

Wellness

CAMPUS

MODULE 3 GROW FOODS



# GROW FOODS

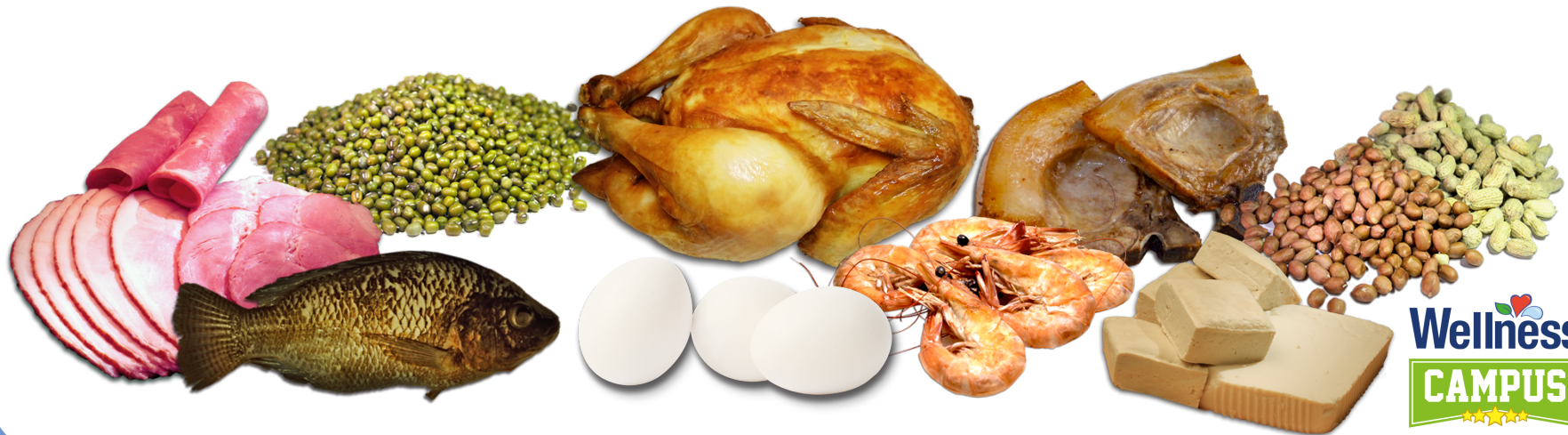
There are many different sources of protein:

- 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.

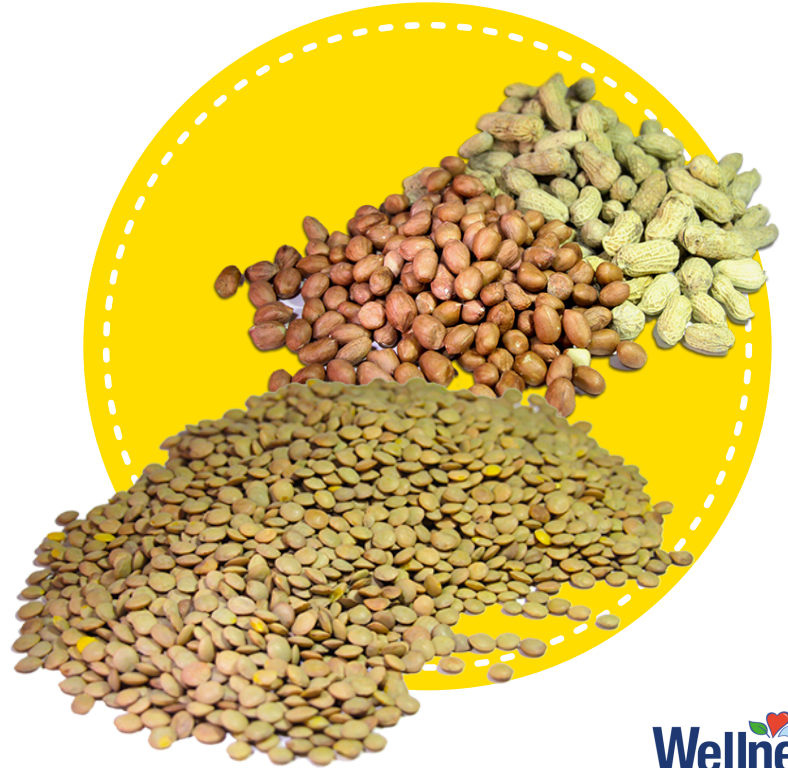
Examples are egg, meat, fish, poultry, milk, cheese, and yogurt.

These promote growth and development, and maintain life.



# GROW FOODS

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

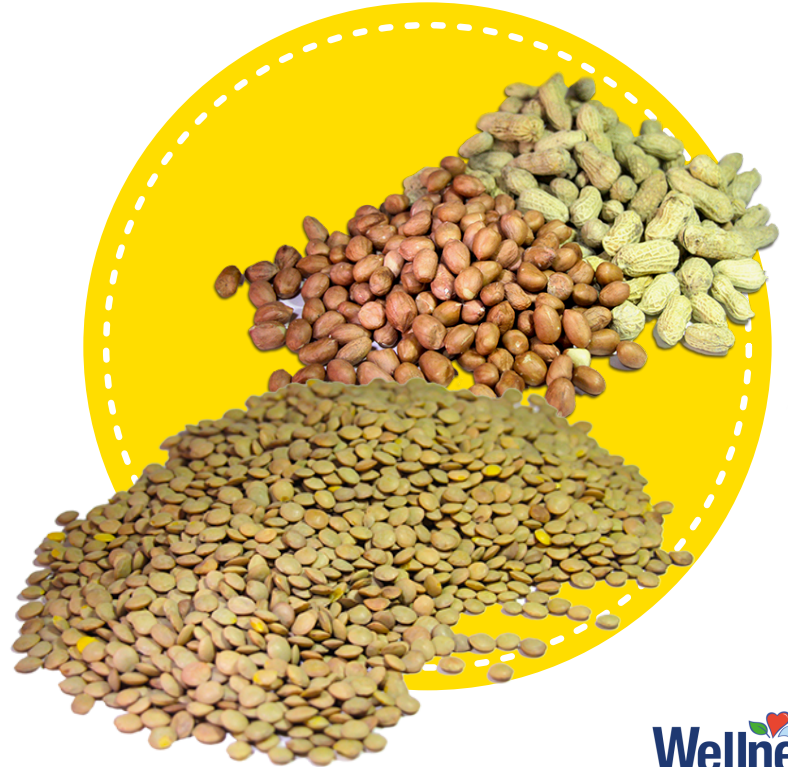




# GROW FOODS

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

Examples are legumes and nuts.

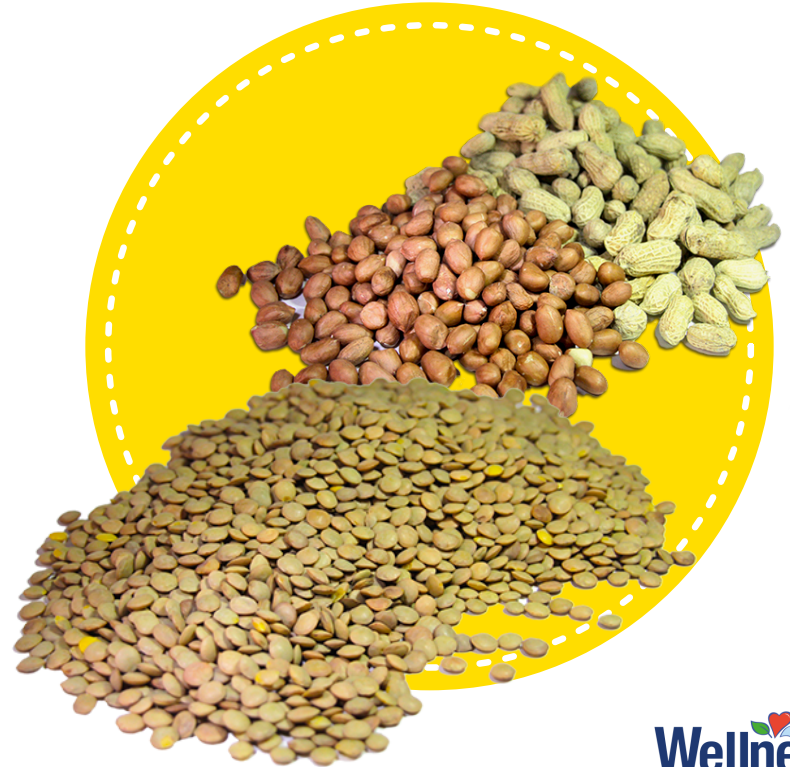


# GROW FOODS

**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

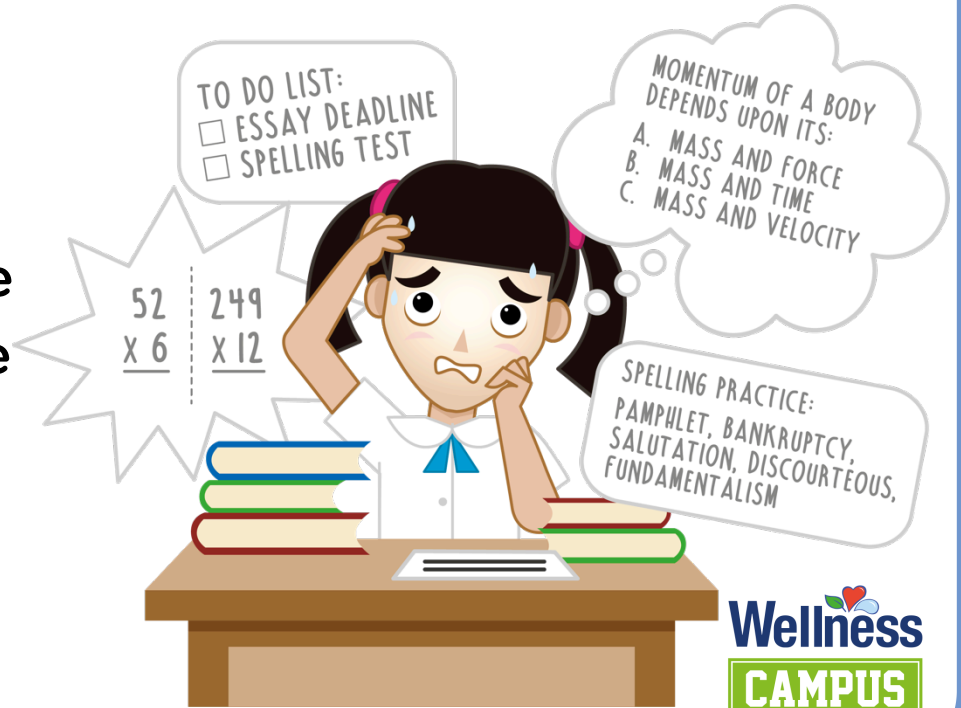
- fatigue
- weakness
- pale skin
- poor cognitive performance





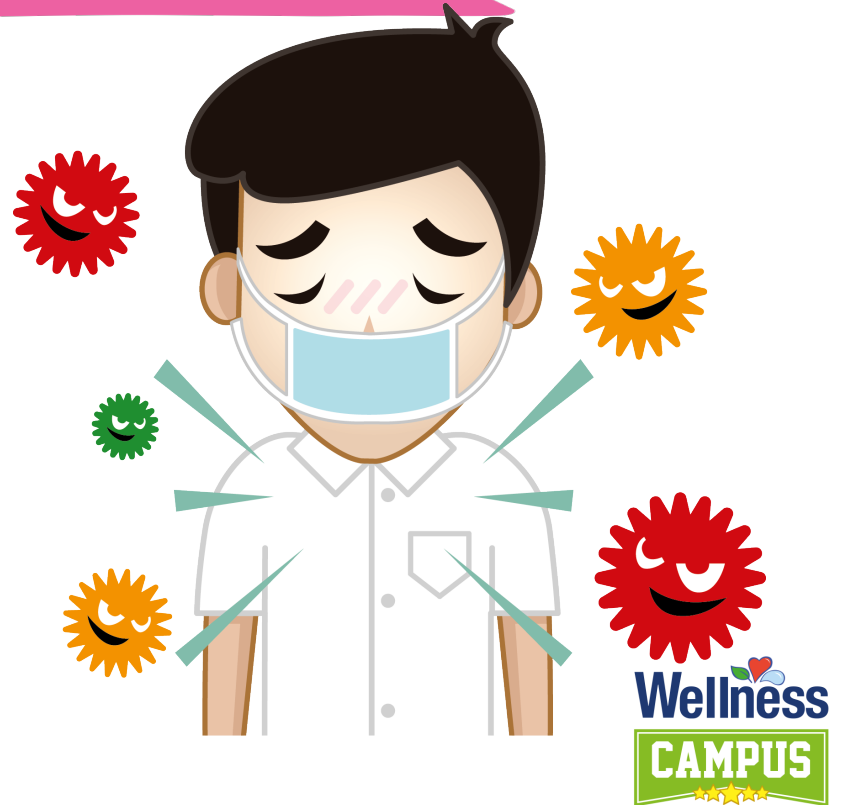
# SIGNS & SYMPTOMS OF IRON DEFICIENCY

- 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

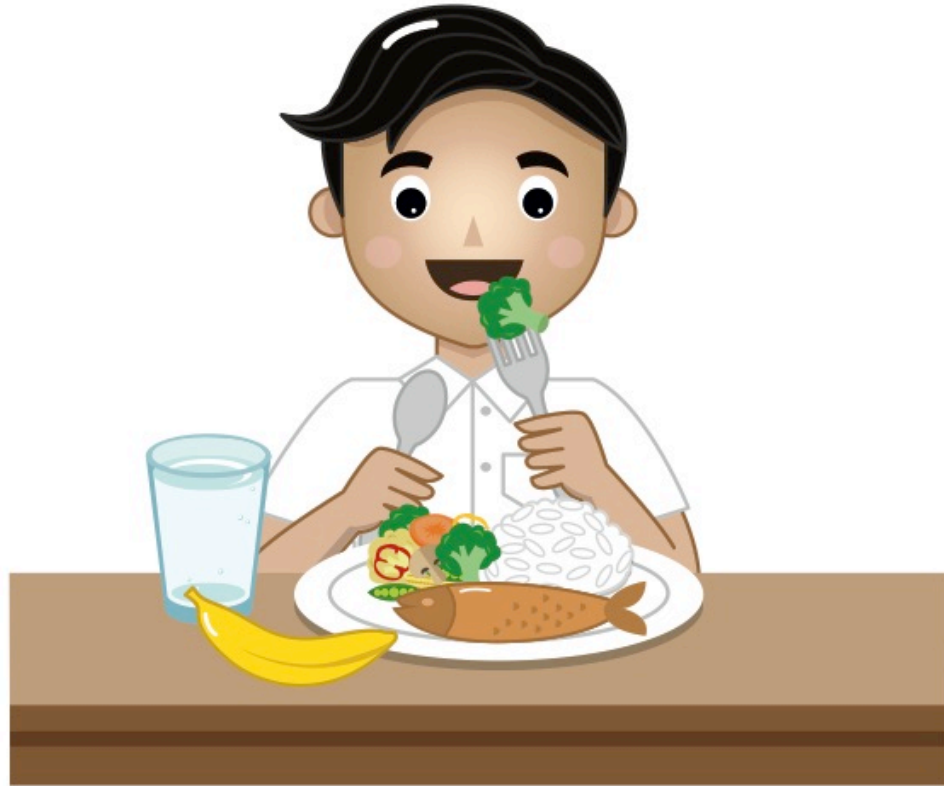


# ZINC DEFICIENCY

# FUNCTIONS OF ZINC

# FUNCTIONS OF ZINC

- normal taste



# FUNCTIONS OF ZINC

- normal taste
- wound healing



## FUNCTIONS OF ZINC

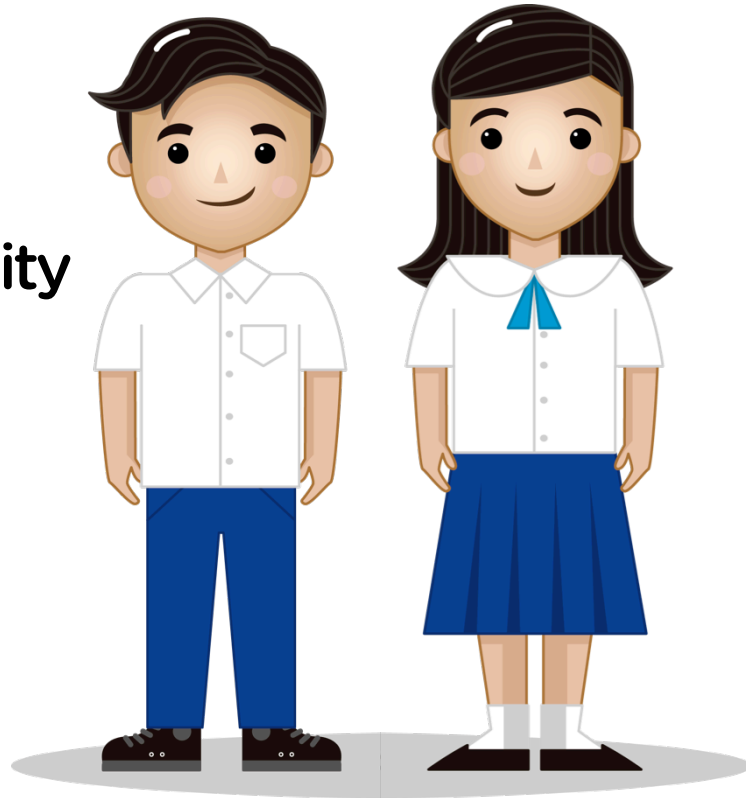
- normal taste
- wound healing
- strengthens immunity





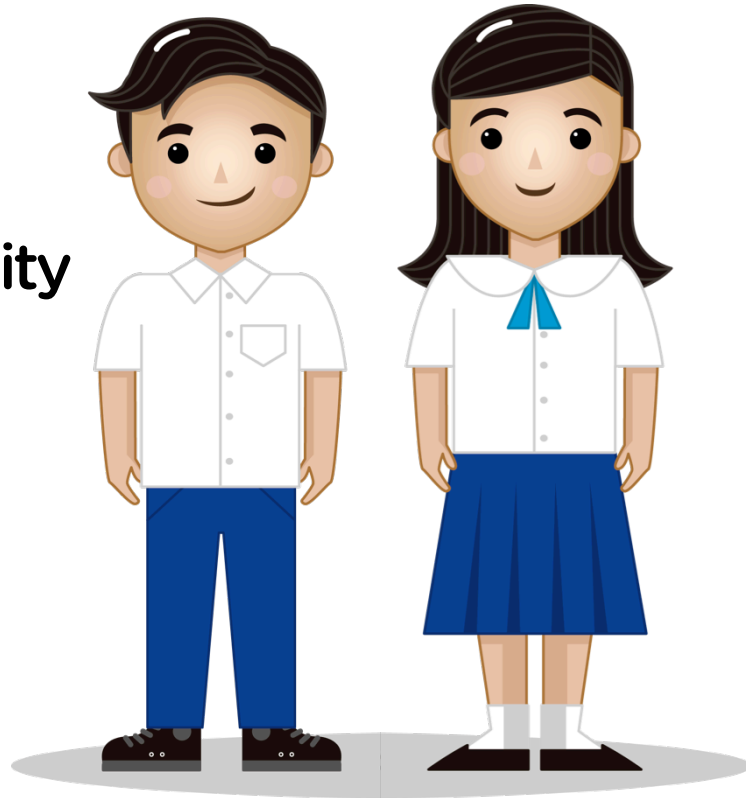
# FUNCTIONS OF ZINC

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



# FUNCTIONS OF ZINC

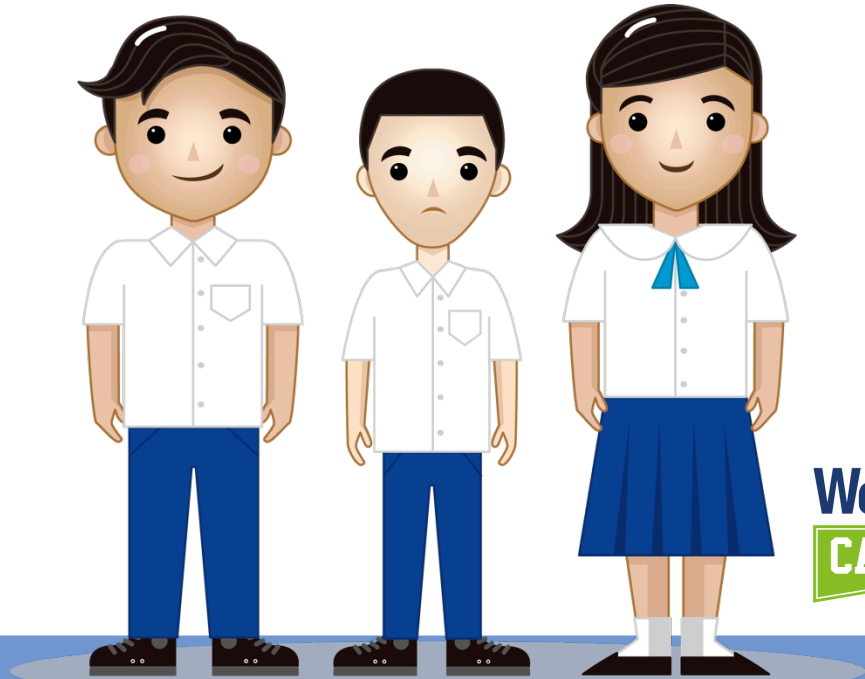
- normal taste
- wound healing
- strengthens immunity
- secondary sexual maturation
- sperm production



# SIGNS & SYMPTOMS OF ZINC DEFICIENCY

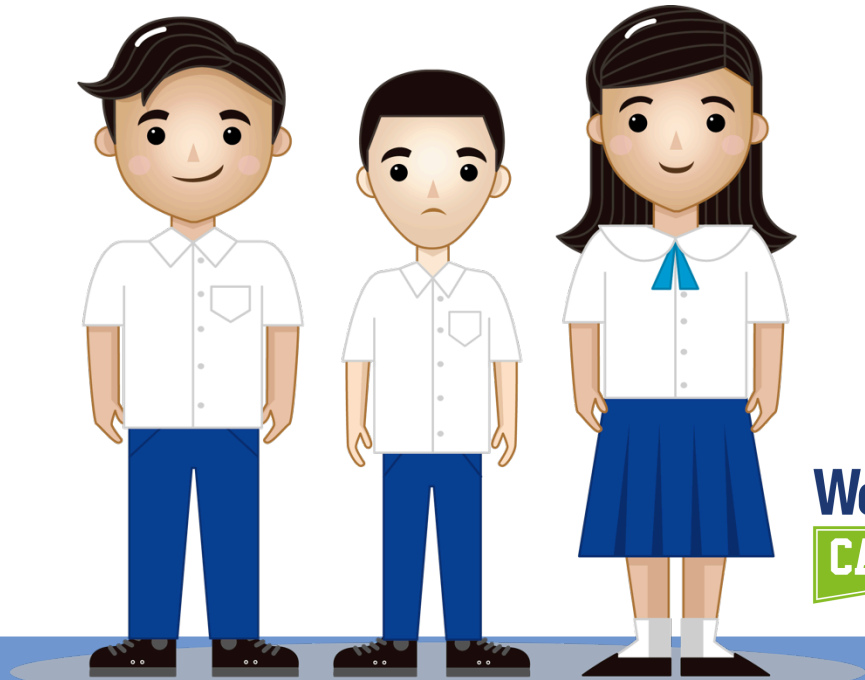
# SIGNS & SYMPTOMS OF ZINC DEFICIENCY

- 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 also cause damage to the central nervous system and brain, and 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

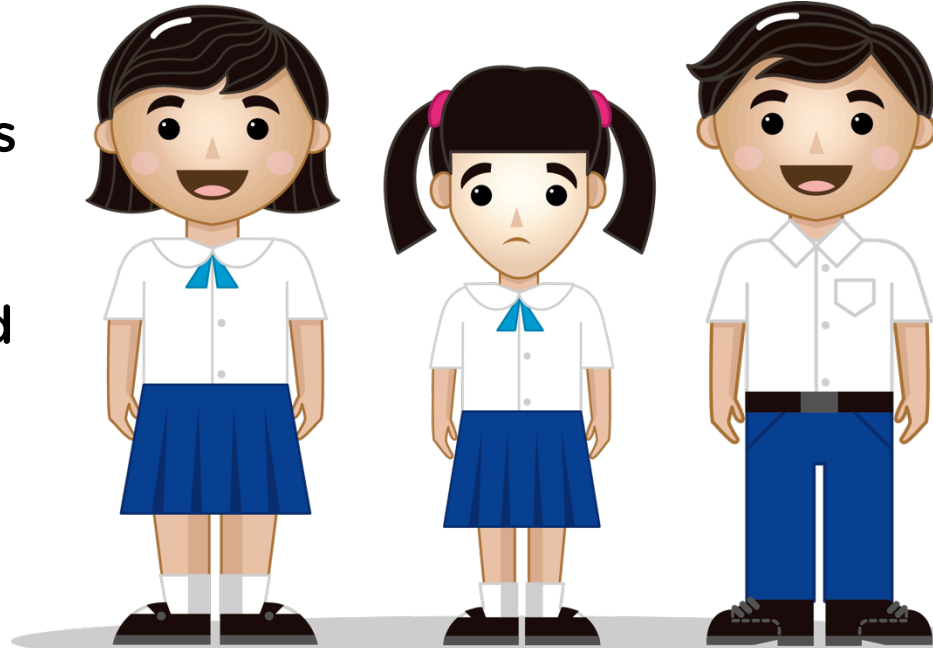


# IODINE DEFICIENCY DISORDER

# FUNCTIONS OF IODINE

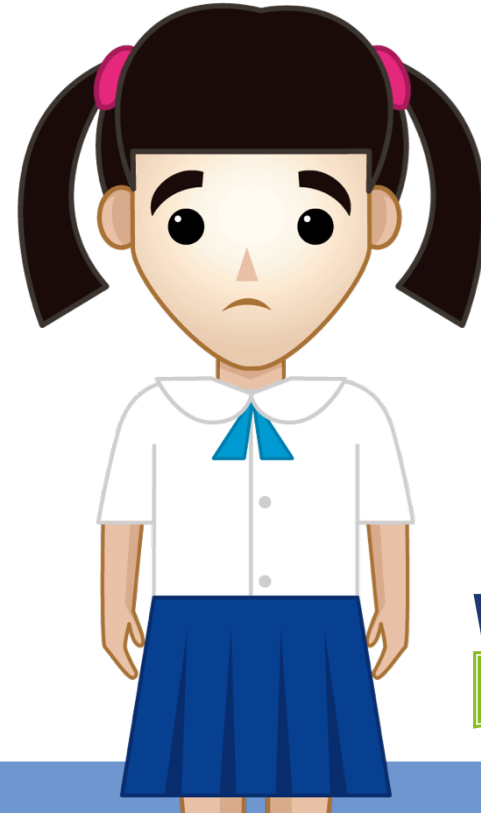
# FUNCTIONS OF IODINE

- component in thyroid hormones which helps regulate growth, development and metabolism



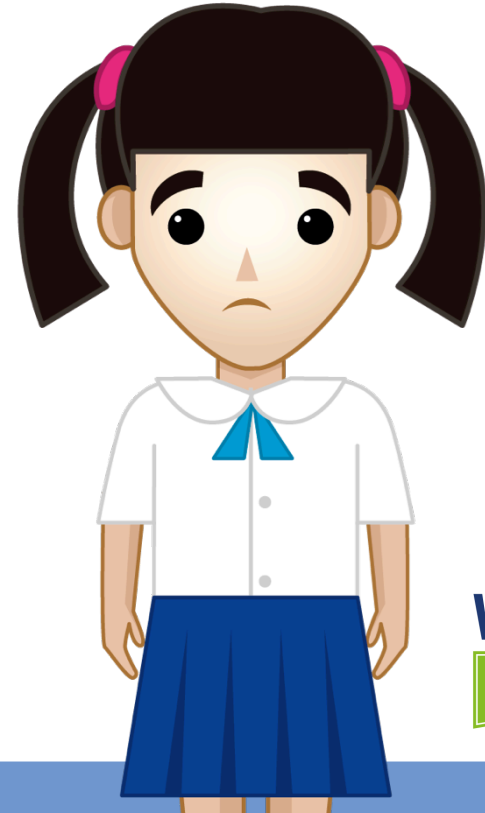
# SIGNS & SYMPTOMS OF IODINE DEFICIENCY

- enlargement of the thyroid gland (goiter)



# SIGNS & SYMPTOMS OF IODINE DEFICIENCY

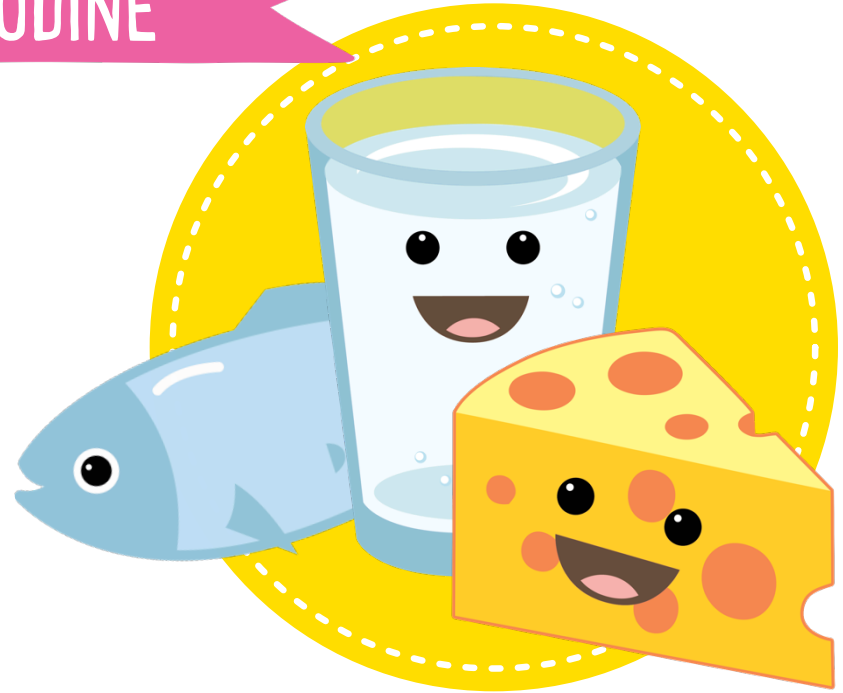
- enlargement of the thyroid gland (goiter)
- mental and physical retardation among infants and children





# SIGNIFICANT SOURCES OF IODINE

- iodized salt
- seafood
- dairy products



# VITAMIN A DEFICIENCY

# FUNCTIONS OF VITAMIN A

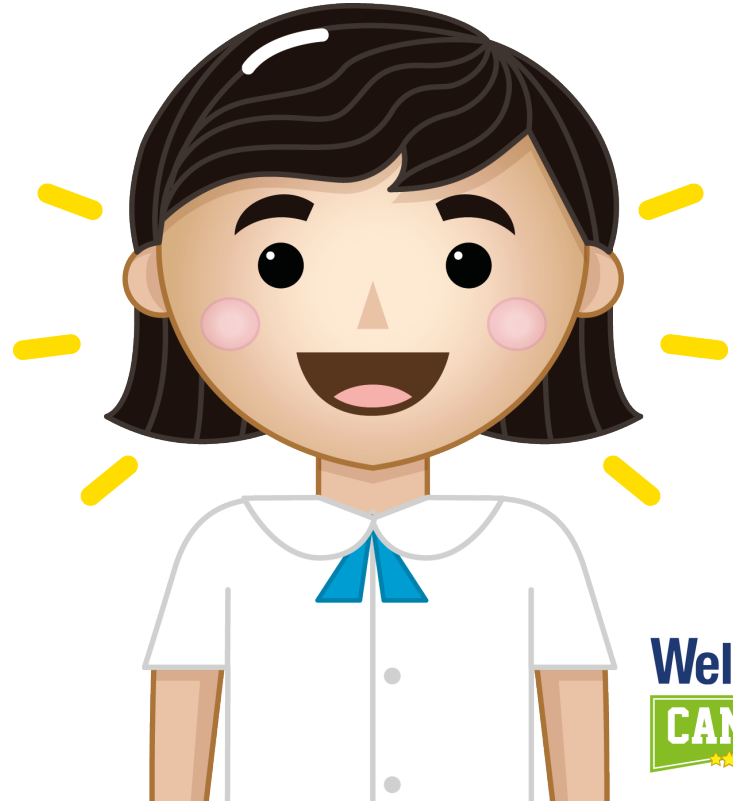
# FUNCTIONS OF VITAMIN A

- 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



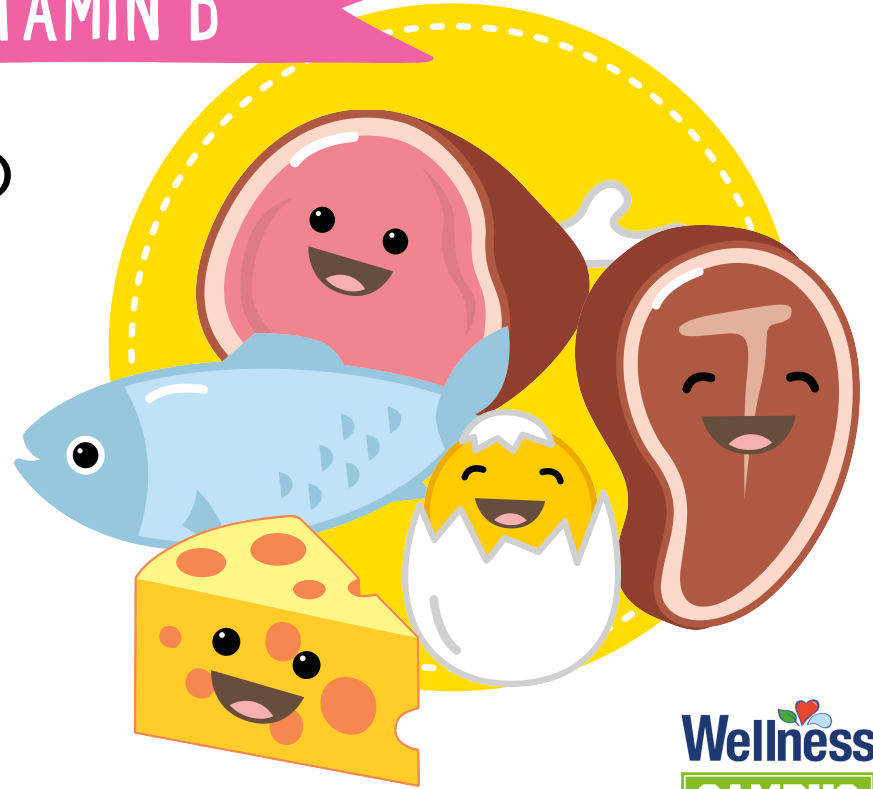
# SIGNS & SYMPTOMS OF VIT. B DEFICIENCY

- 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

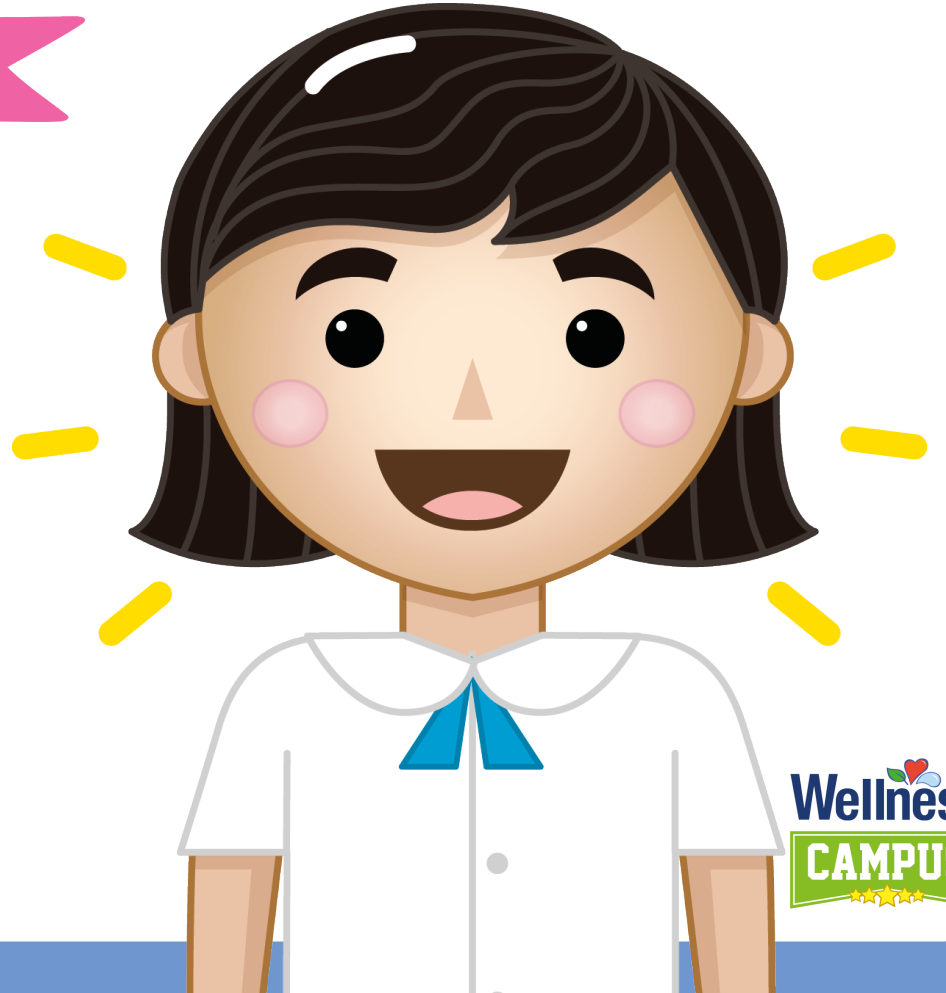


# VITAMIN E DEFICIENCY

# FUNCTIONS OF VITAMIN E

## FUNCTIONS OF VITAMIN E

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

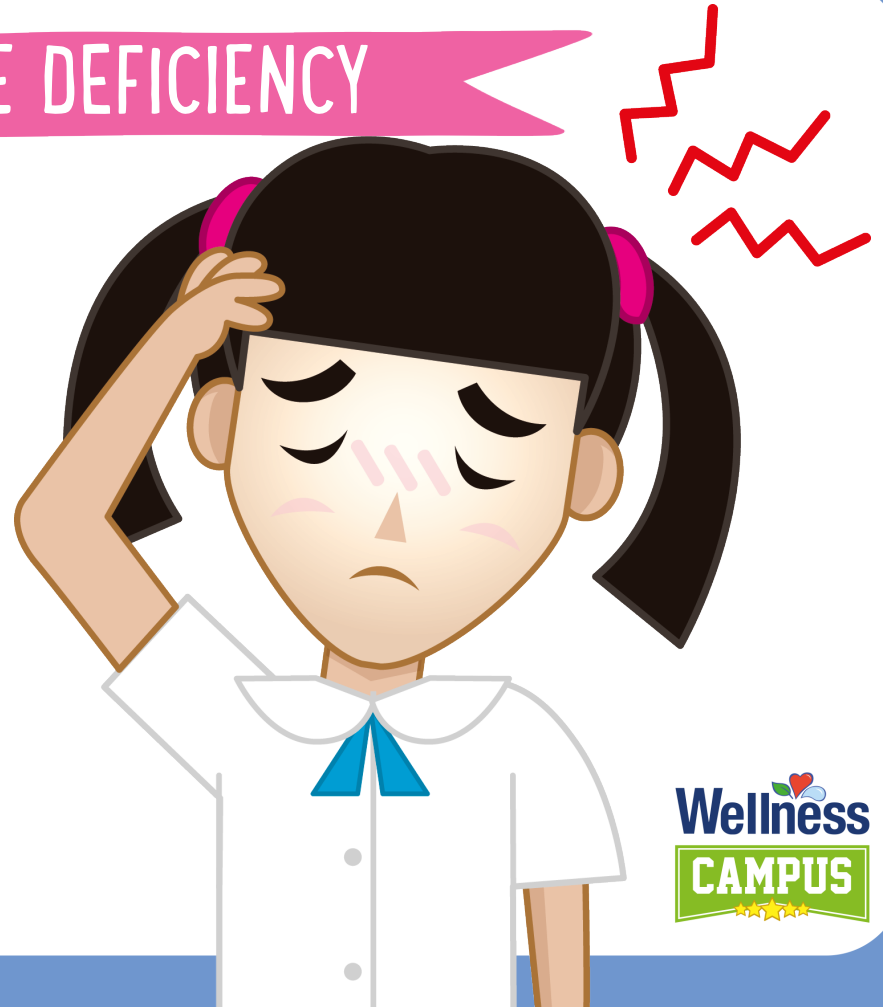




# SIGNS & SYMPTOMS OF VIT. E DEFICIENCY

## 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

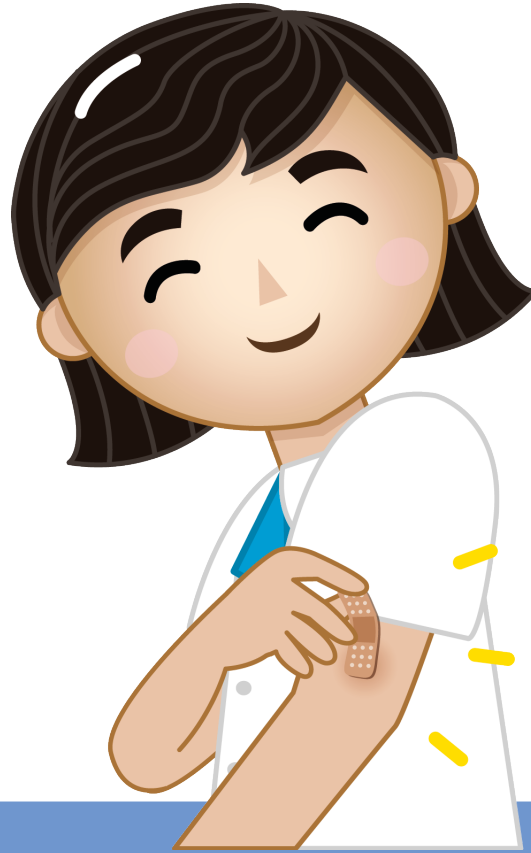


# VITAMIN K DEFICIENCY

# 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

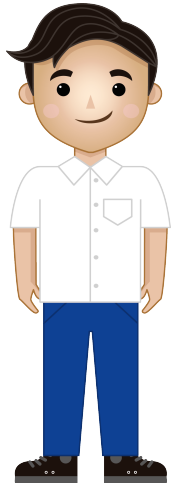


## GROW FOODS

Adolescents should aim to eat any of the following portions with each meal:

# GROW FOODS

Adolescents should aim to eat any of the following portions with each meal:

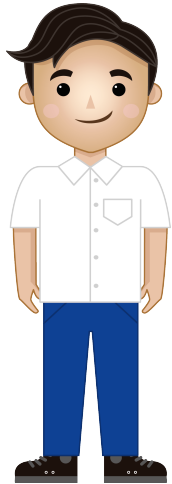


## Males

- 2 pieces of medium variety of fish (e.g. *galunggong*)
- 2 slices of large variety of fish (e.g. *bangus*)
- 2 pieces of small chicken leg
- 2 servings of lean meat (30g)
- 2 pieces of *tokwa* 6 x 6 x 2 cm
- 1 piece of small chicken egg and 1 piece of any food item mentioned above

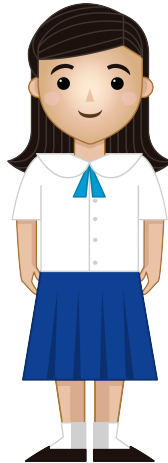
# GROW FOODS

Adolescents should aim to eat any of the following portions with each meal:



## Males

- 2 pieces of medium variety of fish (e.g. *galunggong*)
- 2 slices of large variety of fish (e.g. *bangus*)
- 2 pieces of small chicken leg
- 2 servings of lean meat (30g)
- 2 pieces of *tokwa* 6 x 6 x 2 cm
- 1 piece of small chicken egg and 1 piece of any food item mentioned above



## Females

- 1 piece of medium variety of fish (e.g. *galunggong*)
- 1 slice of large variety of fish (e.g. *bangus*)
- 1 piece of chicken leg
- 1 serving of lean meat (30g)
- 1 piece of *tokwa* 6 x 6 x 2 cm
- 1 piece of small chicken egg