# **ABC's of Vitamins**

You take a vitamin tablet in the morning. Someone says eat your fruit and vegetables because they have vitamins. What's so important about vitamins? While they do not provide energy like protein from meat and sugar from breads, they do help to convert this energy into the energy your body uses.

Since our bodies can't make vitamins we need to get them from the food we eat. There are 11 vitamins we need to get from the foods we eat.

Four of these vitamins dissolve in fat (are fat soluble). They are found in foods that contain fat and are stored in fat in our body - vitamins A, D, E, and K.

Seven of these vitamins dissolve in water (are water soluble). They are not stored in our body. The seven vitamins are B vitamins that include thiamin, riboflavin, niacin, folate, B6, B12 and vitamin C.

### **Fat Soluble Vitamins**

### Vitamin A

· discovered in 1913

#### What it does

- · helps with eyesight
- keeps skin healthy
- helps with growth of body organs (like bones)

#### Foods

· liver, fish, milk, butter, eggs, carrots

### Deficiency problems

· night blindness, poor growth, dry skin

### Vitamin D

· made in the skin by the sun

### What it does

· helps bones grow strong

### Foods

· liver, egg yolks, milk, butter

### Deficiency problems

· rickets (deformed bones), weak bones

### Vitamin E

· called the antiaging vitamin

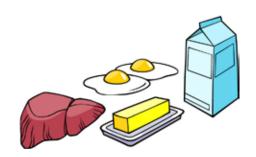
#### What it does

- · protects lungs against pollution damage
- · helps keep heart healthy
- · may help protect against cancer

### Foods

- · sweet potatoes, peanut butter, sunflower seeds, spinach, nuts Deficiency problems
  - · nerve destruction, red blood cell destruction







### Vitamin K

· made by bacteria in our intestines

#### What it does

- · helps make blood clot
- · helps keep bones healthy

#### Foods

· liver, cabbage, lettuce, spinach, milk, meat, eggs

### Deficiency problems

· hemorrhage



### Water Soluble Vitamins

### **Folate**

#### What it does

- · helps to make new cells
- · helps prevent heart disease

#### Foods

· asparagus, broccoli, corn flakes, beans, tomato juice Deficiency problems

· diarrhea, mental disorders, poor growth



### **Niacin**

#### What it does

- · helps our body use the fat and sugar we eat for energy
- · helps keep our skin healthy

#### Foods

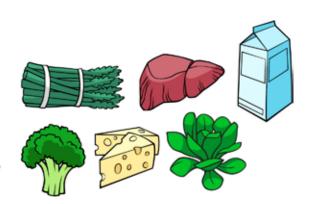
· mushrooms, tuna, green beans, broccoli, spinach, breakfast cereals

### Deficiency problems

· diarrheam skin problems, mental disorientation

### <u>Riboflavin</u>

- named for its yellow color (flavus means yellow in Latin) What it does
- · helps convert the food we eat to the energy we need Foods
- milk, cheese, liver, broccoli, asparagus, spinach Deficiency problems
  - · eye disorders, cracks at corners of mouth, swollen tongue





### **Thiamin**

#### What it does

helps convert the food we eat to the energy we need

#### Foods

• spinach, tomato juice, watermelon, sunflower seeds, ham

#### Deficiency problems

· weakness, tingling in feet and hands, poor coordination



### Vitamin B6

### What it does

- · helps make red blood cells
- · helps our body use the fat and protein we eat for energy

#### Foods

• spinach, broccoli, tomato juice, banana, watermelon, chicken breast

### Deficiency problems

· headache, convulsions, vomiting, flaky skin, sore tongue



### Vitamin B12

### What it does

· helps to make new cells

#### Foods

· meat, fish, poultry, milk, cheese, eggs

#### Deficiency problems

anemia, poor nerve function



### Vitamin C

· almost all animals make vitamin C in their bodies (only humans, guinea pigs, some bats, and some fish don't)

#### What it does

- · protects cells from damage
- helps keep bones and skin healthy
- · may help prevent cancer and heart disease

#### Foods

• oranges, strawberries, peppers, kiwi, brussel sprouts, broccoli, spinach

### Deficiency problems

· bleeding gums, tiredness, weakness, sore muscles



## **Vita Means Life!**

You can see by what vitamins do that they are important for a healthy life!