

# Ch. 4: Nutrition

## Lesson 1: Nutrients for Good Health

Words to know:

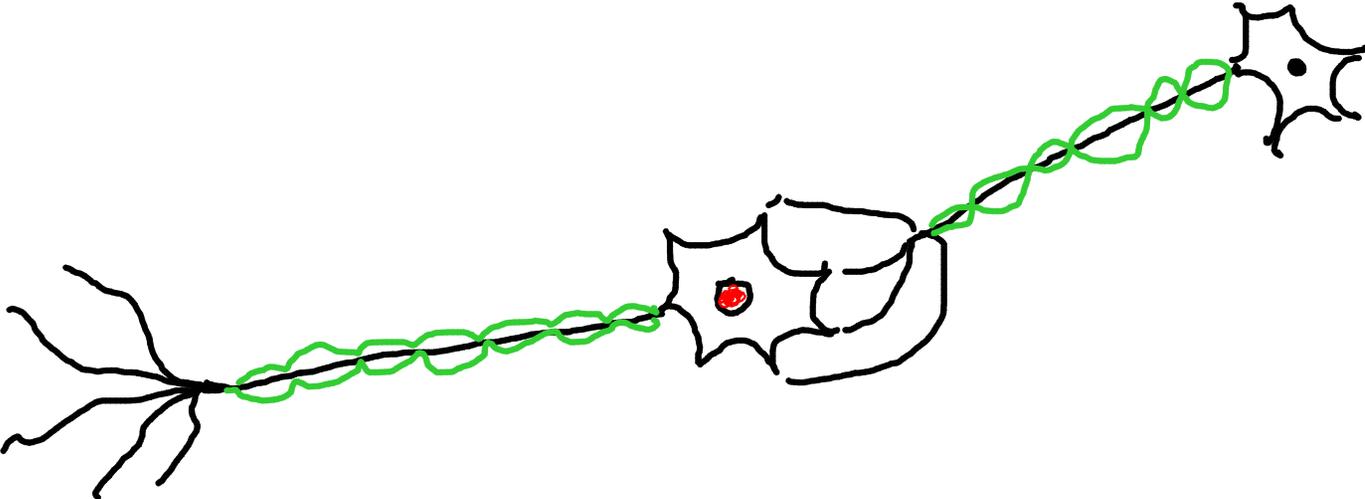
- nutrients**- substances in foods that your body needs to grow have energy, and stay healthy.
- 😊 **carbohydrates**- the starches and sugars found in foods.
- fiber**- complex carbohydrate that the body cannot break down or use for energy.
- 😊 **proteins**- the nutrient group used to build and repair cells.
- 😊 **saturated fats**- fats that are usually solid at room temperature.

- 😊 **unsaturated fat-** fats that are usually liquid at room temperature.
- cholesterol-** the waxy, fat-like substance that the body uses to build cells and make other substances.
- trans fatty acids-** a kind of fat formed when hydrogen is added to vegetable oil during processing.
- 😊 **vitamins-** compounds that help to regulate body processes.
- minerals-** substances the body uses to form healthy bones and teeth, keep blood healthy, and keep the heart and other organs working properly.

What nutrients you need to be healthy

A. Carbohydrates

1. simple carbohydrates: sugars
2. complex carbohydrates: starches



B. proteins

1. complete- meat, eggs, dairy, soybeans

😊 2. incomplete- nuts, beans, rice

C. fats

😊 1. saturated- meats, eggs, dairy, butter

2. unsaturated- olives, nuts, avocados, vegetable oils

D. Vitamins

1. Fat-soluble

a. A- fruit, vegetable

b. D- eggs, fortified milk, sun

😊 c. E- veg. oils, apples, nuts

😊 d. K- eggs, liver, tomatoes

2. Water-soluble

😊 a. B- dairy, eggs, fish, butter

b. C- fruits, peppers

E. water- found in most foods

- 😊 1. regulate body temperature
- 😊 2. aids digestion
- 😊 3. aids in waste removal

F. minerals

- 1. iron- meats, poultry, beans
- 2. calcium- dairy
- 😊 3. phosphorus- eggs, beans, whole grains, meat, fish
- 😊 4. magnesium- milk, nuts, dark green leafy veg.

Guidelines for Good Nutrition

A. make smart food choices

- 1. eat a variety of nutritious foods
  - 😊 a. green leafy vegetables
  - 😊 b. fruits
  - c. whole-grains
  - 😊 d. low-fat foods
  - 😊 e. high fiber foods

## Avoid Too Much Added Sugar and Salt

- 😊 A. avoid processed foods
- B. taste foods before adding sugar or salt
- 😊 C. eat healthy snacks

## Balance Food and Physical Activity

- A. only eat as much food as you burn

## Getting the Nutrition Facts

- A. read the nutrition label
  - 😊 1. check serving sizes
  - 2. check recommended daily allowance (RDA)
  - 3. check daily value (DV)

# Lesson 2: Creating a Healthy Eating Plan

## Words to Know

- 😊 **nutrition**- the process of taking in food and using it for energy, growth, and good health.
- My Pyramid food guidance system**- a guide for developing a healthful eating plan.
- 😊 **calorie**- a unit of heat that measures the energy available in foods.

## How Many Calories Do You Need?

Your Calorie Level	Sedentary Lifestyle	Moderately Active Lifestyle	Active Lifestyle
Females age 9-13	1600 cal. per day	2000 cal. per day	2200 cal. per day
Males 9-13	1800 cal. per day	2000 cal. per day	2600 cal. per day

## What Are Your Food Group Needs Based on Calories

Your Cal. Level	1600	1800	2000	2200	2400	2600
Fruits	1.5 cups	1.5 cups	2 cups	2 cups	2 cups	2 cups
Vegetables	2 cups	2.5 cups	2.5 cups	3 cups	3 cups	3.5 cups
Grains	5 oz.	6 oz.	6 oz.	7 oz.	8 oz.	9 oz.
Meat/Beans	5 oz.	5 oz.	5.5 oz.	6 oz.	6.5 oz.	6.5 oz.
Milk	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups
Oils	5 tsp.	5 tsp.	6 tsp.	6 tsp.	7 tsp.	8 tsp.
Extra Cal.	132	195	267	290	362	410

# Lesson 3: Planning Healthful Meals

## Word to Know

😊 **nutrient dense-** foods having a high amount of nutrients relative to the number of calories.

## Healthful eating habits

### A. pay attention to portions size

- 😊 1. meat 3 oz. the size of a deck of cards
- 2. one cup of vegetables is equal to the size of a baseball

### B. Supplements

- 😊 1. try to get vitamins and minerals from diet
- 2. if you have diet restrictions take vitamin and mineral supplements.
- 3. be careful not to take too many fat soluble vitamins. these can build up to toxic levels.

C. USDA Healthful eating tips

1. focus on fruits and vegetables
2. make half your grains whole grains
3. eat calcium-rich foods
4. choose healthful fats
5. limit your salt and added sugar intake

-  D. Start each day with a healthful breakfast
-  E. Pack a healthful lunch
-  F. Choose nutritious snacks

Keeping Food Safe

- A. keep your hands, utensils, and surfaces clean
- B. separate raw, cooked, and ready-to-eat foods.
-  C. cook foods thoroughly
- D. chill when necessary
-  E. serve safely
-  F. Follow directions
- G. When in doubt, throw it out

# Lesson 4: Digestion and Excretion

<http://www.brainpop.com/health/body systems/digestivesystem/>

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<http://www.brainpop.com/health/body systems/teeth/>

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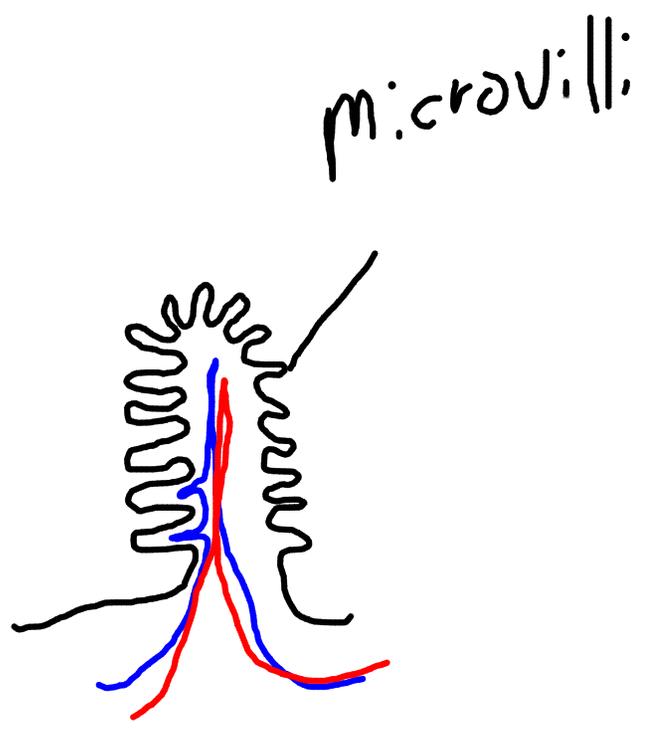
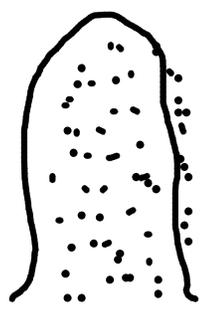
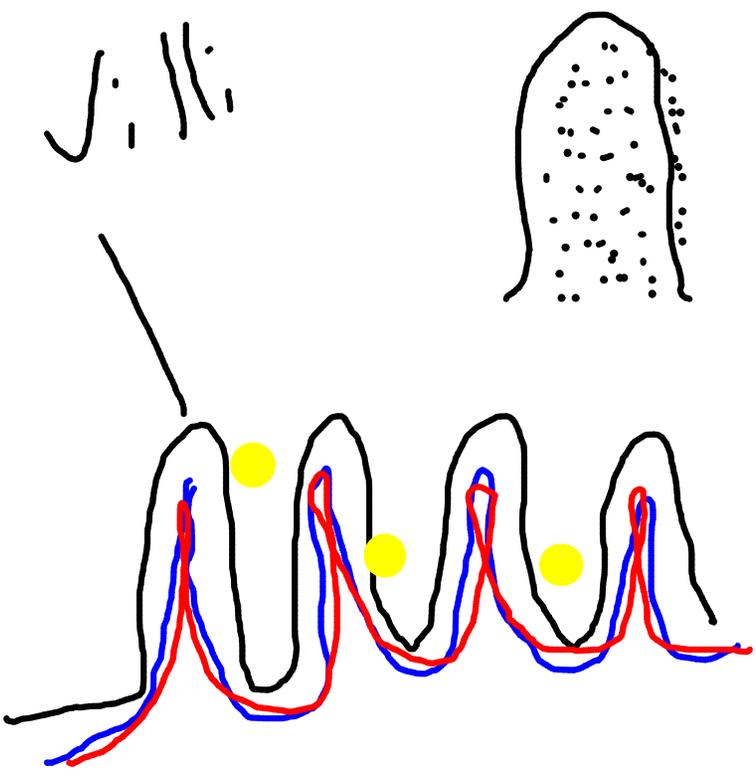
<http://e2bn.skool.co.uk/content/keystage3/biology/pc/learningsteps/ABDLC/launch.html>

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## Words to know:

- digestion: is the process by which the body breaks food down into smaller pieces that can be absorbed by the blood stream and sent to each cell in your body.
- Digestive system: is a group of organs that work together to break down foods into substances that your cells can use.
- enzyme: a substance that aids in the body's chemical reactions.
- 😊-saliva: is a digestive juice produced by the salivary gland in your mouth.
- 😊-esophagus: is a long, muscular tube that connects the mouth to the stomach.
- stomach: is a muscular organ in which some digestion occurs.
- small intestine: is a coiled tube, about 20 feet long, where about 90% of the digestive process takes place.
- liver: is the body's largest gland, which secretes a liquid called bile that helps to digest fats.
- 😊-gall bladder: is the organ that stores bile.





-colon or large intestine: is a storage tube for solid wastes and absorption of water.

😊 -anus: is the external opening at the end of the digestive system.

-pancreas: is a gland that helps the small intestine by producing pancreatic juice, that breaks down proteins, carbohydrates, and fats

😊 -excretory system: is the system that removes wastes from your body and controls water balance.

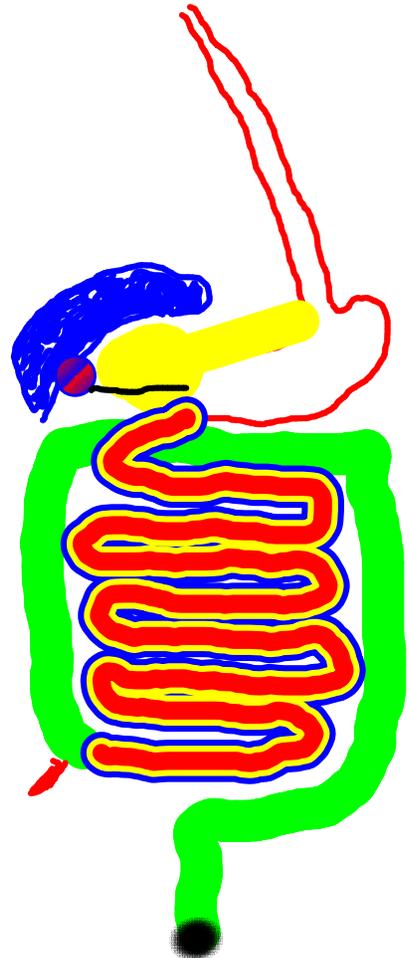
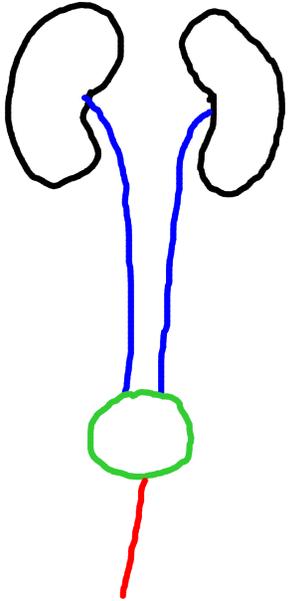
-excretion: is the process by which the body gets rid of liquid waste material

😊 -kidneys: are a pair of organs that filter water and waste materials from the blood.

-ureters: are the two tubes leading from the kidneys to the bladder.

😊 -bladder: is a pouch that stores urine.

-urethra: is a tube that allows urine from the bladder to exit from the body.





# Lesson 5: Body Image and Healthy Weight

Words to Know:

- 😊 **body image**- the way you see your body.
- body mass index**- a method for assessing your body size by taking your height and weight into account.

How to Develop a Positive Body Image

- 😊 A. accept yourself and your body.
- B. understand teens go through growth spurts that affects body shape.
- C. when losing or gaining weight be sure to set reasonable goals.

Healthy weight range is based on

- 😊 A. gender    😊 C. inherited body type
- 😊 B. height    😊 D. growth pattern

# Lesson 6: Maintaining a Healthy Weight

<http://www.brainpop.com/health/diseasesinjuriesandconditions/eatingdisorders/>

Words to Know:

- 😊 **eating disorder**- extreme eating behaviors that can lead to serious illness or even death.
- anorexia nervosa**- is an eating disorder in which a person has an intense fear of weight gain and starves him/herself.
- bulimia nervosa**- is an eating disorder in which a person repeatedly eats large amounts of food and then throws-up.
- 😊 **binge eating**- a disorder in which a person repeatedly eats too much food at one time.

## The Weight-Loss Energy Equation

A. 1 pound = 3,500 calories

B. To lose 1 pound in two weeks

1. eat 250 fewer calories a day

or

2. burn 250 extra calories a day through physical activity

250 calories

day

X 14 days = 3,500 calories