

Wellness

CAMPUS

MODULE 3 GROW FOODS



GROW FOODS

There are many different sources of protein:

- meat (pork, beef, chicken)
- seafood and fish
- eggs
- plant sources (e.g. tofu, nuts, beans, legumes)
- milk and dairy products (e.g. yoghurt and cheese)



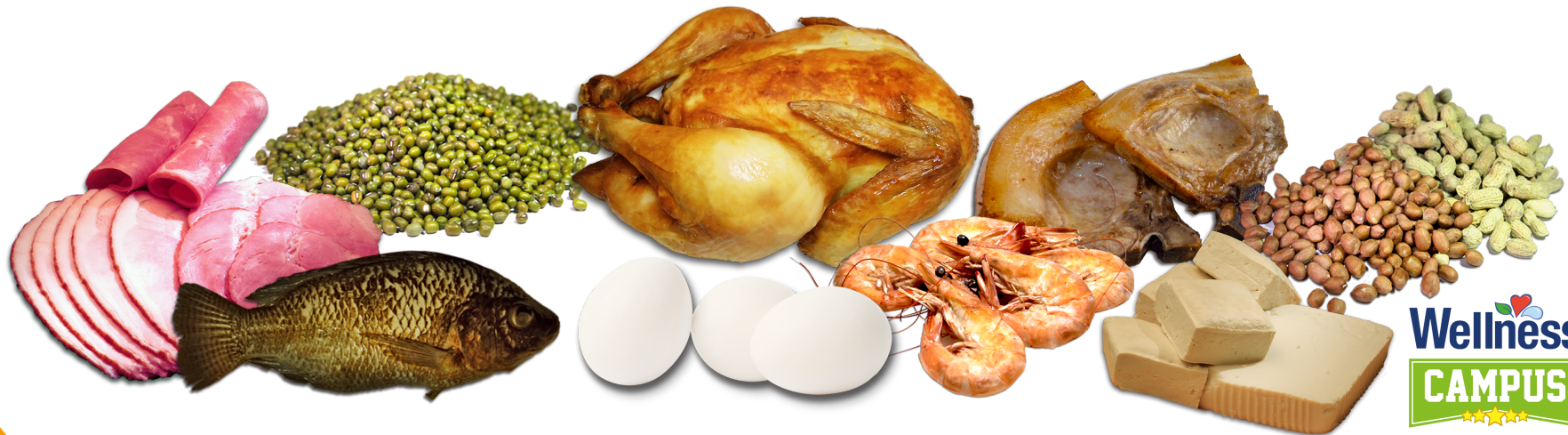
GROW FOODS

It is important that we get our protein from different sources, and not just one or two, because different sources have different kinds of amino acids and nutrients.



GROW FOODS

Eating different sources of protein raises your chances of getting all the amino acids that your body needs.



GROW FOODS

Complete proteins contain all the amino acids needed by the body.



GROW FOODS

Complete proteins contain all the amino acids needed by the body.

Examples are egg, meat, fish, poultry, milk, cheese, and yogurt.



GROW FOODS

Complete proteins contain all the amino acids needed by the body.

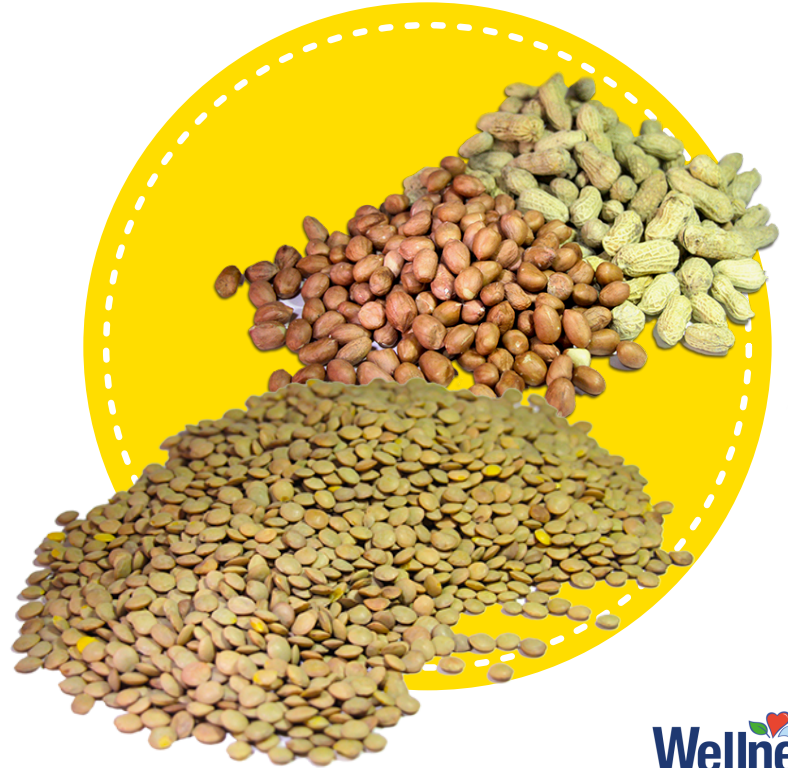
Examples are egg, meat, fish, poultry, milk, cheese, and yogurt.

These promote growth and development, and maintain life.



GROW FOODS

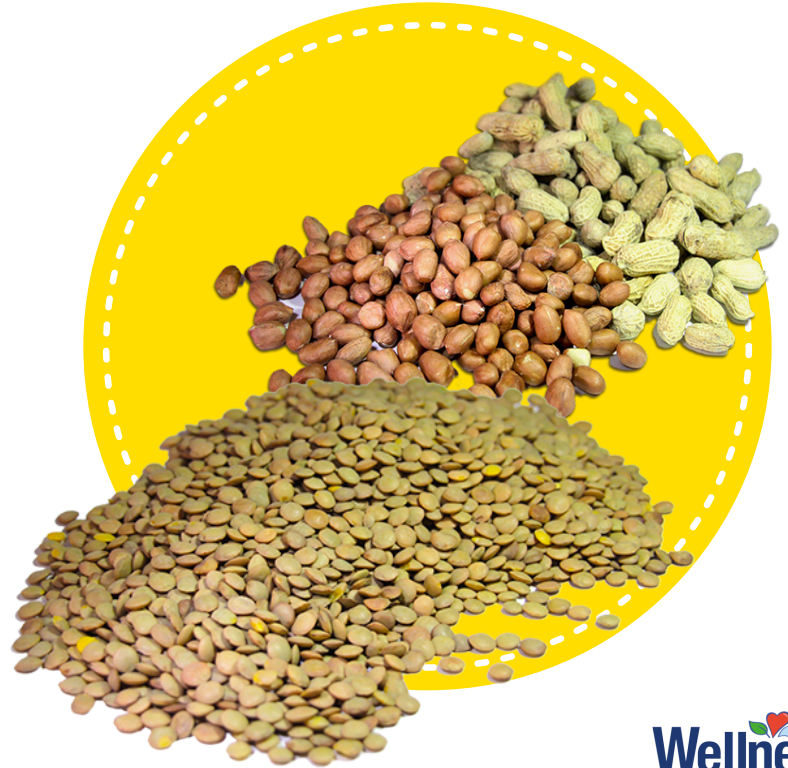
Partially complete proteins contain some, but not all, amino acids needed by the body.



GROW FOODS

Partially complete proteins contain some, but not all, amino acids needed by the body.

Examples are legumes and nuts.

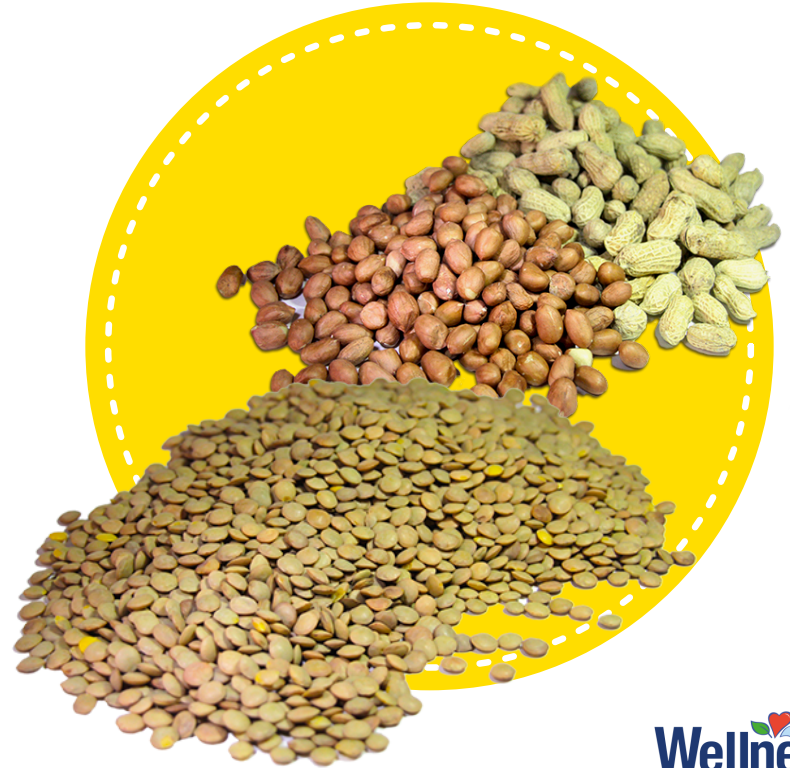


GROW FOODS

Partially complete proteins contain some, but not all, amino acids needed by the body.

Examples are legumes and nuts.

These maintain life but not growth and development.



GROW FOODS

Incomplete proteins contain very little amino acids needed by the body.



GROW FOODS

Incomplete proteins contain very little amino acids needed by the body.

Examples are gelatin, bread, and suman.



GROW FOODS

Incomplete proteins contain very little amino acids needed by the body.

Examples are gelatin, bread, and suman.

These cannot support neither life nor growth.



MICRONUTRIENT DEFICIENCIES

The following are micronutrient deficiencies associated with a lack of Grow foods are...

- iron deficiency anemia
- zinc deficiency
- iodine deficiency disorder
- vitamins A, B, E and K deficiency

IRON DEFICIENCY ANEMIA

FUNCTIONS OF IRON

FUNCTIONS OF IRON

- Iron is found in the blood which helps transport oxygen.

FUNCTIONS OF IRON

- Iron is found in the blood which helps transport oxygen.
- Low iron results in low hemoglobin concentration in the blood.

FUNCTIONS OF IRON

- Iron is found in the blood which helps transport oxygen.
- Low iron results in low hemoglobin concentration in the blood.
- Hemoglobin is the component in blood that carries oxygen throughout the body for energy metabolism.

SIGNS & SYMPTOMS OF IRON DEFICIENCY

SIGNS & SYMPTOMS OF IRON DEFICIENCY

- fatigue



SIGNS & SYMPTOMS OF IRON DEFICIENCY

- fatigue
- weakness



SIGNS & SYMPTOMS OF IRON DEFICIENCY

- fatigue
- weakness
- pale skin



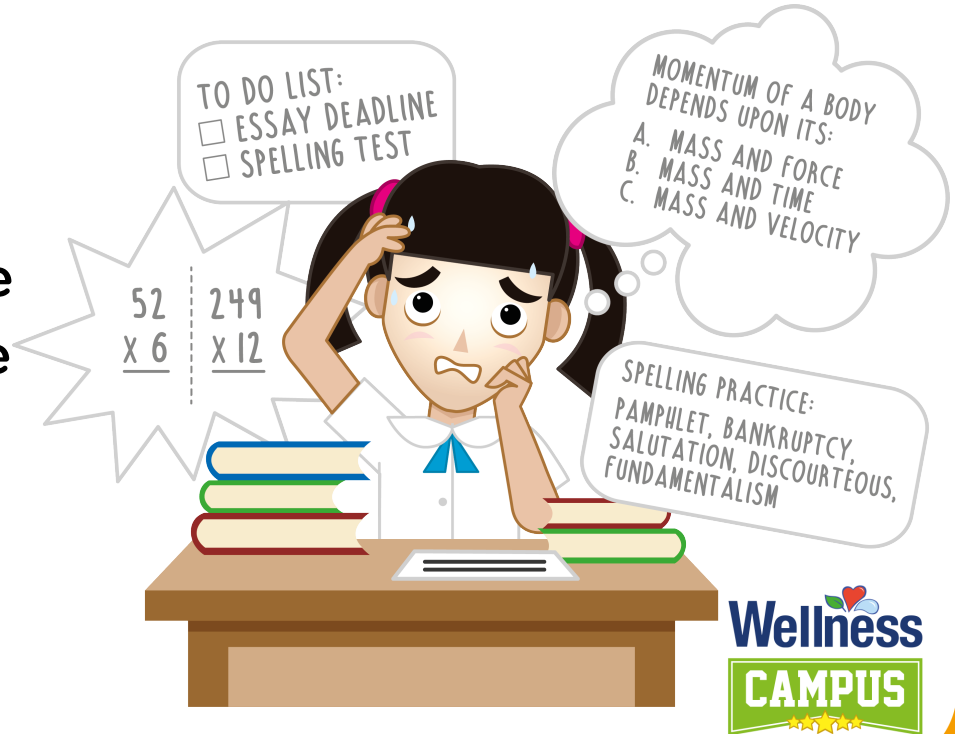
SIGNS & SYMPTOMS OF IRON DEFICIENCY

- fatigue
- weakness
- pale skin
- poor cognitive performance



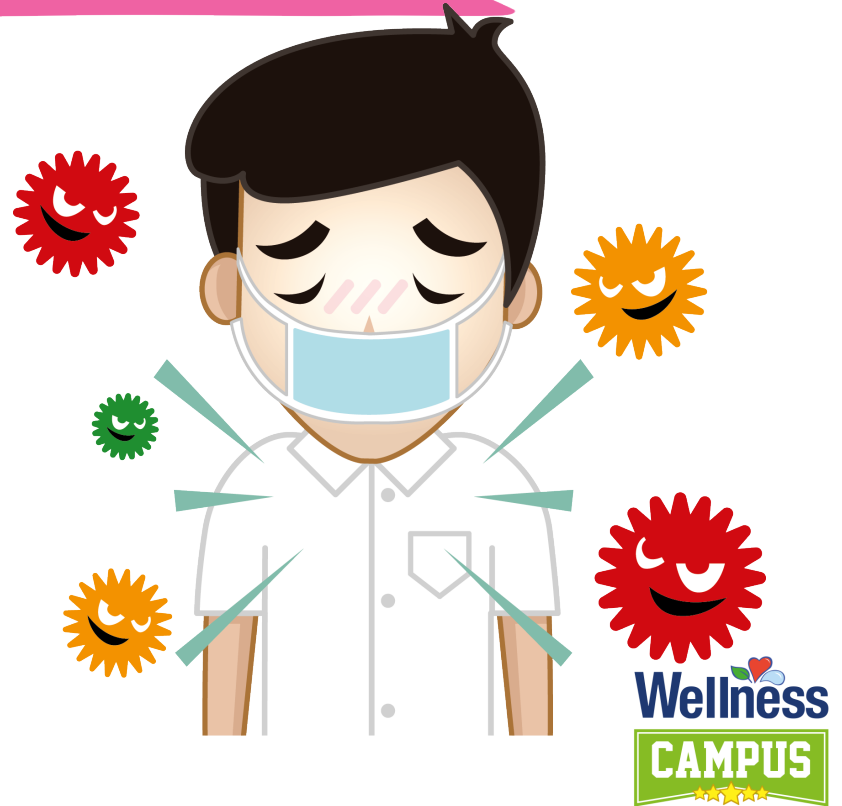
SIGNS & SYMPTOMS OF IRON DEFICIENCY

- fatigue
- weakness
- pale skin
- poor cognitive performance
- impaired work performance



SIGNS & SYMPTOMS OF IRON DEFICIENCY

- fatigue
- weakness
- pale skin
- poor cognitive performance
- impaired work performance
- weak resistance to infectious diseases



SIGNIFICANT SOURCES OF IRON

- red meats
- liver
- poultry
- fish
- shellfish
- legumes



ZINC DEFICIENCY

FUNCTIONS OF ZINC

FUNCTIONS OF ZINC

- normal taste



FUNCTIONS OF ZINC

- normal taste
- wound healing



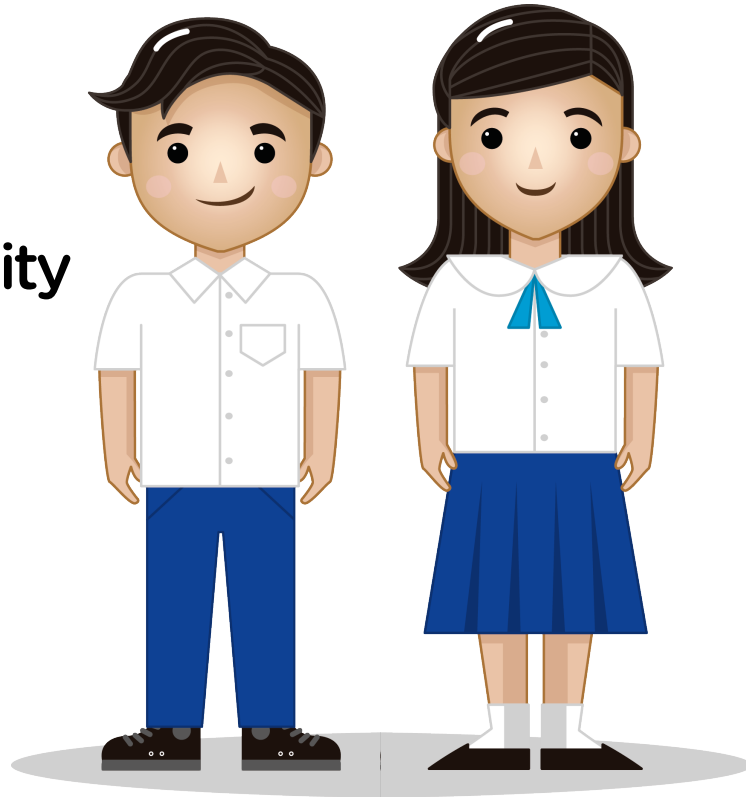
FUNCTIONS OF ZINC

- normal taste
- wound healing
- strengthens immunity



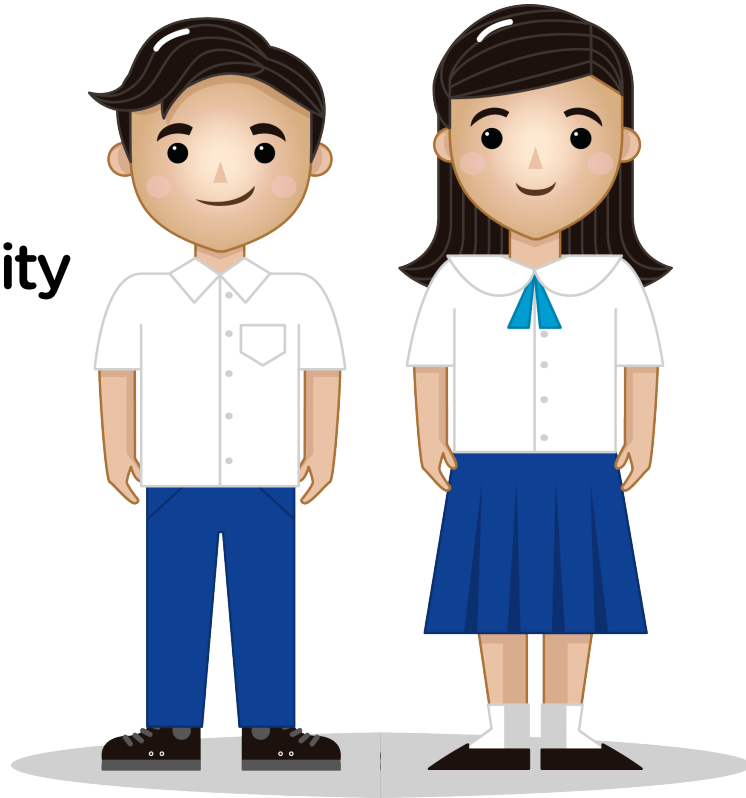
FUNCTIONS OF ZINC

- normal taste
- wound healing
- strengthens immunity
- secondary sexual maturation



FUNCTIONS OF ZINC

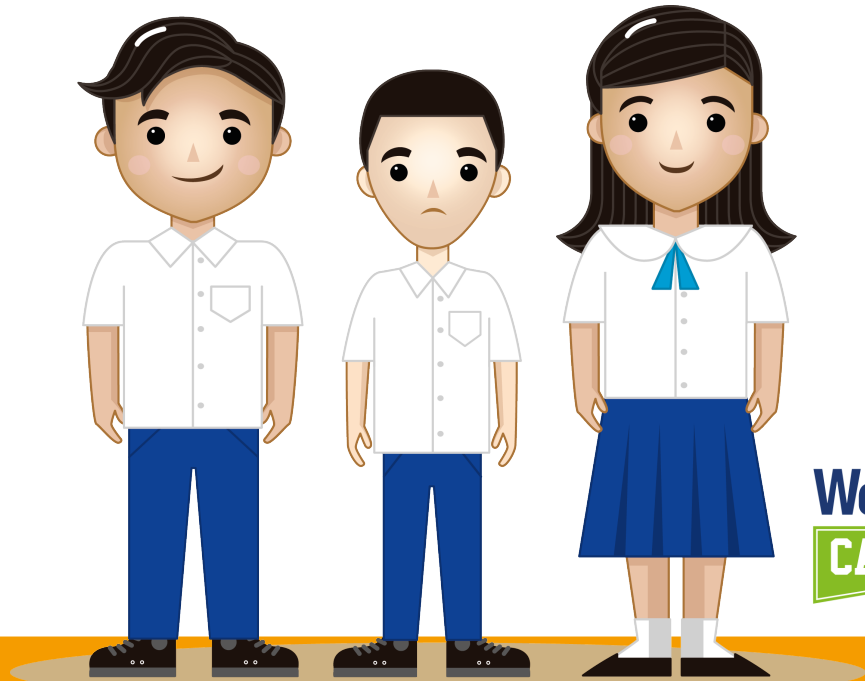
- normal taste
- wound healing
- strengthens immunity
- secondary sexual maturation
- sperm production



SIGNS & SYMPTOMS OF ZINC DEFICIENCY

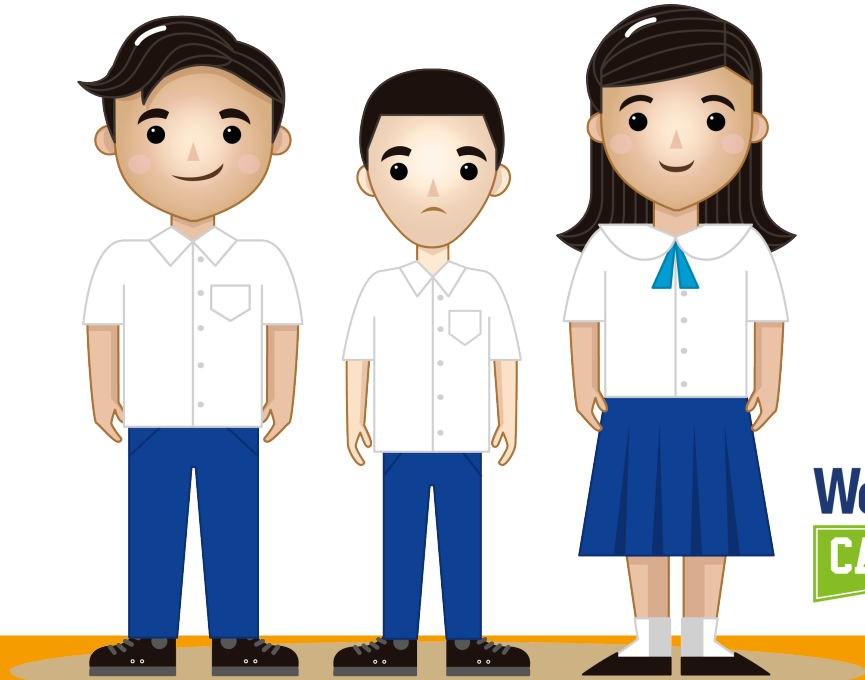
SIGNS & SYMPTOMS OF ZINC DEFICIENCY

- stunted growth



SIGNS & SYMPTOMS OF ZINC DEFICIENCY

- stunted growth
- delayed maturation of sexual organs



SIGNS & SYMPTOMS OF ZINC DEFICIENCY

- stunted growth
- delayed maturation of sexual organs
- weak resistance to infectious diseases



SIGNS & SYMPTOMS OF ZINC DEFICIENCY

- stunted growth
- delayed maturation of sexual organs
- weak resistance to infectious diseases
- hair loss



SIGNS & SYMPTOMS OF ZINC DEFICIENCY

- stunted growth
- delayed maturation of sexual organs
- weak resistance to infectious diseases
- hair loss
- eye and skin lesions



SIGNS & SYMPTOMS OF ZINC DEFICIENCY

- stunted growth
- delayed maturation of sexual organs
- weak resistance to infectious diseases
- hair loss
- eye and skin lesions
- poor appetite



SIGNS & SYMPTOMS OF ZINC DEFICIENCY

Chronic zinc deficiency may lead to poor motor development and cognitive performance.



SIGNIFICANT SOURCES OF ZINC

- seafood (oyster and crab)
- beef
- milk and dairy products (yogurt, cheese)
- whole grains

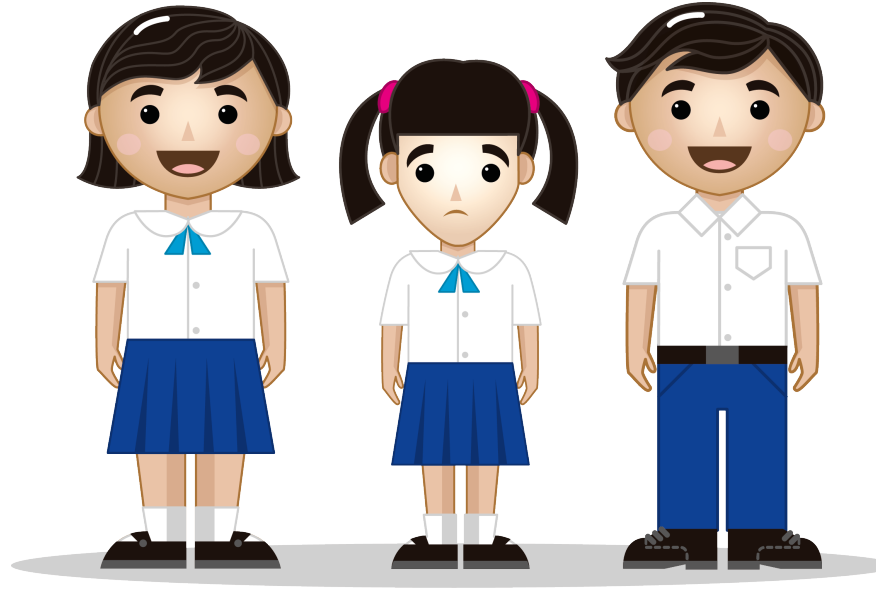


IODINE DEFICIENCY DISORDER

FUNCTIONS OF IODINE

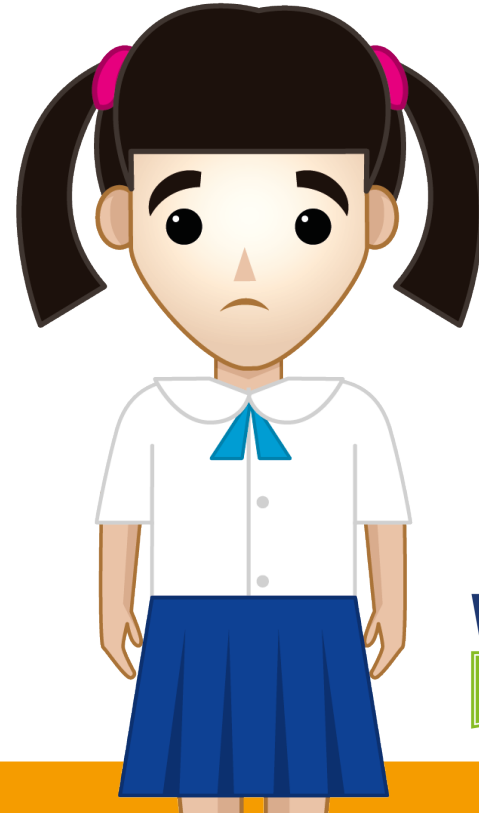
FUNCTIONS OF IODINE

- component of thyroid hormones which help regulate growth, development and metabolism



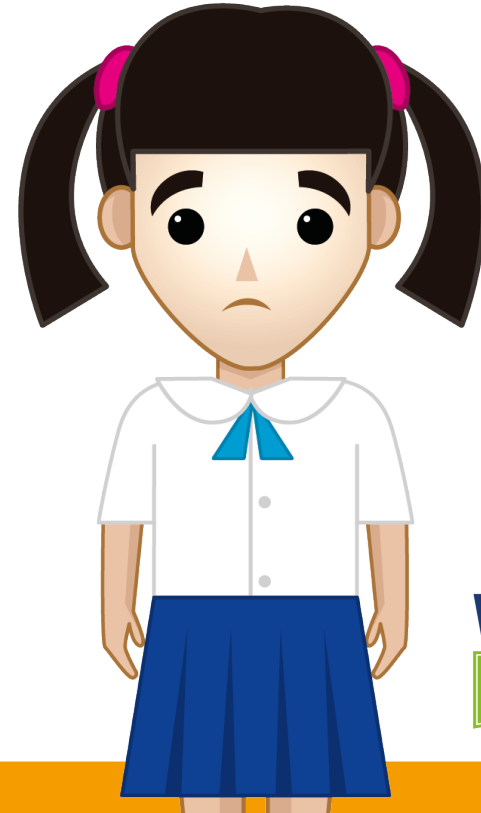
SIGNS & SYMPTOMS OF IODINE DEFICIENCY

- enlargement of the thyroid gland (goiter)



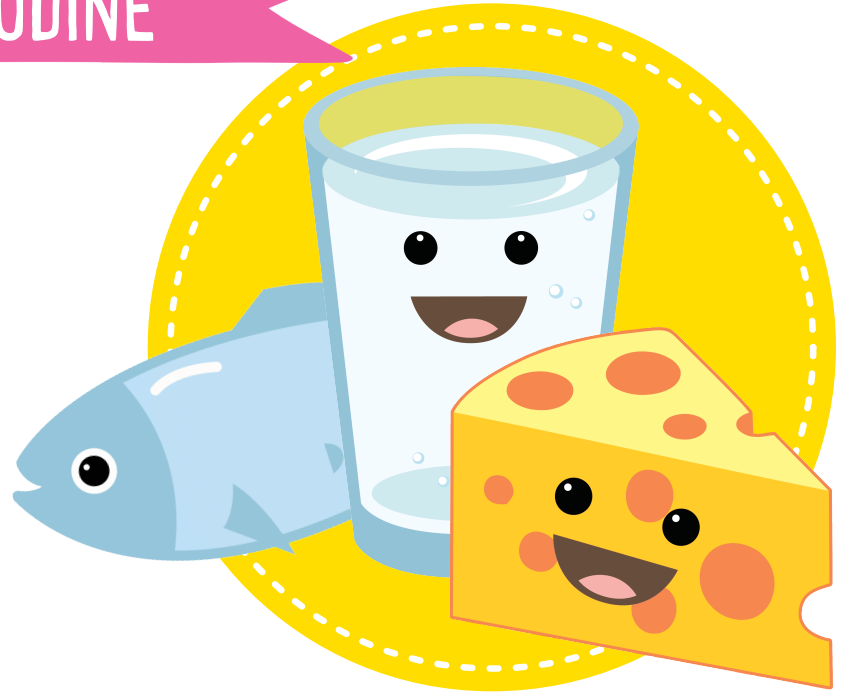
SIGNS & SYMPTOMS OF IODINE DEFICIENCY

- enlargement of the thyroid gland (goiter)
- mental and physical retardation among infants and children



SIGNIFICANT SOURCES OF IODINE

- iodized salt
- seafood
- dairy products



VITAMIN A DEFICIENCY

FUNCTIONS OF VITAMIN A

FUNCTIONS OF VITAMIN A

- maintains clear vision



FUNCTIONS OF VITAMIN A

- maintains clear vision
- keeps skin smooth



FUNCTIONS OF VITAMIN A

- maintains clear vision
- keeps skin smooth
- helps in development of bones and teeth



FUNCTIONS OF VITAMIN A

- maintains clear vision
- keeps skin smooth
- helps in development of bones and teeth
- strengthens immunity



SIGNS & SYMPTOMS OF VIT. A DEFICIENCY

SIGNS & SYMPTOMS OF VIT. A DEFICIENCY

- night blindness (slow recovery of vision after flashes of bright light at night or inability to see in dim light)



SIGNS & SYMPTOMS OF VIT. A DEFICIENCY

- night blindness (slow recovery of vision after flashes of bright light at night or inability to see in dim light)
- weak resistance to infectious diseases



SIGNIFICANT SOURCES OF VITAMIN A

- fortified milk
- cheese
- eggs
- liver



VITAMIN B DEFICIENCY

FUNCTIONS OF VITAMIN B (B1, B2, B3, B6 & B6)

FUNCTIONS OF VITAMIN B (B1, B2, B3, B6 & B6)

- helps in energy metabolism



SIGNS & SYMPTOMS OF VIT. B DEFICIENCY

SIGNS & SYMPTOMS OF VIT. B DEFICIENCY

- **swollen tongue**



SIGNS & SYMPTOMS OF VIT. B DEFICIENCY

- swollen tongue
- irritated or inflamed corners of the mouth



SIGNS & SYMPTOMS OF VIT. B DEFICIENCY

- swollen tongue
- irritated or inflamed corners of the mouth
- poor appetite



SIGNS & SYMPTOMS OF VIT. B DEFICIENCY

- swollen tongue
- irritated or inflamed corners of the mouth
- poor appetite
- fatigue



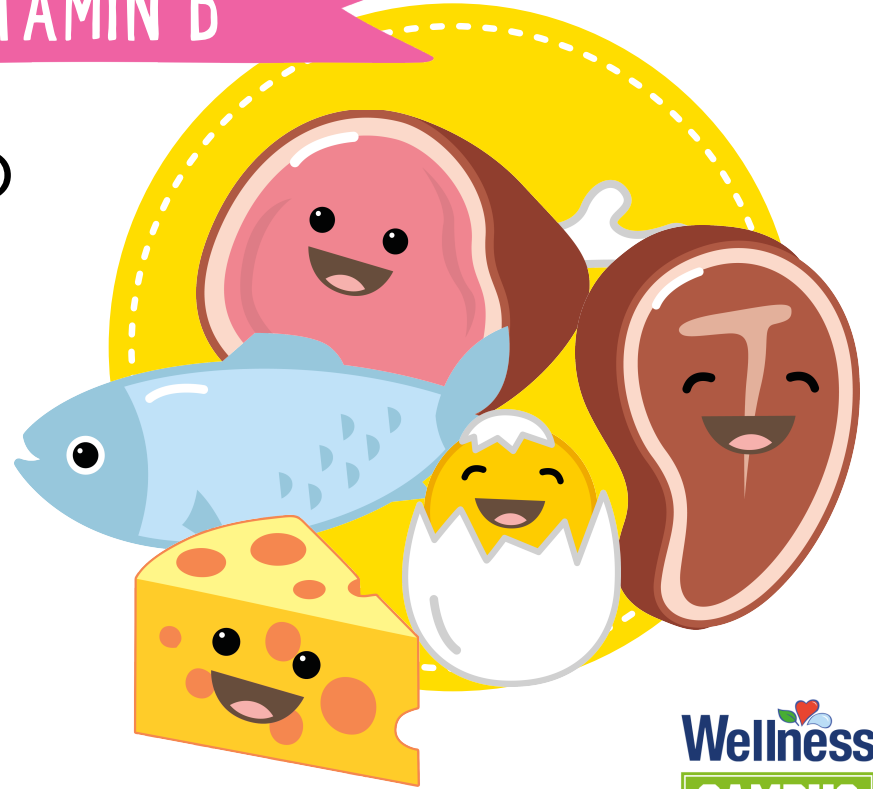
SIGNS & SYMPTOMS OF VIT. B DEFICIENCY

- swollen tongue
- irritated or inflamed corners of the mouth
- poor appetite
- fatigue
- weakness



SIGNIFICANT SOURCES OF VITAMIN B

- milk products (yogurt, cheese)
- liver
- eggs
- meat
- poultry
- fish

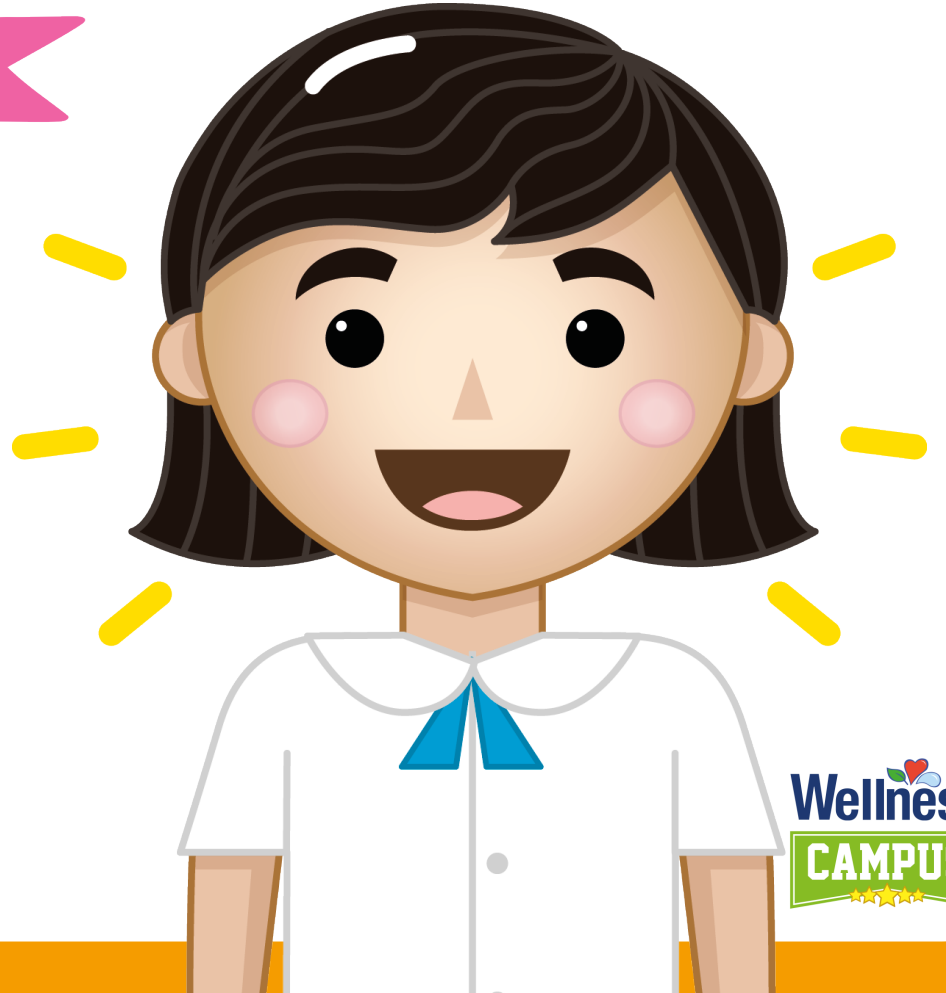


VITAMIN E DEFICIENCY

FUNCTIONS OF VITAMIN E

FUNCTIONS OF VITAMIN E

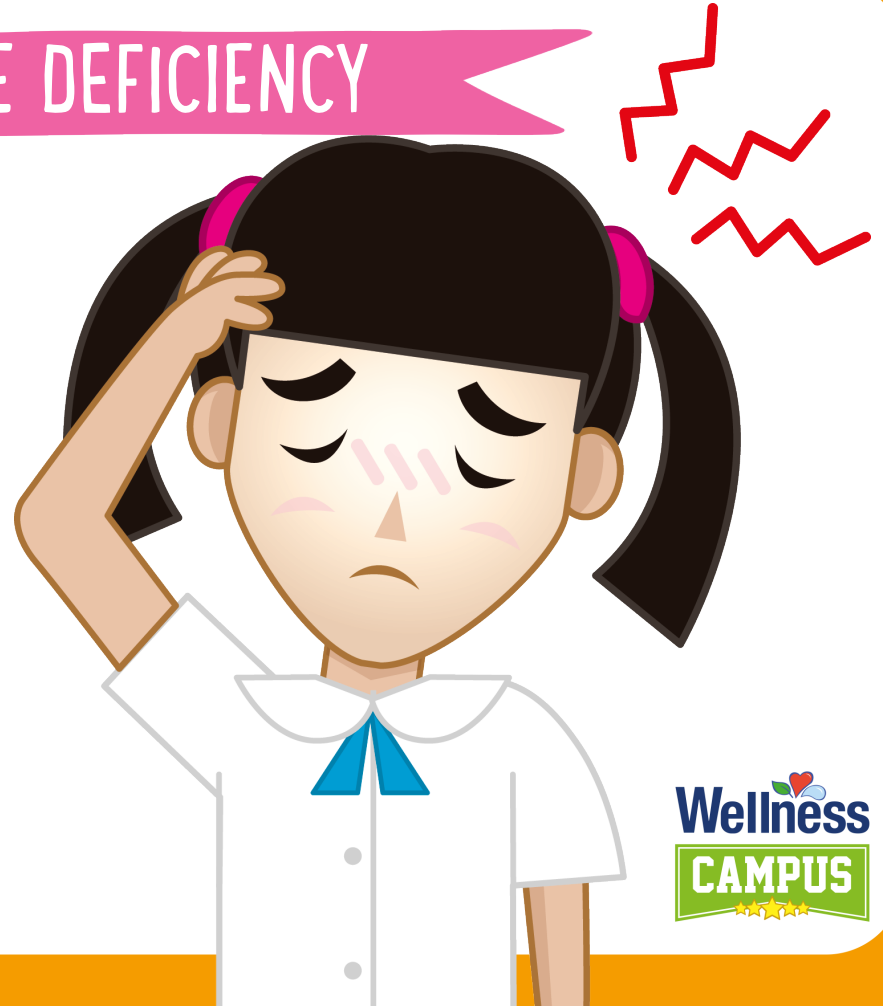
- antioxidant (a substance that prevents or delays some types of cell damage)



SIGNS & SYMPTOMS OF VIT. E DEFICIENCY

SIGNS & SYMPTOMS OF VIT. E DEFICIENCY

Vitamin E deficiency is uncommon but deficiency can cause a type of anemia.



SIGNIFICANT SOURCES OF VITAMIN E

- liver
- egg yolks



VITAMIN K DEFICIENCY

FUNCTIONS OF VITAMIN K

FUNCTIONS OF VITAMIN K

- aids in blood clotting



SIGNS & SYMPTOMS OF VIT. K DEFICIENCY

SIGNS & SYMPTOMS OF VIT. K DEFICIENCY

- hemorrhage
(excessive bleeding)



SIGNIFICANT SOURCES OF VITAMIN K

- liver
- milk

