Our digestive system works together to absorb nutrients

What is a nutrient?
What do they do?
What is good for us?





Nutrients: components in food that an organism utilizes to survive and grow

Food Nutrients Energy and materials Growth, development, and repair

Food provides nutrients

Carbohydrates
Fats
Proteins
Vitamins
Minerals

There is also water and fibre. Both are important as well but are not considered nutrients!

Nutrients: Carbohydrates

Two types of carbohydrates

Simple sugars: glucose, fructose, lactose -> QUICK energy

Complex sugars (starches): chains of glucose molecules -> STORE energy



Nutrients: Fats

Two types of fats

Saturated fats:

Usually animal fats (butter or lard)
SOLID in room temperature
Can build "plaques" in your blood vessels

Unsaturated fats:

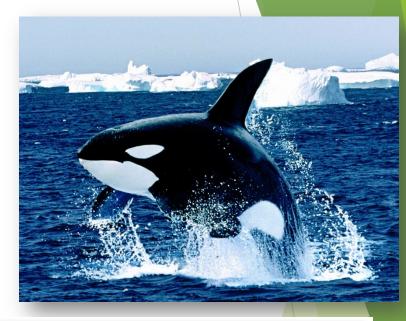
Usually plant fats (fish too)
Corn oil, olive oil
LIQUID in room temperature
The "good" fat?

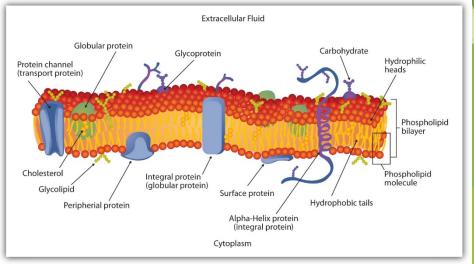


Nutrients: Fats

Roles of fats

- 1. Store energy for the future
- 2. Insulate body
- 3. Protect internal organs
- 4. Build cell membranes





Nutrients: Proteins

Proteins are made of amino acids (20 different types)

- 1. Grow and repair of body tissue
- 2. Form bones, skin, nail, and hair
- 3. Repair cuts, clots, or thickens blood
- 4. Form enzymes for reactions

Why do meats have lots of proteins?



Let's Reflect!

Nutrients	3 Food items you ate this weekend
Simple carbohydrates	
Complex carbohydrates	
Unsaturated fats	
Saturated fats	
Proteins	

Nutrients: Vitamins and minerals

Small amounts of vitamins and minerals are needed to make people's body work properly.

However, our body cannot produce vitamins and minerals. Therefore, we must eat them.

Minerals:

Fluorine, Iron, Sodium, Magnesium, Calcium, Phosphorus, Copper, Potassium, Sulfur

Not a nutrient: Water

However, water is necessary for life.

- 1. Transports nutrients and wastes
- 2. Needed in chemical reactions
- 3. Cools our body
- 4. Main component of the cell (65% of our body is water). You need 3L~5L of water every day.



Take some time to reflect on:

Vitamins	What happens when we don't have enough?	Food that provides these vitamins
Vitamin A		
Vitamin C		
Vitamin D		
Vitamin K		