food we eat

Eating influences

- Cultural and social meanings attached to food
- Convenience
- Habit or custom
- Advertising
- Availability
- Economy
- Emotional comfort
- Weight and body image
- Social interaction
- Regional and seasonal trends
- Nutritional value
- Environmental conditions

Eating for health

- Nutrients
- Energy yielding macromolecules
- Proteins
- Fats

- Carbohydrates
- Vitamins
- Minerals
- Waters
- A healthful diet
- Enough calories
- Moderate portion sizes
- Balanced
- Varied
- Nutrient-dense

Obtaining essential nutrients

- Water
- Prevent dehydration
- Bathes cells
- Aids in fluid and electrolyte balance
- Transports molecules and cells
- Constitutes major components of blood
- Proteins
- Function: growth and energy supply
- Types: break down into amino acids
- Complete proteins (containing all essential amino acids): animal products and some plant products
- incomplete proteins: grains, dry beans, nuts
- Carbohydrates
- Function: primary energy source, especially in brain
- Types
- Simple: natural sugars and added sugars; high glycemic index
- Complex: grains, cereals, veggies, beans; low glycemic index
- Glucose
- C6H12O6
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- Create ATP
- Fats
- Function: vital role in maintaining healthy skin and hair, insulating body organs against shock, maintaining body temperature, and promoting healthy cell function
- Triglycerides are the most common (comes from excess calories too) (95% of body fat)

- Cholesterol: remaining 5% of body fat, can accumulate as plaque on inner artery walls
- LDL: bad
- HDL: good
- MUFA (monounsaturated fatty acids)
- PUFA (polyunsaturated fatty acids)
- Trans fats (polyunsaturated oils hydrogenated to make them more solid): raise LDL and lower HDL

Vegetarianism

- Advantages
- Better cholesterol levels
- Increase GI function
- Lower risk of heart disease
- Decrease carbon footprint
- Decrease antibiotic resistance
- Save water
- Disadvantages
- Possible vitamin deficiencies

Vitamins

- Functions: helps put macromolecules to use
- Essential to regulating growth, maintaining tissue, and releasing energy from blood, involved in manufacturing blood cells, hormones, and other compounds
- B and C are water soluble, rest are fat soluble

Antioxidants

- Oxidative stress
- Free radicals
- Vitamin C and E, beta-carotene, and other carotenoids, and selenium
- Lycopene
- Lutein
- Walnuts
- All berries
- Tomatoes
- Peaches
- Artichoke
- walnuts/almonds

Minerals

- Functions: help build bones and teeth, aid in muscle function, help our nervous system transmit messages
- Types
- Macro: sodium, potassium, chloride, calcium, etc
- Trace; iron, iodine, fluoride, etc

Food additives

- Added to reduce foodborne illness, prevent spoilage, and enhance the way foods look and taste
- Antimicrobial agents: salt, sugar, nitrates
- Antioxidants: preservatives of color/flavor
- Artificial preservatives
- Sulfites: preserve vegetable color

Food allergy vs. intolerance

- Allergy: abnormal response due to immune system
- Intolerance: cause symptoms of gastric upset

Organic

- Expensive, so go to farmers market (wtf farmers market is expensive?!?!?!?!?!)

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