

# WHAT IS NUTRITION?

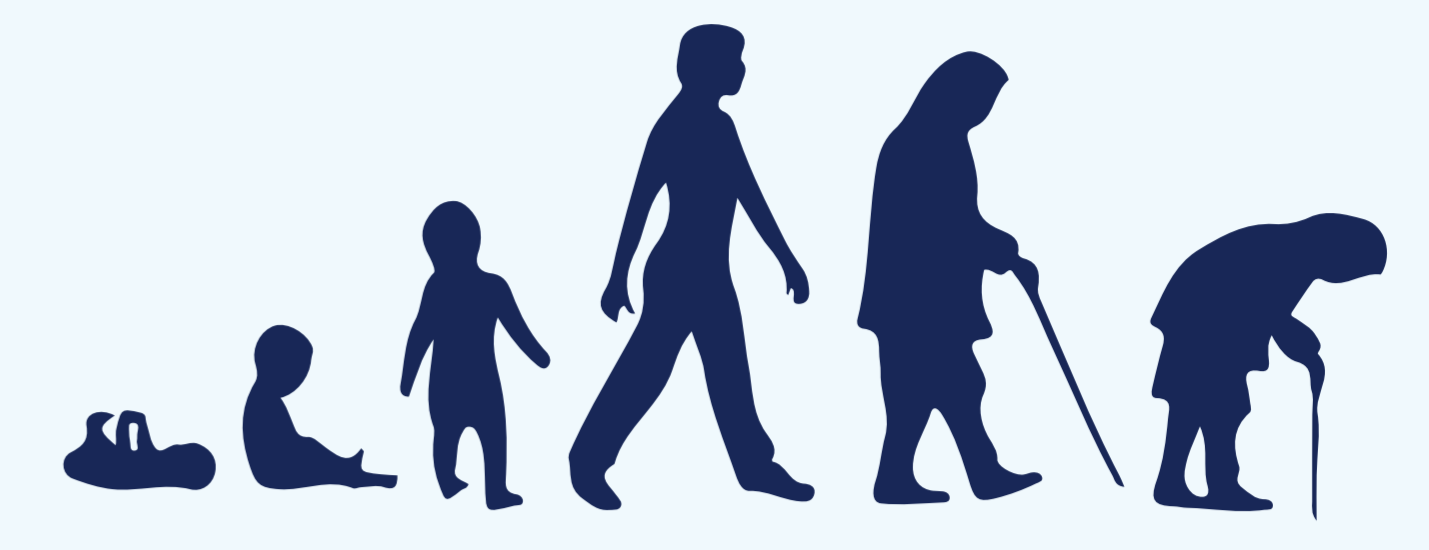
The process of providing or obtaining the nutrients necessary for health and growth.



Food brings what body needs to function.

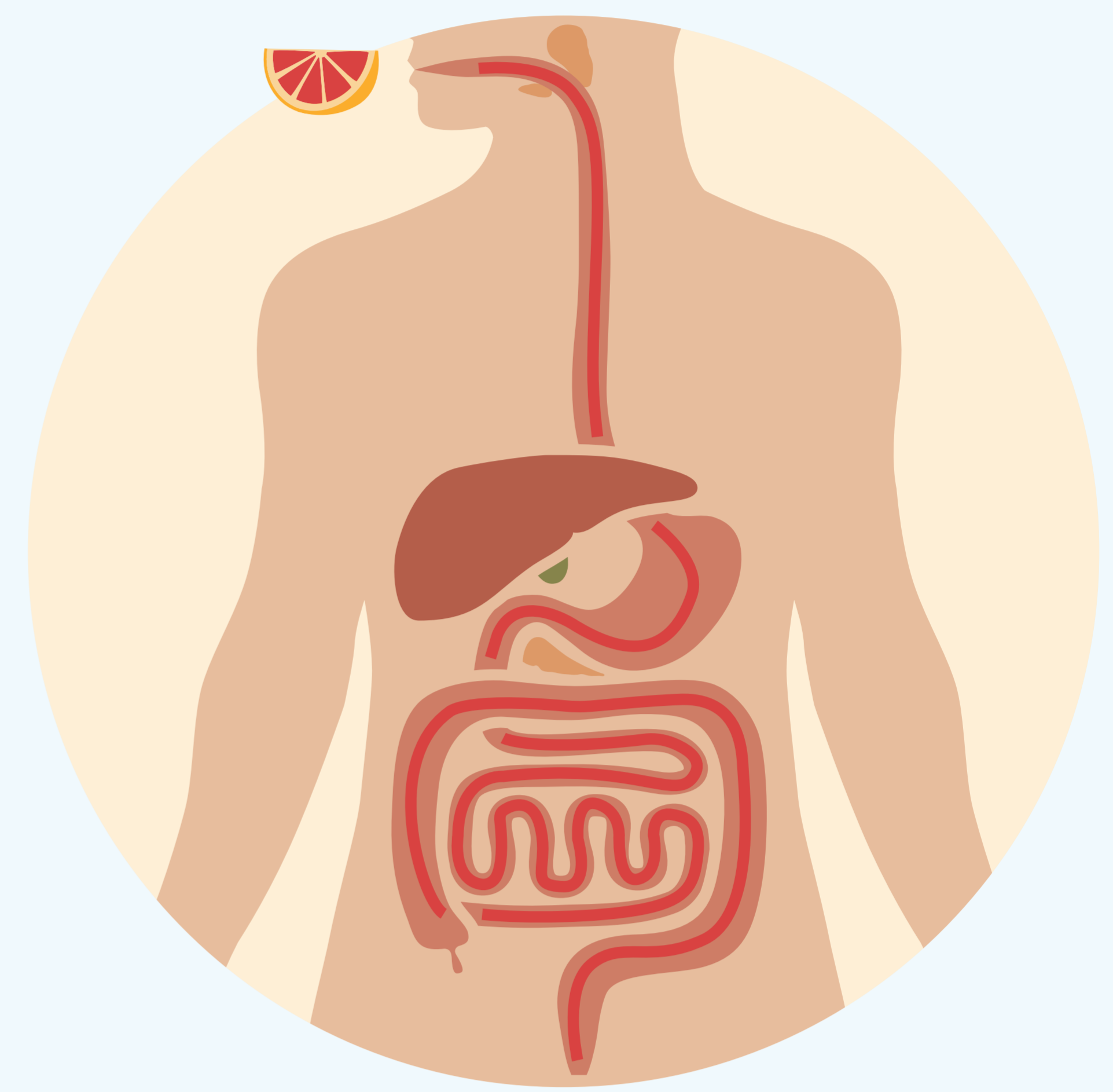
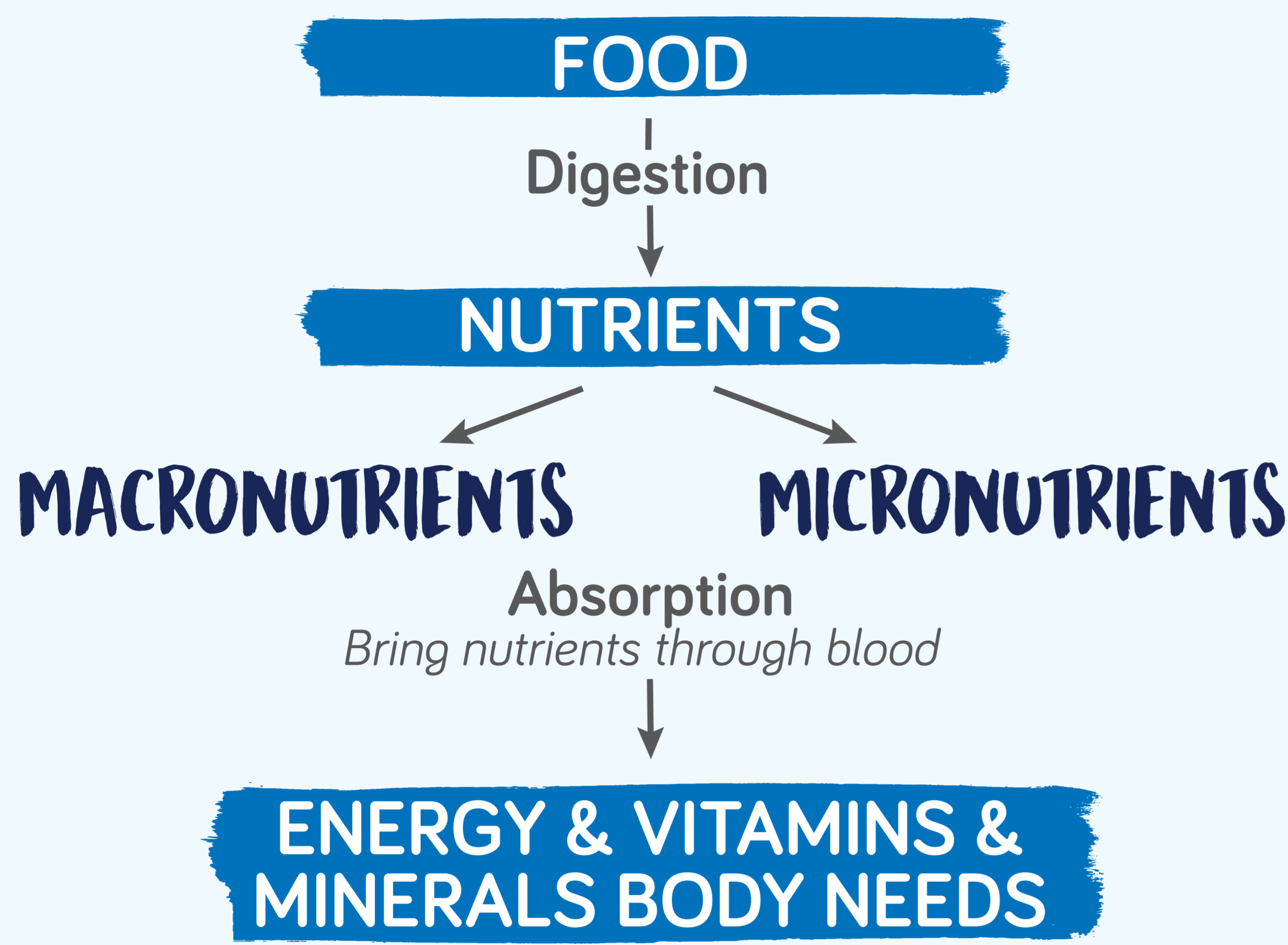
What foods does our body need?

Balanced diet with variety of food with moderation



Needs are multifactorial (incl. life stage, activities).

From food to nutrients : digestion and absorption through the gut



## MACRONUTRIENTS

**CARBOHYDRATES**  
Whole grain cereals, fruits and vegetables, dairy products, legumes  
Main source of energy of the body

<p><b>Simple carbohydrates</b> Digestible</p> <p>Sucrose, Lactose, Fructose Max free sugars: 10% of total amount of energy</p>	<p>Average adult daily needs: <b>55%</b></p>	<p><b>Complex carbohydrates</b> Digestible</p> <p>Starch</p>	<p>Non digestible Fibers = 25/30g*</p> <p>Fibers</p>
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**LIPIDS / FATS**  
Butter, oils, meat, dairy products  
Energy storage and several structural and functional roles.

<p><b>High in unsaturated fat (UFA) w3 &amp; w6</b> Vegetal and fish fats Protective role against Cardio Vascular Disease</p>	<p><b>30%</b></p>	<p><b>High in saturated fat (SFA)</b> Animal origin Increase risk of Cardio Vascular Disease if excess</p>
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**PROTEINS**  
Egg, meat, fish, dairy products, soy, beans, nuts, peas  
Provide amino acids : build and renew the body (structural role, hormone regulation, immune system, etc.)  
9 essentials amino acids need to be provided by food

<p><b>Plant origin</b> Combination needed to provide all essential amino acids</p>	<p><b>15%</b></p>	<p><b>Animal origin</b> Provide all essential amino acids</p>
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**WATER**  
Main component of the body: 60% of adult body mass  
Transports nutrients and wastes in our body, necessary for metabolic reactions, regulates T°  
Adult daily needs: 1,6L to 2L\*

## MICRONUTRIENTS

Adult daily needs\*

### MINERALS

Each mineral or trace element plays a unique and often multifactorial role

<p><b>Iron (Fe)</b> Meat, vegetables &amp; cereals Hemoglobin formation (oxygen transport) 9mg*</p>	<p><b>Calcium (Ca)</b> Dairy products, water, vegetables Structural role (eg., Muscle contraction) 950mg*</p>	<p><b>Magnesium (Mg)</b> Seafood, iodized salt, etc. Regular growth, development and metabolic rate 144µg*</p>
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### VITAMINS

Ensure normal metabolism and physiological function

<p><b>Fat-soluble : A, D, E, K</b></p> <p>Vit D : Meat, fats, dairy products: Calcium absorption, immunity 10 - 15 µg*</p> <p>Vit A : Animal products: role in vision, growth and development, immunity 650 - 750 µg*</p> <p>Vit E : Vegetal oils, whole cereals, nuts, dairy products: antioxidant 11 - 13 mg*</p> <p>Vit K : Plant based food: blood coagulation, bones metabolism 50 - 70 µg*</p>	<p><b>Water-soluble : C &amp; B group</b></p> <p>Vit B12 : Meat, dairy products: energy metabolism, blood coagulation, DNA synthesis 4 µg*</p> <p>Vit B6 : Animal and plant based food: prevent Cardio Vascular diseases, co-enzyme, hemoglobin synthesis 2 - 3 mg*</p> <p>Folic acid : Plant based food: protein metabolism 200 - 300 µg*</p> <p>Vit C : Fruits and vegetables: antioxidant 110 mg*</p>
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**DANONE INSTITUTE**  
Nutrition for Health

\*Superior Health Council. Dietary guidelines for the Belgian adult population. 2019  
This is a scientific based content, do not consider it as claims for external communications