

Minerals: Major vs. Trace Minerals

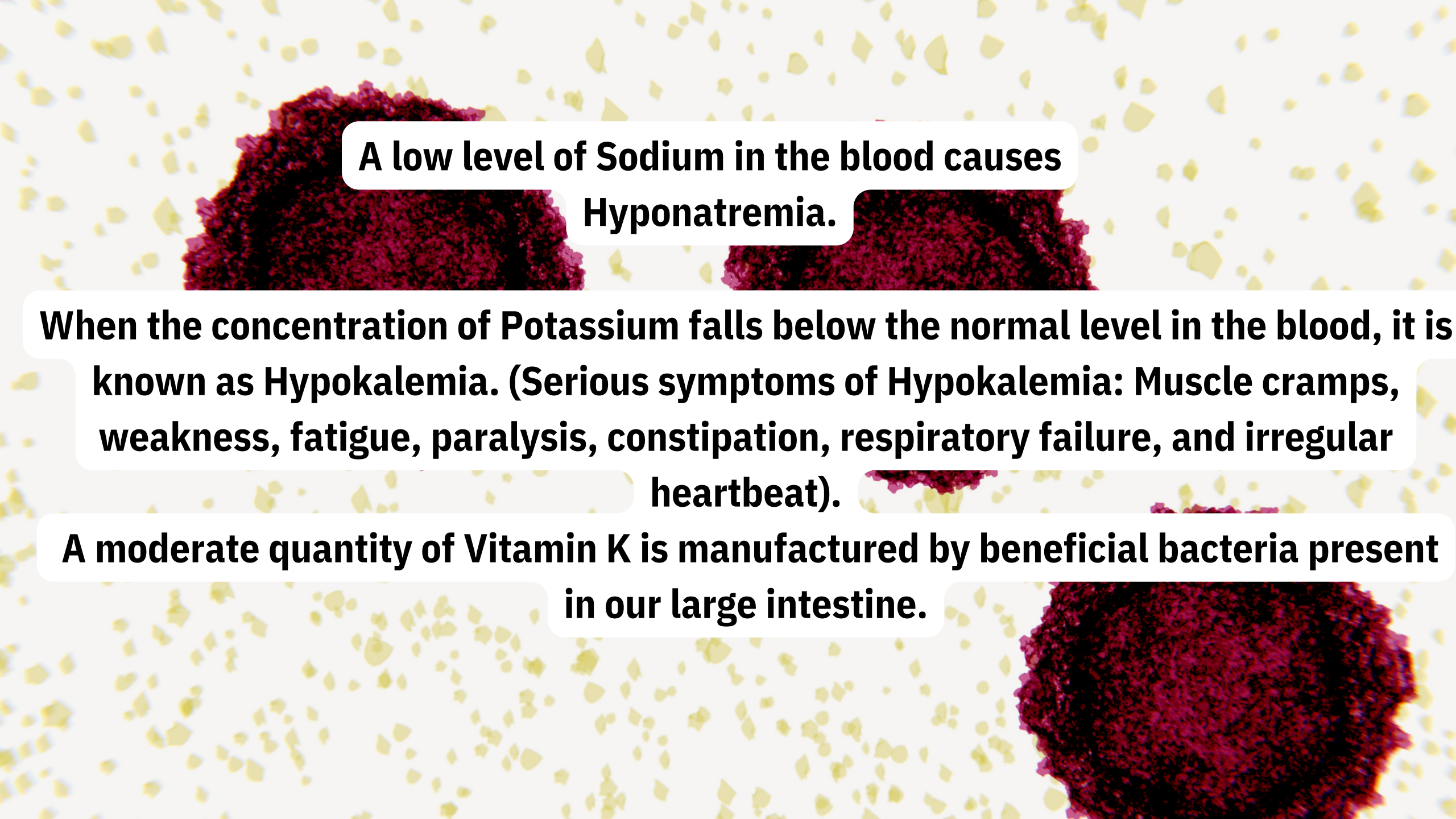
Minerals are also essential nutrients needed in small amounts. They are of two types:

Major Minerals: Needed in larger amounts. These include Calcium, Chloride, Magnesium, Potassium, Phosphorus, Sodium, and Sulfur.

Sources: Milk, salt, meat, bananas, eggs, fish, and leafy vegetables.

Trace Minerals: Needed in comparatively lesser amounts. These include Copper, Chromium, Fluoride, Iodine, Iron, Manganese, Molybdenum, Selenium, and Zinc.

Sources: Nuts, olives, cheese, meat, fruits, and vegetables.



A low level of Sodium in the blood causes Hyponatremia.

When the concentration of Potassium falls below the normal level in the blood, it is known as Hypokalemia. (Serious symptoms of Hypokalemia: Muscle cramps, weakness, fatigue, paralysis, constipation, respiratory failure, and irregular heartbeat).

A moderate quantity of Vitamin K is manufactured by beneficial bacteria present in our large intestine.

Minerals: Strength & Balance



Calcium

For strong bones and teeth. Found in Milk and Eggs.



Iron

Builds hemoglobin in blood. Found in Spinach and Apples.



Iodine

Prevents Goiter. Found in Iodized Salt and Seafood.

Iron:

Sources: Dates, meat, green vegetables (like spinach), bananas, honey, and dry fruits.

Importance: Formation of hemoglobin.

Deficiency Disease: Anemia.

Calcium:

Sources: Milk, milk products, pulses, and eggs.

Importance: For strong bones and teeth.

Deficiency Diseases: Weak bones and tooth decay.

Phosphorus:

Sources: Meat, fish, eggs, wheatgerm, milk, and its products.

Importance: Development of strong bones and teeth, and making energy-rich compounds in body cells.

Deficiency Diseases: Weakness, weak teeth, and weak bones.

Potassium:

Sources: Green vegetables, meat, cereals, and fruits.

Importance: Helps in maintaining the body's water balance (prevents dehydration).

Deficiency Diseases: Muscle and body weakness.

Sodium:

Sources: Common salt (Sodium Chloride).

Importance: Helps keep body fluids in normal balance, and aids nervous system and muscle function.

Deficiency Diseases: Muscle cramps and dehydration.

Iodine:

Sources: Iodized salt and seafood.

Importance: Constituent of the thyroxine hormone secreted by the thyroid gland.

Deficiency Diseases: Goiter (swelling of the thyroid gland in the neck) and mental disability in children.

Fluorine:

Sources: Water supply, tea, and fish.

Importance: Makes tooth enamel hard and prevents dental caries.

Deficiency Disease: Dental caries (tooth decay).

Roughage & Water

85%

Why are they vital?

Roughage(Fiber):Addsbulk tofoodand prevents constipation. Found in fruits and green veggies.

Water: Transports nutrients and regulates body temperature.

The Balanced Diet

A balanced diet contains ****ALL**** nutrients in right proportions. It keeps us healthy and active!

- ★ More Grains & Cereals.
- ★ Plenty of Fruits & Veggies.
- ★ Moderate Proteins.
- ★ Very little Fats & Sweets.



Cooking it Right!

- ✗ **Don't wash** after cutting! (Vitamins wash away).
- ✗ **Avoid overcooking** (Heat destroys Vitamin C).
- ✓ Eat more **raw fruits** and salads.
- ✓ Wash grains only 1-2 times to save minerals.

Nutritional Deficiencies

Major Diseases:

Kwashiorkor: Caused by severe protein deficiency. Leads to a swollen belly.

Marasmus: Caused by lack of proteins, carbs, and fats. Leads to extreme weakness and weight loss.

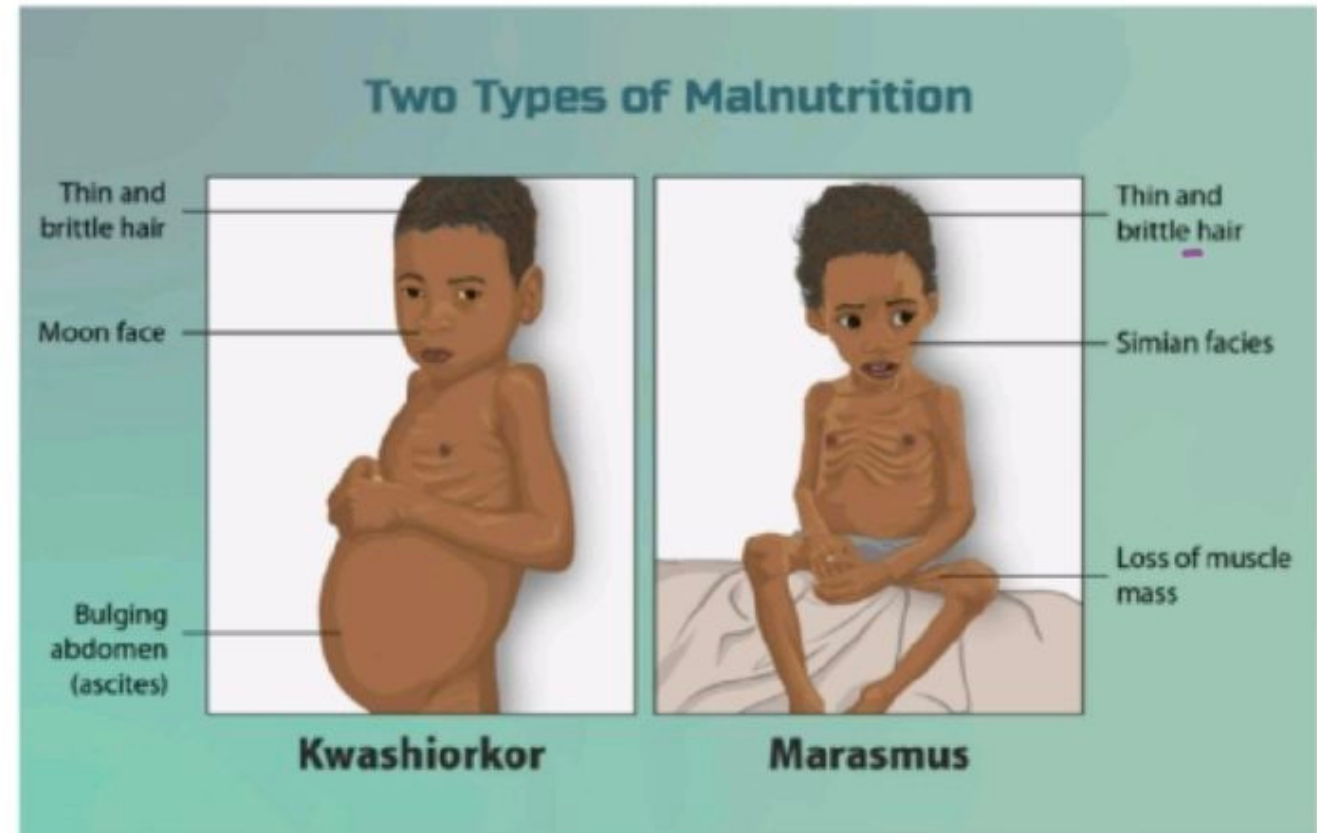


Image Attribution and License:  <https://www.flickr.com/photos/14848070@N00/10000000000/>