

NUTRITION

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FOOD GROUPS

There are four types of food groups.

1. Fruits and Vegetables



These are
where you get
your nutrients.

2. Grains



3. Dairy and Dairy Substitutes



4. Meat and Meat Substitutes

1. Protein

2. Carbohydrates

3. Fats

Major Nutrients

Protein

- Made of these elements: carbon, hydrogen, oxygen, nitrogen.

- Meat sources of protein:

- i. pork
- ii. beef
- iii. chicken
- iv. duck
- v. fish



- Non-Meat Animal Sources

- i. dairy
- ii. eggs



- Vegetarian Combinations

- i. grains and legumes
- ii. grains and dairy
- iii. grains and soy



Twenty common amino acids are assembled into the thousands of different proteins required by the human body. To assemble the proteins it needs, the body must have a sufficient supply of all these amino acids.

Protein

- Benefits of Protein
 - i. builds muscles and organs
 - ii. fights illnesses
 - iii. helps blood clot
 - iv. carries nutrients in blood
 - v. maintains acid/alkaline
 - vi. forms antibodies
 - vii. provides heat and energy
 - viii. forms hormones



Carbohydrates

- Includes these elements: carbon, hydrogen, oxygen.

- Fruit sources:

- i. apples
- ii. banana
- iii. citrus (orange, grapefruit)



- Vegetable sources:

- i. broccoli
- ii. carrots
- iii. yams



- Grain sources

- i. wheat
- ii. rice
- iii. corn
- iv. oats
- v. rye



There are two kinds of carbohydrates, *simple* and *complex*. Simple carbohydrates have a simple molecular structure. Complex carbohydrates have a complicated molecular structure that consists of simple carbohydrates joined in long chains.

Carbohydrates

- Benefits:

- i. provides energy
- ii. provides cellulose or fibre
- iii. provides heat
- iv. regulates metabolism of fats and protein



- Dangers:

- i. blood sugar fluctuations can lead to diabetes
- ii. obesity
- iii. tooth decay
- iv. indigestion, heartburn and nausea



Fats

- Includes these elements: carbon, hydrogen, oxygen.
- Healthy sources:
 - i. olive and coconut oil, fish oil
 - ii. avocados, nuts and seeds
- Unhealthy Sources:
 - i. fast food or processed food
 - ii. candy



Many scientists believe that limiting the amount and types of fats eaten can help reduce the risk of developing diseases.

Fats

- Benefits:
 - i. smooth skin
 - ii. shiny hair
 - iii. warmth
 - iv. energy for muscles
 - v. absorbs vitamins A, D, E, K
 - vi. builds cell membranes



MICRONUTRIENTS

1. Vitamins



2. Minerals



Vitamins

- Vitamin A

- Sources:

- i. carrots
- ii. dark green leafy vegetables
- iii. yams

- Benefits:

- i. helps eyes see in dim light
- ii. keeps skin healthy
- iii. helps bones grow
- iv. keeps linings of body smooth

Vitamin A prevents eye problems, promotes a healthy immune system, is essential for the growth and development of cells, and keeps skin healthy.

- Vitamin B

- Sources:

- i. liver
- ii. legumes (peanuts, beans)
- iii. green leafy vegetables
- iv. whole grains
- v. eggs

- Benefits:

- i. energy
- ii. reduces effects of stress

Vitamins

- Vitamin C

- Sources:

- i. broccoli
- ii. citrus (oranges, grapefruit)
- iii. sweet peppers
- iv. sprouts
- v. liver

- Benefits:

- i. heals wounds
- ii. fights infections
- iii. helps absorb iron and other vitamins

- Vitamin D

- Sources:

- i. eggs
- ii. milk
- iii. sunlight
- iv. liver
- v. fish

- Benefits:

- i. helps bones grow
- ii. helps teeth be strong

Vitamins

- Vitamin E

- Sources:

- i. Vegetable oil
- ii. Avocados

- Benefits:

- i. helps absorb other nutrients
- ii. helps blood carry oxygen, so helps keep us warm
- iii. helps protect us from air pollution
- iv. helps wounds heal

- Vitamin K

- Sources:

- i. green leafy vegetables
- ii. cauliflower

- Benefits:

- i. helps blood clot

Vitamin E is an antioxidant and helps protect cells from damage. It is also important for the health of red blood cells.

Minerals

- Calcium

- Sources:

- i. dairy
- ii. broccoli
- iii. canned salmon and sardines

- Benefits

- i. muscles work better
- ii. builds strong bones
- iii. helps blood clot

- Magnesium

- Sources:

- i. broccoli
- ii. dark chocolate
- iii. milk

- Benefits:

- i. breaks down carbohydrates
- ii. helps absorb calcium
- iii. regulates body temperature
- iv. helps heart work properly

Minerals

- Iron

- Sources:

- i. leafy green vegetables
- ii. meat (liver,oysters)

- Benefits:

- i. makes red blood cells
- ii. fights stress and disease

Iron helps red blood cells carry oxygen to all parts of the body. Symptoms of iron-deficiency anemia include weakness and fatigue, lightheadedness, and shortness of breath.

- Potassium

- Sources:

- i. bananas
- ii. potatoes
- iii. tomatoes
- iv. orange juice

- Benefits

- i. keeps the heart beating
- ii. helps maintain water balance

Potassium helps with heart, muscle, and nervous system function. It also helps the body maintain the balance of water in the blood and body tissues.

Minerals

- Fluoride

- Sources:

- i. water
 - ii. toothpaste

- Benefits:

- i. keeps teeth strong
 - ii. helps deposition of calcium

- Sodium

- Sources:

- i. salt
 - ii. seafood

- Benefits:

- i. regulate water balance
 - ii. keeps minerals soluble in blood

Minerals

Zinc is important for normal growth, strong immunity, and wound healing.

- Zinc
- Sources:
 - i. shellfish
 - ii. whole grains with yeast
- Benefits:
 - i. helps wounds heal
 - ii. helps ability to taste food

NUTRITION IS STEP ONE!

HEALTHY EATING,
EXERCISING, AND
GETTING ENOUGH SLEEP
CAN LEAD TO A GOOD LIFE!

CITATIONS

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