

Unit 1

The human body and how it works

1 THE HUMAN BODY

2 NUTRITION

PATHS TOWARDS CONSCIENTIOUS CITIZENSHIP

EDUCAZIONE CIVICA:

Healthcare in Italy and in the UK

FROM THEORY TO PRACTICE:

Discovering new food trends and learn how to eat well

Thinking over risky eating behaviours

FROM THE PRESS:

What is hunger?

VIDEO CORNER:

 A healthy diet, a healthier world

GRAMMAR FOCUS:

Wh – Questions

Comparatives and superlatives

Comparatives (as...as)

Present simple

Can/Can't

Countables and uncountables

Some/Any

Much/Many/A lot of

Instructions and requests

Should/Shouldn't

Have to/Don't have to

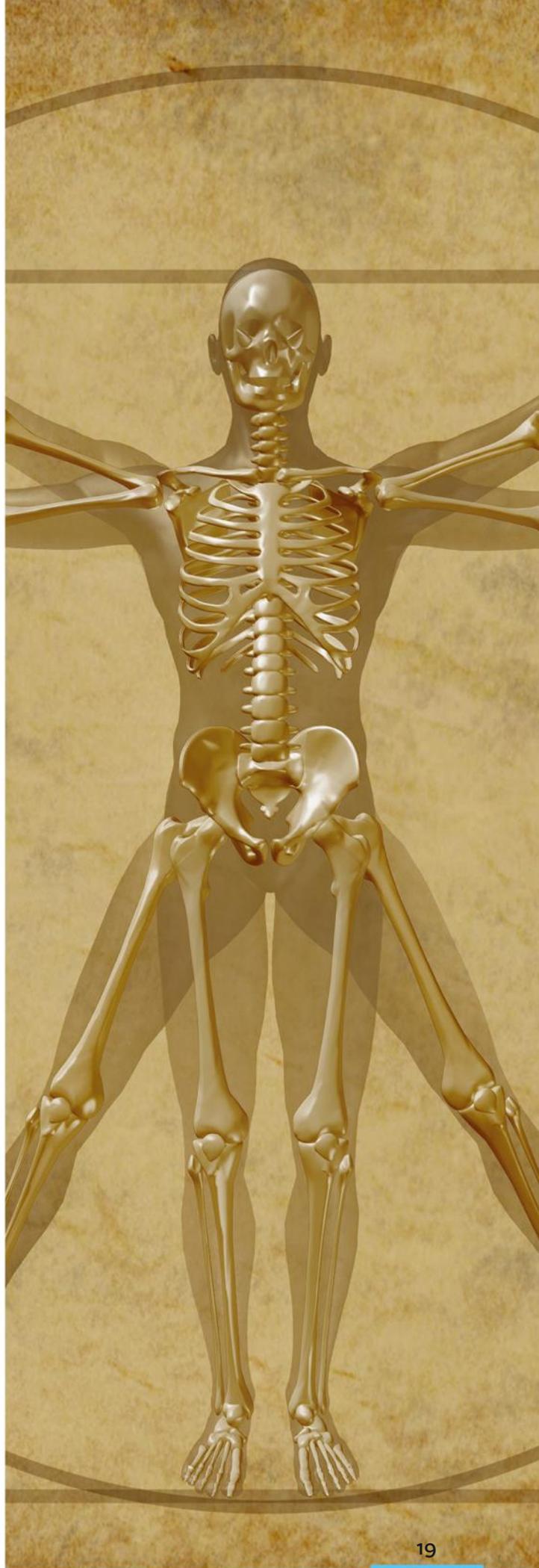
To need

Infinitive of purpose

REVIEW AND REMEMBER THE BASICS

REVISION AND PRACTICE:

Test your knowledge





Scarica
GUARDA!
e inquadrami
per vedere le
risorse digitali
di questa Unit.



Glossary

Ankle: caviglia

Elbow: gomito

Eyebrow:
sopracciglio

Forehead: fronte

Heel: tallone

Waist: vita
(girovita)

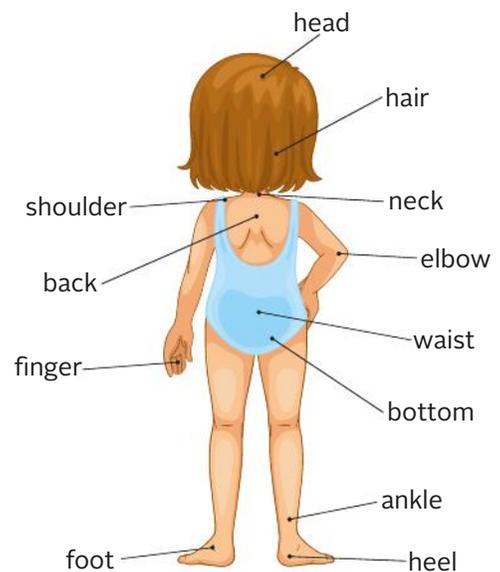
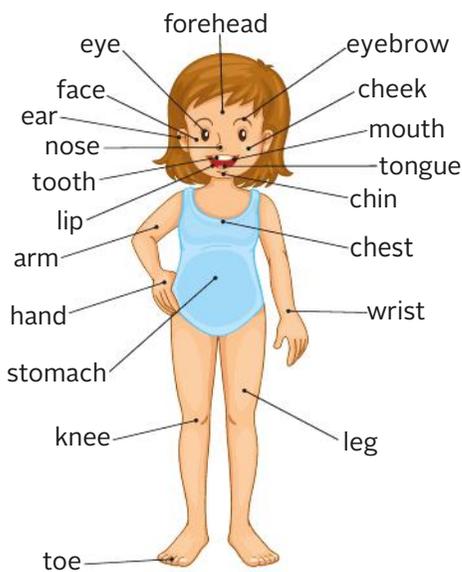
Wrist: polso

1 The human body

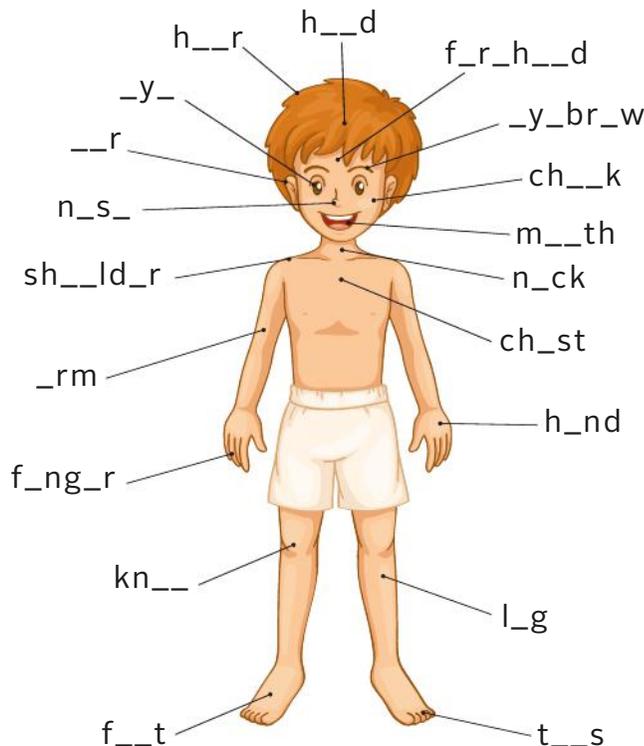
The human body is an extraordinary and complex machine made up of billions of smaller structures of cells, tissues, organs and systems, all working together in an organized manner to accomplish the specific functions necessary for sustaining life.

1.1 The external parts of the human body

- * **Front:** forehead, leg, foot, chest, wrist, knee, stomach, toe(s)
- * **Behind:** head, neck, back, elbow, heel, shoulder, arm, finger(s), ankle, bottom, hand, waist
- * **Head:** hair, face, eye, ear, nose, lip, chin, head, nose, cheek, mouth, tooth (teeth), tongue, eyebrow



1 VOCABULARY IN CONTEXT | Fill in the missing vowels for each of the following words.



2 VOCABULARY IN CONTEXT | Put the words in the box into the correct column.

foot • chest • ear • tooth • shoulder • heel • ankle • chin • waist •
eyebrow • lip • back • finger • bottom • toe

HEAD	TRUNK	ARMS/LEGS

3 VOCABULARY IN CONTEXT | Cross out the wrong word.

- a Eyebrow, head, ear, elbow
- b Waist, stomach, toe, shoulder
- c Heel, hair, ankle, foot
- d Eye, arm, hand, finger

PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking

To go deeper

Idioms with parts of the body.

4 SPEAKING | Explain to your classmates the reason why you excluded the word from the list.

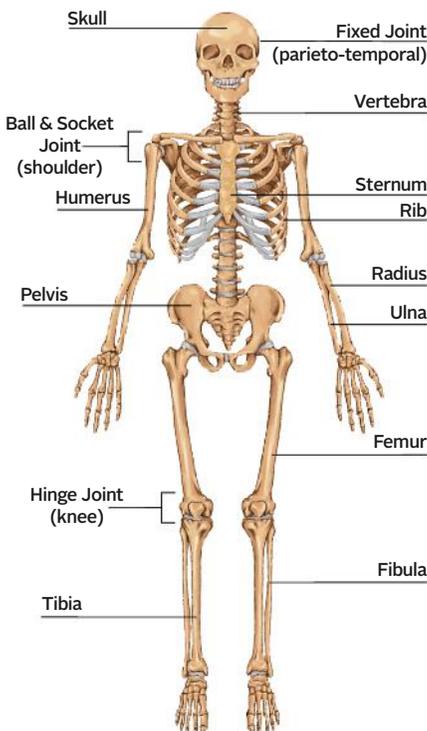
1.2 Inside the human body

The human body is made up of certain elements including carbon, calcium, phosphorous and water (more than 50 percent of the average adult’s body weight).

The **skin**, which protects the body from the outside world, is the first defence against bacteria, viruses and other pathogens.

The skin also helps to regulate body temperature and to eliminate waste through **perspiration**. The skin is part of the **integumentary system** which includes hair and nails.

The **skeleton** is made up of many **bones**, which give the body structure, let it move in many ways and protect the internal organs. The bones that make up the skeleton are all alive, growing and changing all the time, like other parts of the body. The **spine**, which is not a perfectly straight line, runs down your back and it is what holds you up straight. It is like a tower made of blocks of bones, called **vertebrae**, one on top of another and it runs from your head to your bottom, and attaches to your arms and legs. The **skull** is your brain’s home, and it is protected by several fused bones. The longest bone in the human body is the **femur**. The place where two bones meet is called a **joint**. Some joints move and others do not.



Glossary

Bend (to): piegare; flettersi

Cartilage: cartilagine

Femur: femore

Joint: articolazione

Perspiration: sudorazione

Twist (to): torcere; torcersi

Moving joints are the ones that permit you to **twist, bend** and move different parts of your body. Fixed joints are held in place and do not move at all. The skull has some of these joints which close up the bones of the skull in a young person's cranium. A baby's body has about 300 bones at birth. These eventually fuse to form the 206 bones that adults have. Some of baby's bones are made entirely of a special material called **cartilage** that is soft and flexible. During childhood, the cartilage grows and is slowly replaced by bone, with help from calcium. At about 25 years of age this process will be complete.

1 Answer the questions.

- a What is the body's first defence against bacteria, viruses and other pathogens?
- b How do we eliminate waste?
- c What is the skeleton made up of?
- d What is the spine?
- e What is the longest bone we have called?
- f What is a joint?
- g Are the skull's joints fixed or moving?
- h How many bones does a baby's body have at birth?
- i How many bones do adults have?
- j What helps cartilage to be replaced by bone?

2 VOCABULARY IN CONTEXT | Match the words (a-h) to the correct description (1-8).

a Skin	1 It is made up of bones
b Bone	2 It protects the internal organs
c Skeleton	3 It holds you up straight
d Cartilage	4 It protects from the outside world
e Spine	5 It is your brain's home
f Skull	6 It is a soft and flexible material
g Moving joints	7 They are fixed in place and don't move at all
h Fixed joints	8 They bend and move different parts of the body

To go deeper

The diseases of bones and joints.

3 LISTENING | TRACK 1 | Listen to a doctor talking about deformity of the spine. Complete the passage with the missing words.

Deformity of the spine is any abnormality in the formation, alignment or shape of the
 1) column.

There are different types of deformity. **Scoliosis** is a sideways curvature of the spine. It can be 2) accentuated, and can be seen on both sides 3), presenting two curvatures. Scoliosis occurs most often during the growth spurt just before 4)

Kyphosis 5) the abnormally excessive convex *kyphotic* curvature of the spine as it occurs in the thoracic and sacral 6)

Lordosis is a condition in which the spine in the lower 7) has an excessive curvature. This can lead to excess 8) on the spine, causing 9)



4 **VOCABULARY IN CONTEXT** | Match the words to their synonyms.

a Abnormality	1 Anterior
b Deformity	2 Disproportionate
c Frontal	3 Irregularity
d Excessive	4 Malformation
e Curvature	5 Bend

5 Choose the correct alternative(s).

a Scoliosis...

- is a spinal deformation
- is a dislocation of the bones
- can be right or left accentuated

b Kyphosis...

- presents two curvatures
- is when the curvature of the spine is too convex

- is when the shape of the vertebral column has a deformity

c Lordosis...

- is when the spine in the lower back is curved
- can cause pain
- can only be right accentuated

1.3 Body systems

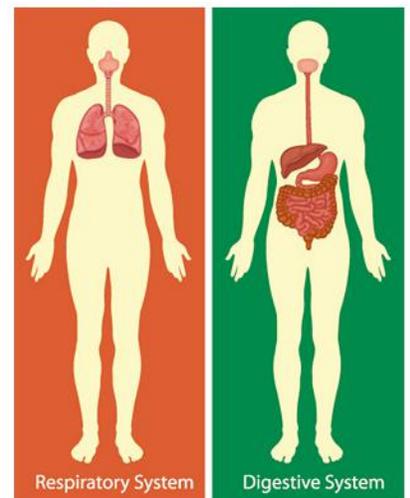
A body system is a collection of parts able to work together to serve a common purpose – growth, reproduction and survival. Each part of a system depends on the other parts to perform tasks that cannot be achieved by single parts acting alone.

The respiratory system

The respiratory system allows us to take in essential oxygen and expel carbon dioxide in a process called **breathing**. The main parts of the system include the **trachea**, the **diaphragm** and the **lungs**. The lungs remove oxygen from the air we breathe and transfer it to the blood where it can be delivered to the cells. The lungs also remove **carbon dioxide**, which we **exhale**. The average adult takes over 20,000 breaths a day. Most adults and older children have several respiratory infections each year. Respiratory problems can be as minor as the common **cold** or as serious as **pneumonia**. They may affect the upper respiratory system (nose, mouth, **sinuses**, and throat) or the lower bronchial tubes and lungs. Respiratory problems are less common in the lower respiratory system than in the upper respiratory system. Viral infections are the most common cause of upper respiratory symptoms.

The digestive system

The digestive system consists of a series of connected organs that together allow the body to **chew** and **swallow** food, transform it into energy and nutrients for the body, and remove **waste**. The **esophagus** carries solid food and swallowed liquids to the stomach. The **stomach**, located between the esophagus and the **duodenum**, helps support digestion by mixing gastric juices with food. The **intestines** extend from the outlet of the stomach to the **anus**. They are divided into two parts: the small intestine and the large intestine (or **colon**). The function of the intestines is to ensure the absorption of nutrients from food into



Glossary

Bloating:	gonfiore
Blood:	sangue
Breathe (to):	respirare
Carbon dioxide:	anidride carbonica
Chew (to):	masticare
Cold:	raffreddore
Exhale (to):	esPELLERE
Pneumonia:	polmonite
Sinuses:	cavità nasali
Swallow (to):	ingoiare
Waste:	scorie
Heartburn:	bruciore di stomaco
Stools:	feci



the **blood** and elimination of waste. The **liver** and the **pancreas** also play a role in the digestive system because they produce digestive juices.

Digestive problems such as **constipation**, **heartburn** and **bloating** are very common, but can usually be resolved with lifestyle changes and medicines. A diet rich in fibre can help digestion and prevent constipation. It is important to keep drinking, especially water. Water encourages the passage of waste through the digestive system and helps soften **stools**.

1 Answer the questions.

- a What does breathing mean?
- b How many parts does the respiratory system consist of?
- c What is the function of the lungs?
- d How often does an adult breathe?
- e What is the upper respiratory system?
- f What are the most common causes of upper respiratory problems?

2 Tick the correct statements.

- The digestive system includes mouth, oesophagus and stomach.
- The liver and pancreas remove waste.
- Heartburn is widespread.
- A diet rich in fibre can prevent constipation.
- Water is needed to help the passage of waste through the digestive system.
- If you drink too much water constipation occurs.

3 **LISTENING** | **TRACK 2** | Listen and choose the correct alternative.

- a The sharpest teeth we have are the...
 - Incisors
 - Canines
- b The Canines are located in...
 - the very front of the mouth
 - the corners of the mouth
- c The Premolars are located...
 - behind the canine teeth
 - between the Molars and the Incisors
- d The Molars...
 - have very long roots
 - are the last teeth towards the back of the mouth
- e Dental decay occurs when...
 - acids in the mouth dissolve the outer layers of teeth
 - a cavity is not cured



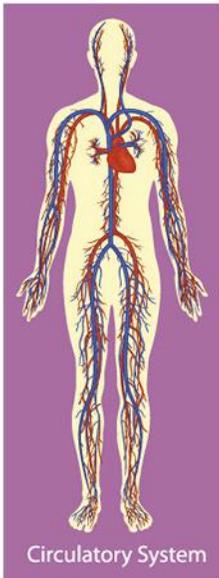
PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies:

Communication and public speaking /
Creative and critical thinking



- 4 **SPEAKING** | Are you afraid of the dentist? How often do you have your teeth checked? Share with the class.



The circulatory system

The circulatory system consists of the **heart, blood, arteries, veins** and **capillaries**. Its job is to move blood, nutrients, oxygen, carbon dioxide and hormones around the body.

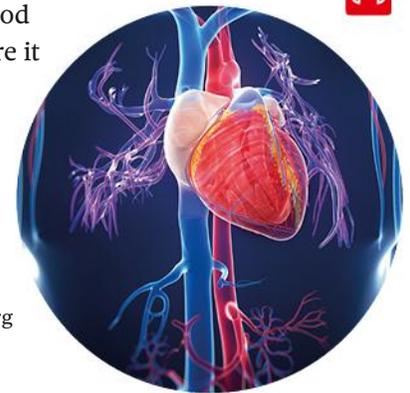
The muscle that makes up the heart is called **cardiac muscle**, also known as the **myocardium**. The thick muscles of the heart contract to pump blood out and then relax to let blood back in after it has circulated through the body.

Just like smooth muscle, cardiac muscle works autonomously with no help from you: while hormones and signals from the brain adjust the **rate of contraction**, cardiac muscle stimulates itself to contract.

The heart is a muscular organ about the size of a **fist**, located just behind and slightly left of the **breastbone**. It has four chambers. The **right atrium** receives blood from the veins and pumps it to the **right ventricle**. The right ventricle receives oxygen poor blood from the right atrium and pumps it to the lungs, where it

is **loaded** with oxygen. The left atrium receives oxygen rich blood from the lungs and pumps it to the left ventricle. The left ventricle pumps oxygen-rich blood to the rest of the body. The left ventricle's vigorous contractions create **blood pressure**. The **coronary arteries** run along the surface of the heart and provide oxygen-rich blood to the heart muscle. Surrounding the heart is a sac called the **pericardium**.

Adapted from: www.kidshealth.org



Glossary

Atrium:	atrio
Blood pressure:	pressione sanguigna
Breastbone:	sterno
Coronary arteries:	arterie coronarie
Fist:	pugno
Load (to):	caricare
Pericardium:	pericardio
Rate of contraction:	frequenza delle contrazioni
Ventricle:	ventricolo

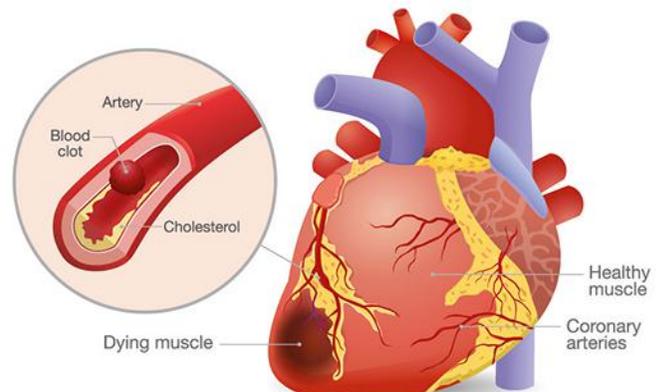
5 Complete the sentences with the missing words.

- The circulatory system the heart, blood, arteries, veins and capillaries.
- Cardiac muscle is also known as
- Cardiac muscle doesn't need any help from you out.
- The heart is more or less as big as
- The heart has four
- is pumped to the lungs, where it is loaded with oxygen.
- The left ventricle's create blood pressure.
- The run along the surface of the heart.
- The coronary arteries provide to the heart muscle.
- Pericardium is a sac that surrounds

Diseases that can affect the circulatory system include:

- * **Atherosclerosis.** It is a hardening of the arteries caused by plaque deposits which is usually caused by a diet high in fat which leaves fatty deposits on the blood vessels. As these deposits stick together, they make the arteries hard and less flexible.
- * **Heart attack.** It can occur when the blood supply is cut off from the heart, often by a **blood clot**. Some heart attacks are minor, but others can be life-threatening.

Heart Attack

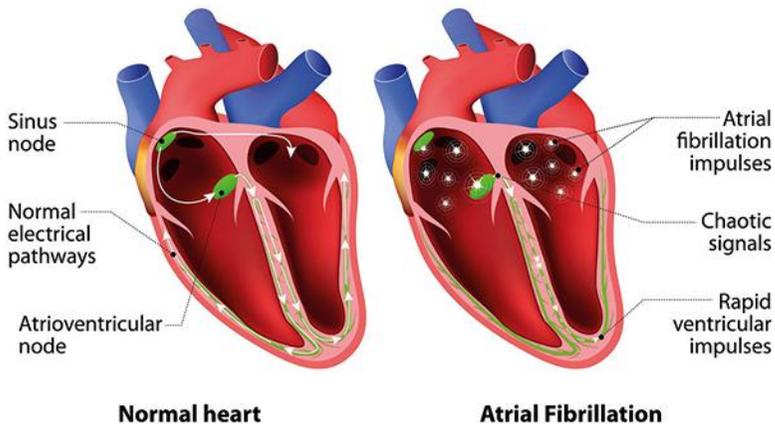


Glossary

Blood clot:	coagulo di sangue
Burst (to):	scoppiare
Diseases:	malattie
Shortness of breath:	respiro corto

- * **Heart failure.** It means that the heart is not pumping blood as efficiently as it should. It can lead to fatigue, **shortness of breath** and coughing. Most people with heart failure find it difficult to do things such as walking or climbing stairs.
- * **Stroke.** A stroke can happen when one of the vessels that lead to the brain either becomes blocked by a blood clot or **bursts**. This stops blood flow and prevents oxygen from getting to the brain.
- * **Hypertension.** It is commonly called high blood pressure and causes the heart to work harder. It can lead to such complications as a heart attack or a stroke.

Cardiac arrhythmia



- * **Cardiac arrhythmia.** It is a disorder of the heart rate or heart rhythm, such as beating too fast (**tachycardia**), too slow (**bradycardia**), or irregularly. Normally, the heart works as a pump that brings blood to the lungs and the rest of the body. Arrhythmias are caused by problems with the heart's electrical conduction system. They may also be caused by some substances or drugs, including alcohol, caffeine, nicotine (from cigarette smoking), drugs or medicines used for depression or psychosis.

6 VOCABULARY IN CONTEXT | What disease do the following definitions refer to? Complete the table.

Heart beating too fast	
Lack of blood supply to the heart	
High blood pressure	
The arteries get hard and less flexible	
Heart beating too slow	
Blood stops flowing and the oxygen cannot get to the brain	

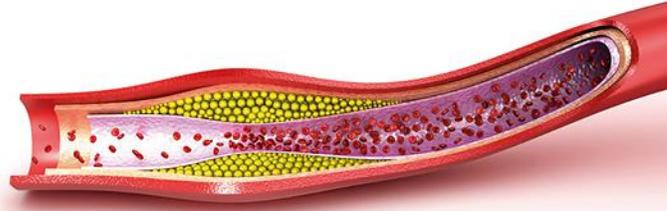
7 Answer the questions.

- What is atherosclerosis usually caused by?
- When might a stroke occur?
- What is cardiac arrhythmia?

8 LISTENING | TRACK 3 | Listen to a doctor talking about cholesterol and then choose the correct alternative.

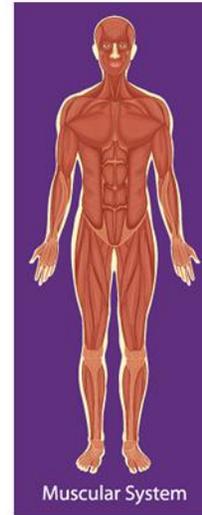
- Cholesterol...
 - is needed by the body to build healthy cells
 - is always dangerous because it increases the risk of heart disease
- Fatty deposits in the blood vessels...
 - can help the heart pump more efficiently
 - can be caused by high levels of cholesterol

- c A clot may cause...
 - a stroke
 - fatty deposits in the arteries
- d High cholesterol...
 - is always inherited
 - may be the result of an unhealthy lifestyle
- e Regular exercise...
 - can help reduce high cholesterol
 - may increase the risk of heart attack



The muscular system

The muscular system is responsible for the movement of the human body. There are about 700 **muscles** that are attached to the bones of the skeletal system. Each of these muscles is an organ made up of skeletal muscle **tissue**, blood vessels, **tendons** and nerves. You can control some of your muscles, while others — like your heart — do their jobs without you thinking about them at all. There are three different types of muscles in the body: **smooth muscles**, also called **involuntary muscles** like the stomach and digestive system, **cardiac muscle**, and **skeletal muscles** also called **voluntary muscles** which means you can control them. There are many diseases that affect the muscular system. Many of them are brain disorders that affect the motor control areas in the frontal and parietal lobes of the brain. The most common is **muscular dystrophy**. To keep the muscular system healthy, aerobic activity is recommended, for at least 30 minutes at a time, four or more days a week, together with a well-balanced diet.



Glossary

Muscles: muscoli
Tendons: tendini
Tissue: tessuto

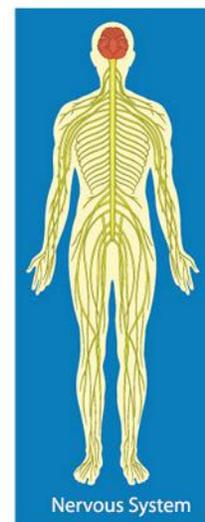
9 Answer the questions.

- a What is the muscular system responsible for?
- b How many muscles are attached to the bones of the skeletal system?
- c Can you control all your muscles?
- d How many different types of muscles are there in your body?
- e Which is the most common brain disorder?
- f How can we keep our muscular system healthy?

The nervous system

The nervous system controls both voluntary action and involuntary actions, and sends signals to different parts of the body. The central nervous system includes the brain and **spinal cord**. The peripheral nervous system consists of **nerves** that connect every other part of the body to the central nervous system.

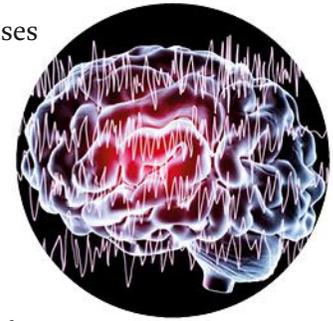
The human brain is the body's control centre, receiving and sending signals to other organs through the nervous system and through secreted hormones. It is responsible for thoughts, feelings, memory storage and a general perception of the world. The human brain contains about 100 billion nerve **cells**. The most severe diseases that can affect the nervous system include:



Glossary

Cells: cellule
Discharges: scariche
Lining: rivestimento
Nerves: nervi
Seizure: crisi epilettica
Spinal cord: midollo spinale
Stiffness: rigidità

- * **Epilepsy.** It is a condition that affects the brain and causes frequent **seizures** caused by abnormal electrical **discharges** from brain cells. Epilepsy can start at any age, but usually starts either in childhood or in people over 60.
- * **Parkinson's disease.** It is a progressive nerve disease that leads to shaking, **stiffness**, and difficulty with walking, balance and coordination.
- * **Multiple sclerosis.** It is a potentially disabling disease of the brain and the central nervous system, in which the protective **lining** of the nerves is attacked by the body's immune system. Eventually, the disease can cause permanent damage or deterioration of the nerves.
- * **Alzheimer's disease.** It is a type of dementia that affects memory, thinking and behaviour. Symptoms eventually grow severe enough to interfere with daily tasks.



10 Decide if the following statements are True or False. Correct the false statements.

- a The nervous system controls merely voluntary actions.
- b The nervous system sends signals to different parts of the body.
- c Nerves connect the nervous system to the brain.
- d The brain secretes hormones.
- e The spinal cord is the body's control centre.
- f The brain contains about 100 billion nerve cells.
- g Epilepsy usually starts in adulthood.
- h Parkinson's disease can lead to permanent deterioration of the nerves.
- i Alzheimer's disease affects movement.

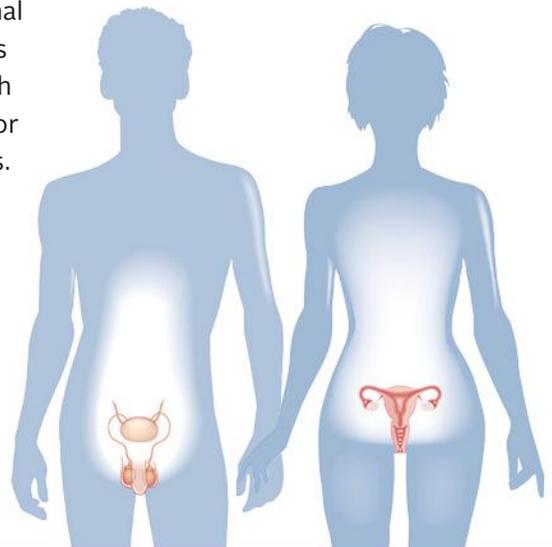


The reproductive system

11 LISTENING | TRACK 4 | Listen and complete with the missing words.

The reproductive system allows 1) to reproduce. The male reproductive system includes the **penis** and the **testes** which produce **sperm**. The female reproductive 2) consists of the vagina, the **uterus**, and the **ovaries** which produce eggs. During **conception**, a 3) cell fuses with an 4) cell which creates a fertilized egg that implants and 5) in the uterus.

Reproductive system problems include abnormal 6) production by the ovaries or the testes or by other **endocrine glands**. Such diseases can also be caused by 7) or congenital abnormalities, tumours or infections. The 8) of the reproductive tract can be caused by a bacterium, virus, fungus or other organisms. Some of them are easily 9) and can be 10) through the use of antibiotics or antiviral medications. Some cannot be cured, such as HIV, hepatitis B and herpes.



Glossary

Conception: concepimento

Endocrine glands: ghiandole endocrine

Ovaries: ovaie

Penis: pene

Sperm: sperma

Testis (plur. testes): testicolo

Uterus: utero

- 12 **VOCABULARY IN CONTEXT** | Complete the table by putting the words below in the right place.

penis • ovaries • testes • vagina • sperm • uterus • eggs

MALE REPRODUCTIVE SYSTEM	FEMALE REPRODUCTIVE SYSTEM

- 13 **VOCABULARY IN CONTEXT** | Put the words below in the right column.

trachea • mouth • brain • intestine • tendons • diaphragm • lungs • oesophagus • heart • veins • stomach • blood • arteries • nerves • spinal cord

RESPIRATORY SYSTEM	DIGESTIVE SYSTEM	CIRCULATORY SYSTEM	MUSCULAR SYSTEM	NERVOUS SYSTEM

PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Creative and critical thinking / Social responsibility



To go deeper

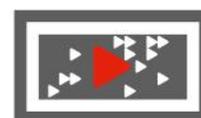
- Other body systems
- The senses and their anomalies

- 14 **WRITING** | Think of illnesses you have had. What were the symptoms and what did the doctor prescribe? You may use the dictionary if necessary.

2 Nutrition



GOAL 3 Ensure healthy lives and promote well-being for all at all ages.



2.1 A balanced diet

Healthy eating is about getting the correct amount of nutrients you need to maintain good health.

Food Balance, the key to eating well, is to enjoy a variety of nutritious foods from each of the **Five Food Groups**.

Foods are grouped together because they provide similar amounts of the key nutrients, and every food group is important because it provides essential nutrients and energy that can support normal growth and good health.

To meet the nutrient requirements essential for good health, you need to eat different types of food from each of the five food groups daily, in the recommended amounts, and the amounts depend on your age, gender and activity level.



Glossary

Amount: quantità
Growth: crescita
Nutrients: nutrienti

1 Answer the questions.

- a What does healthy eating mean?
- b How many food groups are there?
- c Why is every food group important?
- d What do you have to do to meet the nutrient requirements essential for good health?
- e What does the recommended amount of each food group depend on?

PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking / Social responsibility

- 2 **SPEAKING** | Hippocrates said: “If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have found the safest way to good health.” Do you agree with him? Discuss in class. Give reasons for your answers.

Five food groups**Fruits**

The fruit food group includes a wide range of fresh fruits and fruit products. There is plenty of choice throughout the year. Choosing fruits in season provides better quality and also adds more variety to the diet. Moderately-active men and women through the age of 30 should get 2 cups of fruit per day.

Vegetables

The vegetable food group includes a variety of fresh vegetables and vegetable products. The main group is divided into subgroups composed of nutritionally similar foods, including dark green vegetables, red and orange vegetables, other vegetables, beans and peas. Moderately-active women and men between the ages of 19 and 50 should consume 2 and 3 cups of vegetables per day, respectively, while adults over 50 should reduce their daily intake by 1/2 cup.

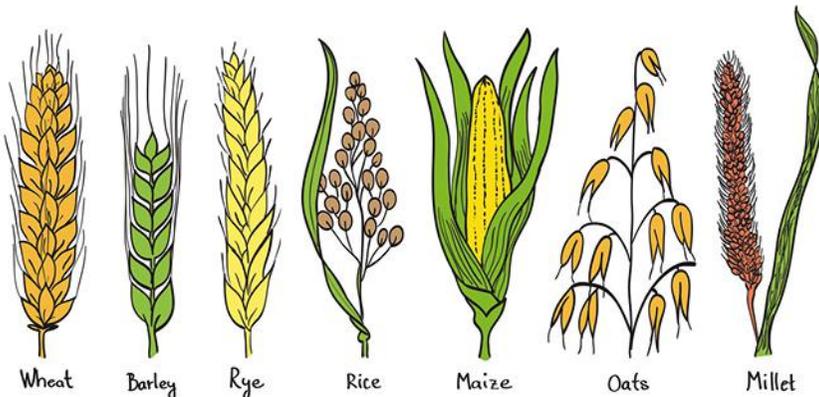
**Glossary**

Barley: orzo
Intake: consumo
Millet: miglio
Oats: avena
Rye: segale
Wheat: grano
Whole grain: integrale

Grains

Grains include foods are mainly made from **wheat, oats, rice, rye, barley, millet,** quinoa and corn. This wide variety of grains can be cooked and eaten whole, ground into flour to make a variety of cereal foods like bread, pasta and noodles, or made into ready-to-eat breakfast cereals.

It is recommended that at least half of the grains you consume should come from **whole grain** sources. Whole grain cereals contain more fibre, vitamins, minerals and antioxidants than refined cereal foods such as white bread. Women aged 50 or younger should consume 200 grams of grains each day, while those over 50 should reduce their daily **intake** to 150 grams. Similarly, men up to the age of 30 need 250 grams of grain per day, but men over 30 and under 50 require only 200 grams each day.



Quiz

3 Food quiz. Choose the correct answer.

- a** Which of the following are grain foods?
1 Beans **2** Grapes **3** Millet
- b** What can be cooked and eaten whole?
1 Aubergine **2** Corn **3** Banana
- c** Which contain more fibre?
1 Wholegrain cereals **2** Refined cereals **3** Fresh vegetables

4 Complete the table.

FOOD	QUANTITY NEEDED FOR MEN	QUANTITY NEEDED FOR WOMEN
Fresh fruits and fruit products		
Fresh vegetables and vegetable products		
Grains		

Protein foods

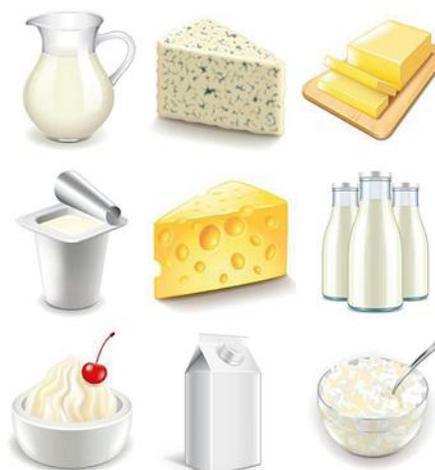
This group includes all kinds of lean meat and poultry, fish, eggs, tofu, nuts and seeds, and pulses/beans.

Pulses provide many of the same nutrients as lean meats, poultry, fish and eggs, and for this reason they have been placed in this food group as well as in the vegetable food group. Traditionally, the foods from this food group are considered “protein rich” and they also provide a wide variety of other nutrients such as iodine, iron, zinc, vitamins, especially B12. At least 250 grams of protein per week should come from seafood. Up to the age of 30, most women need 150 grams of protein per day, while women over 30 should reduce their daily intake. Men aged 19 to 30 need 200 grams each day.



Dairy

The dairy food group is principally made up of dairy products that are high in calcium. All types of yogurt, most cheeses and all liquid milk products are part of the dairy group, as are calcium-rich milk-based desserts such as ice cream and pudding. A large assortment of milk and yogurt products are available with different amounts of fat. Moderately-active men and women of all ages should consume 3 cups of foods from the dairy group each day. However, the minimum recommended will vary according to age, sex and life stage: for example, women over 51 need 4 servings a day as their calcium requirements are high.



Glossary

Dairy: latticini
Lean meat: carne magra
Poultry: pollame
Pudding: budino
Pulses: legumi
Seeds: semi

5 Decide if the following statements are True or False. Correct the false statements.

- a** Meat, poultry, fish and pulses provide more or less the same nutrients.
- b** Meat, eggs and nuts are considered “protein rich”.
- c** Protein foods provide vitamins, especially A and C.
- d** It is advisable to eat at least 250 grams of protein per week, which should come from fish.
- e** Women over 30 should increase their daily intake of protein.
- f** Dairy products are high in calcium.
- g** Milk and yogurt products always have high levels of fat.
- h** Women over 51 should consume more than 3 cups of foods from the dairy group each day.

T F

T F

T F

T F

T F

T F

T F

T F

6 Cross out the odd word in each group.

- a** Banana, aubergine, grapes, pear
- b** Beans, peas, milk, potatoes
- c** Wheat, corn, eggs, rice
- d** Yogurt, pudding, seeds, ice cream
- e** Nuts, fish, tofu, cheese

PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking

7 SPEAKING | Explain to your classmates the reason why you excluded the word from the list.**PROFESSIONALLY VALUED SKILLS**

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking / Social responsibility

8 SPEAKING | Work in pairs and take turns in asking and answering the following questions about yourself.

- a** Do you eat fruit and vegetables every day?
- b** Do you always start your day with a good breakfast? Describe it.
- c** What do you usually have for lunch and dinner?
- d** Do you eat meat or are you a vegetarian?
- e** In your opinion, why do people become vegetarians?
- f** Do you like seafood?
- g** What did you have for dinner yesterday? (Make notes and then compare your list with your classmate).



Fuel for the body

Some types of food help your body to grow and repair itself, other types give you energy.

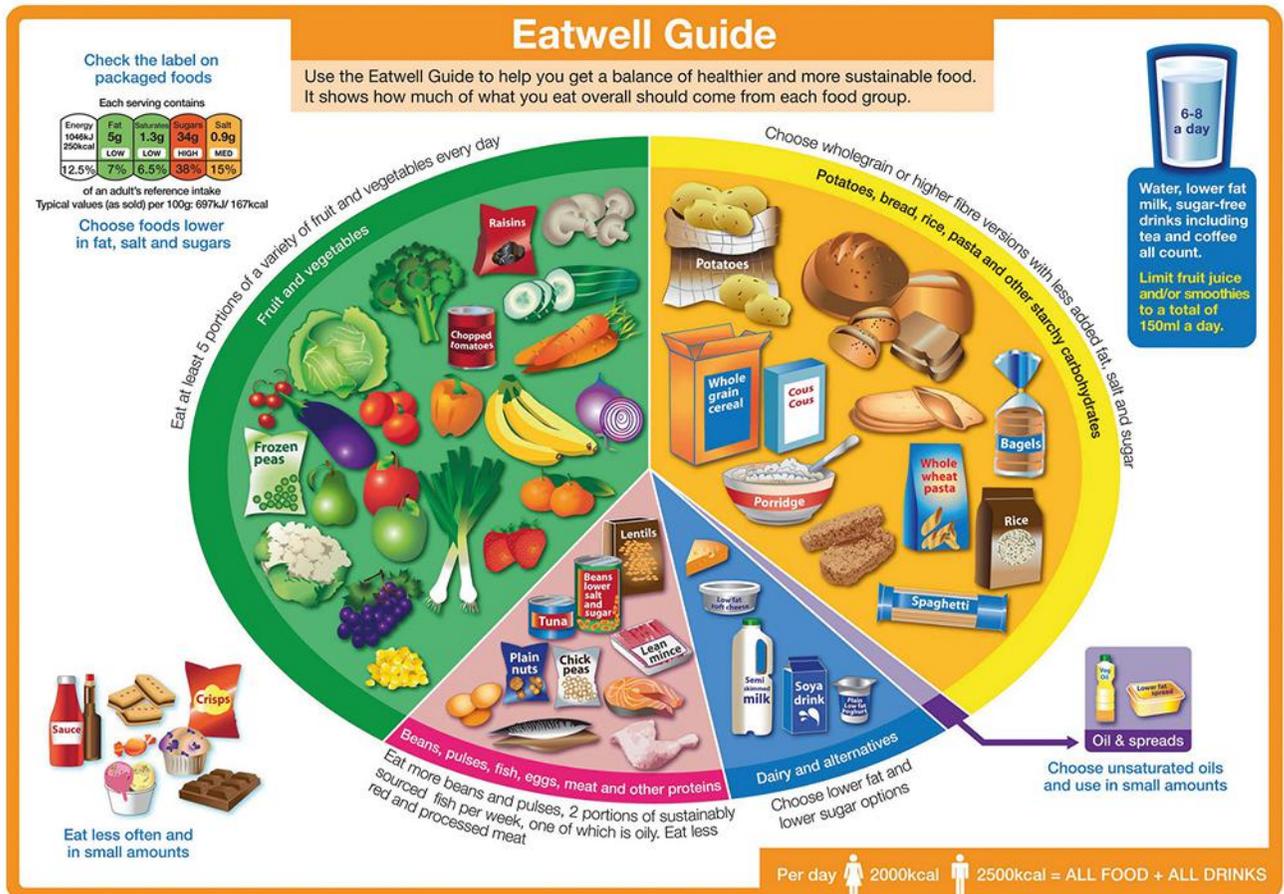
<p>PROTEINS Proteins help your body to make new tissues and to repair damaged cells. You find proteins in meat, fish, eggs, milk, beans and nuts. They are called body-building foods.</p>	<p>CARBOHYDRATES Carbohydrates, which are found in potatoes, rice, bread and cakes, give your body energy. Eating too little of these energy foods makes you slow and lacking energy. Eating too much often makes you fat and overweight.</p>
<p>VITAMINS Vitamins and mineral salts help your body to work properly and protect it against disease. Vitamin C, for example, helps to heal wounds. Vitamins are found in fruit, milk, eggs, cheese, fish, meat, etc.</p>	<p>WATER Your body loses water when you sweat, breathe or go to the toilet. Therefore you need to replace it regularly. All drinks contain water and some foods too. Lettuce is 90% water!</p>
<p>FATS Fats are found in meat, milk, butter, cheese, vegetable oils and nuts. They give your body energy but they can be bad for you too. Too much fat intake can block arteries and cause risk to your heart. It also makes you put on weight.</p>	<p>FIBRE Fibre is found in vegetables, fruit and bread. It is a carbohydrate, but it is not digested easily, so it makes the muscles of our intestine work harder and that is good for your health.</p>

- 9 **VOCABULARY IN CONTEXT** | Write in the correct column the names of the foods mentioned above.

PROTEINS	CARBOHYDRATES	VITAMINS	FATS	FIBRE



The Eatwell Guide



Source: Public Health England in association with the Welsh government, Food Standards Scotland and the Food Standards Agency in Northern Ireland

© Crown copyright 2016

10 LISTENING | **TRACK 5** | Listen to a nutritionist talking about the Eatwell Guide, then choose the correct answer.

- a** The Eatwell Guide...
- represents what we should eat for a healthy diet
 - is a guide to be followed in order to eat the same amount of food every day
- b** We must eat...
- more than 5 portions of potatoes, bread and rice every day
 - at least 5 portions of a variety of fruit and vegetables every day
- c** Wholegrain carbohydrates...
- should be preferred
 - are needed in order to lower fat in blood
- d** Dairy products...
- must be avoided
 - don't have to be avoided
- e** You must eat 2 portions of fish...
- every week
 - every month
- f** Foods and drinks high in fat...
- should be consumed only in small amounts
 - mustn't be consumed

11 Can you name all the food items in the picture? Use a dictionary if necessary.

PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking / Social responsibility

12 **WRITING** **SPEAKING** | Write a short paragraph about what you ate yesterday (breakfast, lunch and dinner), then compare your meals with the proportions of *The Eatwell Guide*. Were your meals balanced enough? If not, how could you improve them?

The Mediterranean diet

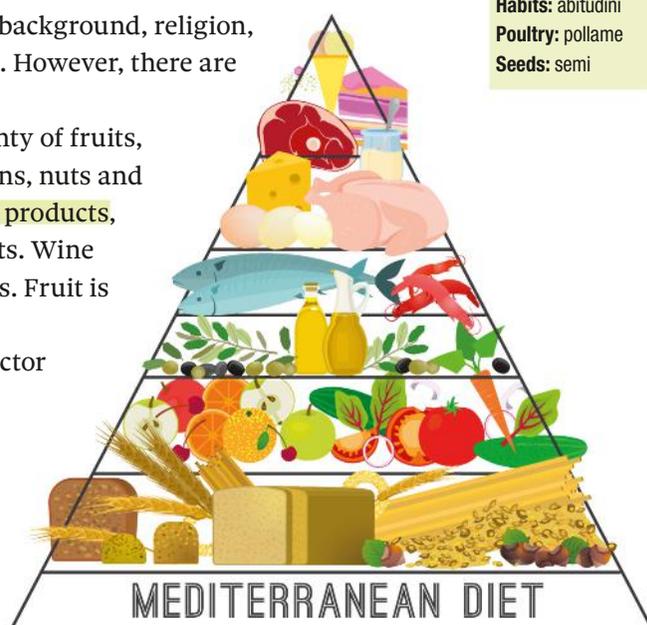
The “Mediterranean diet” is a generic term based on the traditional eating habits in the countries bordering the Mediterranean Sea. Eating styles vary among these countries and even among regions within each country because of differences in culture, ethnic background, religion, economy, geography and agricultural production. However, there are some common factors.

A Mediterranean-style diet typically includes plenty of fruits, vegetables, bread and other grains, potatoes, beans, nuts and seeds; olive oil as a primary fat source, and dairy products, eggs, fish and poultry in low to moderate amounts. Wine may be consumed moderately, usually with meals. Fruit is a common dessert instead of sweets.

Olive oil has been studied as a potential health factor for reducing all-cause mortality and the risk of chronic diseases.

Research studies show that when people in other parts of the world eat a diet similar to that eaten in Mediterranean countries, they reduce their risk of heart disease.

Adapted from: www.heart.org



Glossary

Dairy products: latticini
Habits: abitudini
Poultry: pollame
Seeds: semi

13 Answer the questions.

- What is the “Mediterranean diet”?
- Is the Mediterranean diet the same in every country?
- What is the main source of fat in the Mediterranean diet?
- What kind of dessert is typical in the Mediterranean diet?
- Why do people living in Mediterranean countries have a reduced risk of dying from heart disease?

2.2 Vitamins to keep your immune system strong

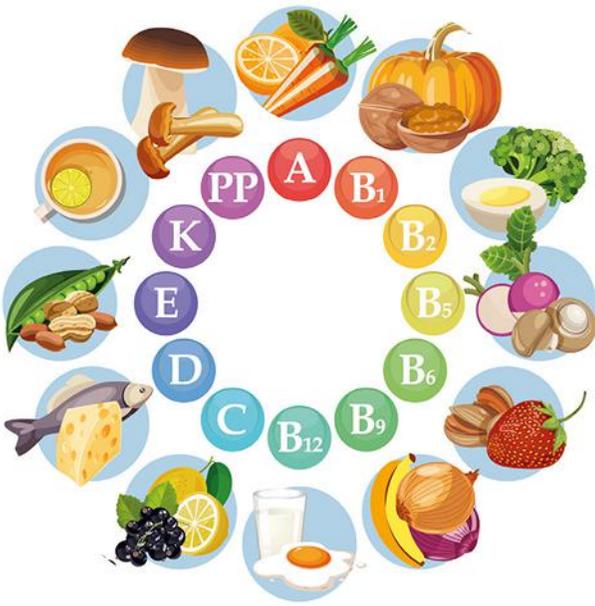
Vitamins are substances that the body needs to grow and develop normally. They are either **fat-soluble** and **water-soluble**. Vitamins A, D, E and K are fat-soluble. The body **stores** fat-soluble vitamins in fatty tissue and the **liver**, and reserves of these vitamins can stay in the body for days and sometimes months. Water-soluble vitamins (vitamin C and all the B vitamins) do not stay in the body for long and cannot be stored. They leave the body via the urine. Because of this, people need a more regular supply of water-soluble vitamins than fat-soluble ones.



Glossary

Liver: fegato
Store (to): immagazzinare

1 Complete the grid using the information from the above picture.



FOOD	CORRESPONDING VITAMINS
Bananas	
Fish	
Onions	
Oranges	
Eggs	
Broccoli	
Tea	
Carrots	
Mushrooms	
Cheese	

Vitamins

NAME	MAIN FUNCTIONS
Vitamin A	It helps you see at night, make red blood cells, and fight off infections.
Vitamin B1	It helps your body turn food into energy. It is also key for the structure of brain cells.
Vitamin B2	Your cells need it to work right, and it might help prevent migraines.
Vitamin B3	Your body needs it to turn food into energy and store it. It helps protect your skin and tissues, too, and may improve your cholesterol levels.
Vitamin B5	It is necessary for fatty acid synthesis.
Vitamin B6	This vitamin plays a role in more than 100 different reactions in your body. It also helps protect against memory loss and colorectal cancer.
Vitamin B8	It is necessary for good cellular function and maintenance of normal hair, skin and mucous membranes.
Vitamin B9	It is important for proper cell division.
Vitamin B12	It helps your body break down food for energy.
Vitamin C	Your body needs it to help your bones, skin and muscles grow.
Vitamin D	It keeps your bones strong and helps your nerves carry messages. It also plays a role in fighting germs.
Vitamin E	It protects your cells from damage caused by pollution, sunlight, and more. It also helps your cells talk to each other and keeps blood moving.
Vitamin K	You need it for blood clotting and healthy bones.

2 What vitamins do the following statements refer to? Complete the table.

<i>Ex: It protects against colorectal cancer</i>	B6
It may help prevent headaches	
It keeps your bones strong	
It helps fight microbes and infections	
It is vital for brain cells	
It turns food into energy	

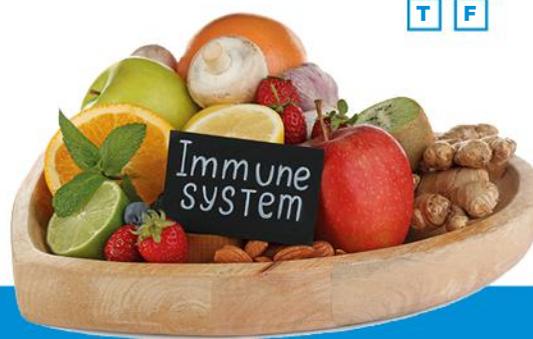
PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking / Social responsibility

3 WRITING | Two friends (Paul and Mike), who are the same age, meet after many years. They have both aged, but Paul is fitter than Mike. Indeed, Paul is very attentive to his diet, he works out three times a week and he takes vitamins to strengthen his immune system. Mike, on the other hand, has gained weight, he is often ill and his eyesight has deteriorated considerably, and his bones have become fragile. Write a conversation between Paul and Mike, where Paul tries to convince Mike to change his habits.

4 LISTENING |  **TRACK 6** | Vitamins and minerals are vital for our immune system. Listen to Dr Gannon talking about them, then decide if the following statements are True or False. Correct the false statements.

- a Vitamins and minerals increase your immune system. T F
- b The best way to get all the vitamins and minerals you need each day is to eat a variety of foods. T F
- c To get all the vitamins and minerals you need, you shouldn't eat fatty foods. T F
- d There is only one type of vegetarian diet. T F
- e If you don't eat meats, you must get a source of protein every day, such as eggs, dairy foods, nuts, peanut butter, and legumes. T F
- f You can get zinc and iron also in dried beans, seeds, nuts, and leafy green vegetables. T F
- g You can find vitamin B12 in plant foods. T F
- h Eggs, milk, other dairy foods, and fortified breakfast cereals, all contain vitamin B12. T F
- i Vegans are vegetarians who eat no animal products at all, including dairy products. T F
- j You do not need your doctor's advice if you want to take vitamin or mineral supplements. T F



2.3 Fuel for growth

1 Complete the passage with the words from the box.

requirement • needs • children • osteoporosis • institutions • minerals • age
• cardiovascular • metabolic • nutrition • nutrients • obesity



Glossary

Childhood: infanzia

Cognitive decline: declino delle facoltà cognitive

Joint: articolazione

Lean: magro

Overweight: sovrappeso

Puberty: pubertà

Our nutritional 1) change with different life stages. Children have a higher energy 2) for their body size compared to adults and need foods that provide sufficient energy but are also rich in 3) **Childhood** is an important time for growth and development, and 4) need a good supply of protein and other nutrients, including calcium, iron, and vitamins A and D. During the teenage years, there are a lot of physical changes, including growth and **puberty**. Eating right during this time is especially important because the body needs a variety of vitamins and 5) to grow, and it can also prevent health problems such as obesity, dental caries, iron deficiency and 6) Energy requirements decrease with advancing 7) This is due to changes in body composition: a decrease in **lean** body tissue (muscle) and an increase in fat tissue. This means that, for a given bodyweight, older people tend to have less muscle and more fat, leading to a fall in basal 8) rate. Many people also become less active as they get older. Good 9) and regular physical activity play a protective role in a number of age-related conditions including 10) disease and **cognitive decline**, and can help to protect oral and dental health, and bone and **joint** health in later life. Both malnutrition and 11) are common in the older population. Malnutrition is more often seen in older people living in 12), while **overweight** and obesity are more common in free-living adults.



2 **LISTENING** | **TRACK 7** | Listen and check your answers.

PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking / Social responsibility

3 **SPEAKING** | Are you concerned about your daily calorie intake when choosing something to eat? Discuss in class.

**Glossary****Canned fish:** pesce in scatola**Handful:** manciata**Skimmed:** scremato**Steamed:** al vapore**Ward off (to):** tenere lontano**Ten easy ways to improve your diet**

- 1** Choose wholegrain bread or brown rice instead of white: it passes through the body faster and it helps other food to move along.
- 2** Cut your sugar intake by drinking less fizzy, sugary drinks.
- 3** Eat a variety of fruit and vegetables every meal. For example, have fruit salad as dessert or a **handful** of dried fruit as a snack.
- 4** Pulses (peas, beans and lentils) are a good way to get protein because they contain fibre and iron.
- 5** When you are eating out, choose **steamed** rice, not fried, or have grilled meat in your burger. It's so simple!
- 6** For lunch on the run a sandwich is handy, but choose healthier ingredients such as salad or lean meat (like ham or turkey).
- 7** Don't eat too much salt to keep blood pressure down. To reduce your salt intake cook with spices and herbs instead.
- 8** Keep your cholesterol down by eating foods high in unsaturated fats: nuts and olive oil are good choices. Eat nuts as snacks and use olive oil to cook with instead of butter.
- 9** Calcium is essential for healthy bones and teeth, and for **warding off** osteoporosis. Have a glass of milk a day, preferably **skimmed** or semi-skimmed. Cheese and yoghurt are also rich in calcium as well as **canned fish** with bones: sardines, tuna, and salmon for instance.
- 10** Eat oily fish twice a week, it's good for omega 3 fatty acids.

4 Decide if the following statements are True or False. Correct the false statements.

- a** Pulses don't contain fibre and iron.
- b** You must reduce sugar because it's not good for your health.
- c** You must choose sandwiches low in fats.
- d** Olive oil is a good choice instead of butter.
- e** Calcium is essential for our brain and skin.
- f** Osteoporosis is a disease which affects bones.
- g** Sardines, tuna and salmon are rich in calcium.
- h** Salt is bad for blood pressure.

**5 VOCABULARY IN CONTEXT | Match each word with its definition.**

a Osteoporosis	1 The part of the alimentary canal below the stomach
b Wholegrain	2 An amount of a substance taken into the body
c Bowels	3 Convenient to handle or use
d Pulses	4 Medical condition in which the bones become fragile
e Intake	5 Cooked by steam from boiling water
f Steamed	6 (Milk) from which the cream has been removed
g Handy	7 The edible seeds of various leguminous plants
h Skimmed	8 Made of unprocessed grains of something

PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking / Social responsibility

- 6** **SPEAKING CLASS DEBATE** | Hippocrates said: “We are what we eat”. Discuss the following topic with the help of your teacher as moderator. Practise agreeing and disagreeing even if you have to argue against something you actually believe in. Here some expressions to help you.

To state an opinion	In my opinion... If you want my opinion... According to (NAME)... As far as I'm concerned (more formal)...
To ask for an opinion	What's your idea? How do you feel about that? What do you think? Do you agree?
To express agreement	I agree with you about... That's for sure. Absolutely. I agree with (NAME). I have to side with (NAME) on this one.
To express disagreement	I don't think so. I'm afraid I disagree. I totally disagree (strong). I'd say the exact opposite (strong). That's not always the case.
To interrupt	Can I add something here? Sorry to interrupt, but... Sorry, you were saying... (to ask for clarification). You didn't let me finish! May I just finish?

PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Creative and critical thinking / Social responsibility

- 7** **WRITING** | According to what you have learnt so far, what do you do to stay healthy and fit? Write a short essay (max. 100 words).

PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking / Digital competence / Social responsibility / Team working

- 8** **INTERNET WRITING SPEAKING** | In groups, search the Internet and find information on food production. What is the “food chain”? Where do vegetables and meat come from? What foods do we import and from where? Write a brief report, then share with the class.



PATHS TOWARDS CONSCIENTIOUS CITIZENSHIP EDUCAZIONE CIVICA



Healthcare in Italy and in the UK

Article 32 of the 1946 Italian Constitution states that health and healthcare is a fundamental right of the individual, and guarantees free access to medical care to citizens. For the **fulfilment** of this right, the Italian Parliament created a uniform health service throughout the country, with equity of access to healthcare for all citizens without exception.

The health care system in Italy is a regionally based national health service known as **Servizio Sanitario Nazionale (SSN)**. It provides free of charge universal coverage at the point of service. While the national level ensures the general objectives and fundamental principles of the national health care system are met, regional governments in Italy are responsible for ensuring the delivery of a benefits package to the population. Health care facilities vary in terms of quality in different regions of Italy.

In the UK, the whole population is covered by the **National Health System (NHST)**, which came into existence in the **aftermath** of the Second World War and became operational on 5th July 1948. The National Health System is financed through general taxation and run by the Department of Health. However, responsibility for the purchasing of health care services across the UK rests at the constituent country level: Primary Care Trusts in England, Health Boards in Scotland, local health groups in Wales and Primary Care Partnerships in Northern Ireland. Despite numerous political and organisational changes, the NHS remains to date a service available universally that cares for people on the basis of need and not ability to pay.

Adapted from: <https://healthmanagement.org> and www.ncbi.nlm.nih.gov



Glossary

Aftermath: periodo successivo

Fulfilment: adempimento



PROFESSIONALLY VALUED SKILLS

Build up your 21st century competencies: Communication and public speaking / Creative and critical thinking / Digital competence / Social responsibility

- INTERNET SPEAKING** | Italian and British National Health System are among the best in the world. What are the differences and similarities between the two systems and what, in your opinion, are their strengths and weaknesses? Build on what you have just read and search the Internet for more information. Share with the class.

From theory to practice

Background

Mike has just started his internship and this change of pace tires him enormously.

In the morning...

He gets up at the same time as when he goes to school; however, in order not to be late, he does not have breakfast.

At lunch...

He has little time for lunch, so he usually chooses fast food (hamburgers, fries, coke...). The restaurant is located near his workplace and it is very convenient.

In the evening...

He feels very tired because he is not used to this pace. He doesn't have the strength to go to the club to join his friends to practice football. He sits in front of the TV and constantly nibbles: cookies, pizzas, sweets, chocolate bars...

Consequences...

This is not ideal for his physical appearance. He has put on a lot of weight and that's very annoying! On the advice of his mother, he decides to consult a dietitian who suggests that he quickly change his eating habits so as not to have to face problems related to cholesterol, diabetes and hypertension.



The internship is ok... but I'm dead tired!

1 What statements fit the situation described above?

- Mike is tired because he trains in the evening.
- Mike feels tired because he has changed his habits.
- Mike is tired because he often goes out with his friends.
- Mike cares about what he eats.
- Mike hasn't changed his eating habits in order to better adapt to the new pace.
- Mike eats a lot at dinner.
- Mike is going to face serious health problems if he doesn't change his diet.
- Mike is not happy because he put on some weight.
- Mike eats lots of fruit and vegetables.
- Mike wakes up early every morning so that he has time to have breakfast.

2 Complete the table.

Changes in Mike's life	
Food he eats	
Problems caused by his diet	
Health problems his diet may cause	
The reason why he wants to change his eating habits	

A Discovering new food trends and learning how to eat well.

DOC 1

How generation Z relates to food

Gen Z is defined by demographers as the follow up to millennials, which includes anyone born between 1997 and 2012.

Gen Z enjoys cooking. Twenty-six percent make most of their own food, and 71% “would love to learn how to cook more.” Eggs, pasta, rice, vegetables, cookies or brownies, pancakes, waffles and French toast top their list of favourites. But a busy schedule has left Gen Z watching more cooking videos than really cooking. Unfortunately, Gen Z is not very concerned about health and wellness. Even if they have a richer background in health and wellness education, healthy eating is less of a priority. They are more likely to seek out indulgent flavours and fun food experiences. A combination of a busy lifestyle and internet exposure to a diverse and sophisticated food universe has led Gen Z to eat and choose food differently. Traditional mealtimes have lost their meaning. Flexibility to eat whenever and wherever they want is preferred over a rigid dinner time. That changes the nature of their meals. Ready-to-eat foods replace traditional meals. Snacking takes precedent. Gen Z is 53 times more likely to consume snacks as meals annually.

Adapted from: <https://dfaingredients.com/trends/gen-z-eating-habits>

3 Decide if the statements are True or False. Correct the false statements.

- a Gen Z and millennials are people belonging to the same generation.
- b Gen Z likes cooking.
- c About 70% would like to prepare their own food.
- d Gen Z doesn't like vegetables.
- e Gen Z likes watching cooking videos.
- f Gen Z is very careful about what they eat.
- g Gen Z knows very well what healthy eating is.
- h Gen Z likes experimenting with new tastes and flavours.
- i Gen Z's food approach is influenced by their lifestyle.
- j Gen Z likes having dinner at a fixed time.
- k Gen Z is more inclined to substitute a meal with snacks.

T	F
T	F
T	F
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T	F



DOC 2

Healthy eating during adolescence

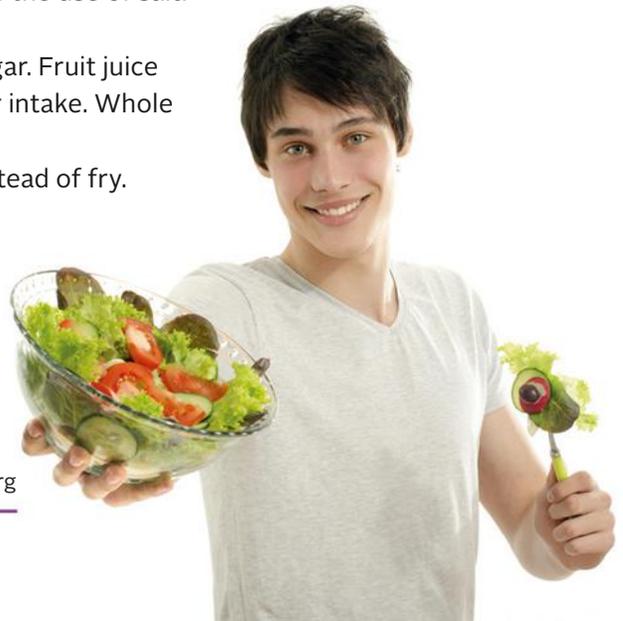
Eating healthy food is important at any age, but it's especially important for teenagers. Being a teenager can be fun, but it can also be difficult as your body shape changes. These physical changes can be hard to deal with if they aren't what you are expecting. There can be pressure from friends to be or look a certain way, and this might affect the foods you eat.

Because you are still growing, you need to take extra care to get enough of some important vitamins and minerals to feel good and be healthy. Eating three regular and balanced meals a day with some snacks will help you meet your nutrition needs. Skipping meals means you will miss out on vitamins, minerals and carbohydrates, which can leave you lacking energy or finding it hard to concentrate.

Here are a few tips:

- * Increase fibre in the diet and decrease the use of salt.
- * Drink plenty of water.
- * Try to avoid drinks that are high in sugar. Fruit juice can have a lot of calories, so limit your intake. Whole fruit is always a better choice.
- * When cooking, try to bake or broil instead of fry.
- * Eat fruit or vegetables for a snack.
- * Decrease the use of butter.
- * Choose low-fat or lean meats and poultry.
- * Vary your protein routine-choose more fish, nuts, seeds, peas and beans.

Adapted from: www.hopkinsmedicine.org

**4 Complete the table.**

	GOOD HABIT	BAD HABIT
Eating healthy food		
Skipping meals		
Eating balanced meals		
Using too much salt		
Drinking a lot of water		
Drinking sugary drinks		
Eating fruit as a snack		
Frying when cooking		
Using a lot of butter		
Choosing poultry and lean meats		
Choosing beans to vary protein routine		

5 Using the information from document 2, compose your ideal menus for a day, respecting the main rules for a balanced diet.

Foods

Cereals



Fruits and vegetables



carbohydrates



Meat



Fish



Dairy products



Eggs



French fries with mayonnaise and ketchup



Chocolate bars



Sugary drinks



Tea and coffee



MEAL	MENU TO BE COMPOSED
Breakfast	
Lunch	
Dinner	

B. Thinking over risky eating behaviours.

DOC 3

What are trans fats?

Trans fats, or trans-fatty acids, are a form of unsaturated fat. They come in both natural and artificial forms.

Natural, or ruminant, trans fats occur in the meat and dairy from ruminant animals, such as cattle, sheep and goats. They form naturally when bacteria in these animals' stomachs digest grass. However, dairy and meat eaters needn't be concerned. Several reviews have concluded that a moderate intake of these fats does not appear harmful. However, artificial trans fats — otherwise known as industrial trans fats or partially hydrogenated fats — are hazardous to your health. These fats occur when vegetable oils are chemically altered to stay solid at room temperature, which gives them a much longer shelf life. Trans fats can be found in many foods – including fried foods like doughnuts, and baked goods including cakes, pie crusts, biscuits, frozen pizza, cookies, crackers, stick margarines and other spreads.

Adapted from: www.healthline.com and www.heart.org

- 6** According to document 3, what kind of trans-fatty acids are harmful for your health? What foods does Mike eat which contain them? (See the answers to ex. 2, page 42).

REVIEW YOUR NOTIONS

- 7** Complete the texts using the words from the box.

habits • vitamins • artificial trans fats • balanced • difficulty
trans-fatty acids • healthy • frying • carbohydrates • poultry • sugary • salt

- a** Adolescents must get enough **1)** and minerals to feel good and be healthy, that's why it is important to have three **2)** meals. Skipping meals means missing out on vitamins, minerals and **3)**, which can cause a lack of energy and **4)** in concentrating. Good eating **5)** help stay healthy and fit. A moderate intake of natural **6)**, that is fats which occur in the meat and dairy from ruminant animals, does not appear to be harmful, as some research has concluded. However, **7)** are dangerous. Industrial trans fats can be found in many foods, above all foods young people like most such as cakes, cookies, crackers and frozen pizzas.
- b** Here are a few tips to have a **8)** diet:
- * Increase fibre and decrease the use of **9)**
 - * Drink water instead of **10)** drinks. Fruit juice can have lots of calories, so limit your intake.
 - * When cooking, bake or broil instead of **11)**
 - * Eat fruit or vegetables for a snack.
 - * Decrease the use of butter.
 - * Choose lean meats and **12)** and vary your protein routine: fish, nuts, seeds, peas and beans are good options.