# **NUTRITION CONCEPTS**

# **MACRONUTRIENTS**

# **Carbohydrates**

Found in breads, cereals, fruits, vegetables, sugar and potatoes.

How it helps the body:

- good source of energy
- fiber in fruits and vegetables aid in eliminating wastes from the body

# **Protein**

Found in cheese, meat, fish, nuts, eggs, peanut butter, grains, and dried beans.

How it helps the body:

- sometimes called your body's "building blocks"
- aids growth
- replaces worn out cells
- helps resist diseases



### **Fats**

Found in oil, butter, margarine, nuts and seeds, poultry skin, salad dressing, meats and cheeses.

How it helps the body:

- carries some vitamins (A, D, E, & K) to your cells
- supplies energy

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# **FAT SOLUBLE VITAMINS**

## Vitamin A

Found in yellow, orange and green vegetables, yellow fruits, fat of some animals, fish, milk, eggs, and liver.

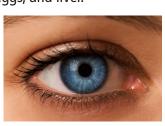
How it helps the body:

- protects eyes, helps night vision
- helps keep skin healthy
- heals wounds



Found in fatty fish, liver, eggs, and butter. Usually added to milk. Your body produces it when you're in sunshine. How it helps the body:

- needed for using calcium and phosphorus
- helps build strong bones and teeth



### Vitamin E

Found in plant tissues: vegetable oils, green leafy vegetables, nuts, legumes; meats How it helps the body:

- helps protect body tissue from free radical damage
- plays role in red blood cell formation

### Vitamin K

Found in deep green leaves, liver, egg yolk, butterfat, produced in intestines by beneficial bacteria How it helps the body:

plays role in blood clotting

# WATER SOLUBLE VITAMINS

# B Vitamins (thiamin, riboflavin, niacin, folic acid, B6, B12)

Found in meats, beans, whole grains, enriched breads, cereals, and vegetables (including dark leafy green).

How it helps the body:

- keeps eyes, skin, and mouth healthy
- · helps keep appetite and digestion in working order
- helps use protein, fat, and carbohydrates
- helps develop brain and nervous system

# **Biotin**

Found in liver, and smaller amounts in meats and fruits

How it helps the body:

 helps synthesize fat, glycogen (carbohydrates stored in muscle and liver), and amino acids (building blocks of protein)

### Vitamin C

Found in citrus fruits (oranges), melons, and green leafy vegetables (broccoli, spinach, and cabbage).

How it helps the body:

- helps heal wounds and broken bones
- helps the body make blood vessels, bones, and teeth
- helps keep body cells and tissues strong and healthy

## Choline

Found in egg yolks, milk, peanuts, soy, wheat germ, livers (beef, veal, and turkey)

How it helps the body:

- plays role in cell structure in cell membranes
- promotes brain and memory functions



# MINERALS/ELEMENTS

### **Calcium**

Found in milk and other dairy products.

How it helps the body:

- helps form healthy bones and teeth
- helps blood clot
- makes nerves and muscles react normally

### Chromium

Found in brewer's yeast, liver, meat, cheese, whole-grain cereals, and broccoli.

How it helps the body:

works in carbohydrate, protein, and fat metabolism

# Copper

Found in liver, shellfish, meats, nuts, legumes, and whole-grain cereals.

How it helps the body:

helps absorption and use of iron to form hemoglobin in red blood cells

## Fluoride

Found in water.

How it helps the body:

- makes teeth resistant to decay most effective in young children
- moderate levels in bone may reduce osteoporosis



### **lodine**

Found in iodized table salt, seafood, plants grown in iodine-rich soils, and dairy products.

How it helps the body:

• important part of thyroid hormones: thyroxine and triiodothyronine

# Magnesium

Found in whole-grain cereals, nuts, legumes, meats, milk, green leafy vegetables.

How it helps the body:

- activates enzymes involved in protein synthesis
- helps muscles and nerves work
- helps regulate blood sugar levels and promotes normal blood pressure



Found in legumes, whole-grain cereals, nuts, tea.

How it helps the body:

- activates many enzymes used in carbohydrates and protein metabolism
- plays a role in bone formation



# **Phosphorus**

Found in breads, cereals, lima beans, meat, poultry, fish, meat alternates, milk, cheese, yogurt. How it helps the body:

- builds strong bones and teeth
- releases energy from fat, protein, and carbohydrates
- aids in formation of genetic material, cell membranes, and enzymes

## Iron

Found in dark green leafy vegetables, liver, meat, egg yolks, and dry beans. How it helps the body:

- helps blood cells carry oxygen to all parts of the body
- protects against some forms of anemia

## Selenium

Found in organ meats, seafood, cereal foods, and plants grown in selenium-rich soil.

- How it helps the body:antioxidant
  - lessens breakdown of vitamin E

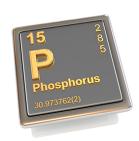
### **Zinc**

Found in seafood, liver and other organ meats, meats, fish, wheat, yeast. How it helps the body:

- part of many enzymes and proteins
- plays role in immune function, protein synthesis, and wound healing
- controls information from gene to gene so living things develop and function







# **ELECTROLYTES**

### **Sodium**

Found in table salt, cheddar cheese, ham, snack foods, most processed foods.

How it helps the body:

maintains fluid balance and nerve transmission



### Chloride

Found in table salt, barley, wheat, green leafy vegetables, melon, and pineapple.

How it helps the body:

- helps maintain normal pH of blood
- maintains fluid balance and nerve transmission

### **Potassium**

Found in bananas, orange juice, most fruits, potatoes, dried peas, peanuts, nuts, dairy products, and meats. How it helps the body:

maintains fluid balance and nerve transmission

### Water

Found in water, juices, beverages, high-moisture solid foods (soups, watermelon, meats, etc.) How it helps the body:

- transports nutrients
- · transports waste
- lubricates joints
- regulates body temperature
- cell hydration







