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Вінницький національний медичний університет ім. М. І. Пирогова

ЗБІРНИК РОЗМОВНИХ ТЕМ З АНГЛІЙСЬКОЇ МОВИ
для студентів медичного університету
спеціальності 226 «Фармація, промислова фармація»

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ПЕРЕДМОВА

Збірник розмовних тем з англійської мови призначений для студентів першого та другого курсів медичних університетів, що навчаються за спеціальностями 226 "Фармація, промислова фармація"

Збірник створено відповідно до вимог робочої програми з навчальних дисциплін «Іноземна мова» та «Іноземна мова (за професійним спрямуванням)» підготовки фахівців другого (магістерського) рівня вищої освіти галузі знань 22 «Охорона здоров'я» спеціальності 226 «Фармація, промислова фармація». Зазначена дисципліна є обов'язковим компонентом освітньо-професійної програми «Фармація», циклу загальної підготовки магістра фармації.

Збірник містить 14 розмовних тем фахової спрямованості, до текстовий словник до кожної теми, а також запитання для вдосконалення мовленнєвих умінь студентів. Кожна розмовна тема супроводжується короткою анотацією, що уможливає диференціацію змісту навчання відповідно до індивідуальних можливостей студентів. Матеріали підручника забезпечують професійну спрямованість здобувачів освіти спеціальності 226 «Фармація, промислова фармація».

Текстовий матеріал збірника – це адаптовані матеріали сучасних оригінальних англомовних джерел – словників, енциклопедій, сайтів довідкового характеру. Зокрема, було використано словники:

- Bma Illustrated Medical Dictionary, Fourth Edition. Dorling Kindersley, 2018;
- Webster's New World Medical Dictionary, Third Edition. Hoboken : Wiley Publishing, 2008;
- енциклопедії:
- Human Diseases and Conditions, Third edition / Project editor : Miranda Herbert Ferrara. Charles Scribner's Sons, 2016;
- The Gale Encyclopedia of Medicine, Sixth edition. Gale Research Inc., 2020;

сайти:

- <https://www.tga.gov.au>
- <https://nida.nih.gov>
- <https://www.drugs.com>
- <https://my.clevelandclinic.org>
- <https://www.britannica.com>
- <https://www.healthdirect.gov.au>
- <https://www.mayoclinic.org>
- <https://www.msmanuals.com/professional>
- <https://www.kenhub.com>

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MY FUTURE SPECIALITY

Increase your vocabulary:

to compound	[ˈkɑːmpaʊnd]	з'єднувати
to dispense	[dɪˈspens]	готувати і відпускати (ліки)
ensuring	[ɪnˈʃʊərɪŋ]	забезпечення
equipment	[ɪˈkwɪp.mənt]	обладнання
expertise	[ˌeksɜːˈtiːz]	досвід
knowledge	[nɒl.ɪdʒ]	знання
manager	[ˈmænɪdʒə]	менеджер, управляючий
to master	[ˈmɑːstə]	оволодівати, удосконалювати
pharmacist	[ˈfɑːməsɪst]	аптекарь, фармацевт
pharmacy	[ˈfɑːməsi]	фармація
quality	[ˈkwɒlɪti]	якість, властивість
to require	[rɪˈkwaɪə]	вимагати
research	[rɪˈsɜːtʃ]	дослідження, дослідницький
speciality	[ˌspeʃiˈælti]	спеціальність

I am a student of pharmaceutical department. My future speciality is a pharmacist. The students who master pharmacy take general and special courses. We study Biology, Physics, Maths, Pharmaceutical Chemistry, Pharmacology, Technology of drugs, *Organization and Economy of Pharmacy, Marketing and Management etc.

During the period of studies students have practice in chemist's shops. Here they get knowledge of the equipment of the chemist's and the work of pharmacists in general. They learn how to compound, dispense, store and sell drugs.

Pharmacists are healthcare professionals who specialize in the field of pharmacy. They are experts in medication therapy and are responsible for ensuring the safe and effective use of pharmaceutical drugs. The profession of a pharmacist requires not only special knowledge and skills, but also high moral qualities, sensitivity, and the desire to help a patient receive the necessary medicines as soon as possible. Overall, future pharmacists will need to combine clinical expertise with strong interpersonal, technological and problem-solving skills to provide high-quality patient care.

After graduating from the university the future pharmacists can work as managers, assistants, *dispensing pharmacists, chemist-analysts, chemist-technologists, pharmaceutical economists. Graduates can also work in different scientific research institutions, pharmaceutical factories and chemical laboratories. They can become *legal experts too. They can master their speciality in state enterprises and private firms. It is a very interesting and useful speciality.

Notes:

*Organization and Economy of Pharmacy – організація та економіка фармації

*dispensing pharmacist – фармацевт, що відпускає ліки (рецептар)

*legal expert – юрист, судовий експерт, юридичний експерт

Answer the questions:

1. What is your future speciality?
2. What do we need to be a good specialist?
3. What subjects do you study?
4. What do students do during their practice in chemist's shops?
5. Where can one work with a pharmacy diploma?
6. What do they learn in chemist's shop?
7. Where would you like to work in the future?
8. What skills are crucial for future pharmacists?
9. Why have you decided to become a pharmacist?
10. What university subjects are the most important for becoming a good specialist?

Summary

I am a student of pharmaceutical department. My future speciality is a pharmacist. To be a good specialist in future means to study well at the University. The students who master pharmacy take general and special courses. We study Biology, Physics, Maths, Pharmaceutical Chemistry, Pharmacology, Technology of drugs, Organization and Economy of Pharmacy, Marketing and Management and others. During the period of studies students have practice in chemist's shops. A chemist's shop is a specialized shop. Here drugs are compounded, dispensed, stored and sold. After graduating from the university the future specialists can work as managers, assistants, dispensing pharmacists, chemist-analysts, pharmaceutical economists. It is a very interesting and useful speciality.

THE HUMAN BODY

Increase your vocabulary:

abdomen	[ˈæbdəməŋ]	живіт; черевна порожнина
allow	[əˈlaʊ]	дозволяти
bone	[bəʊn]	кістка
breastbone	[ˈbreɪstbəʊn]	грудина
cartilage	[ˈkɑːtəlɪdʒ]	хрящ
cavity	[ˈkævɪti]	порожнина
cheekbone	[ˈtʃiːkbəʊn]	вилиця
cranial	[ˈkreɪniəl]	черепний
diaphragm	[ˈdaɪəfræm]	діафрагма
facial	[ˈfeɪʃəl]	лицьовий
fibula	[ˈfɪbjələ]	малогомілкова кістка
forearm	[ˈfɔːrɑːm]	передпліччя
forehead	[ˈfɒrɪd]	лоб
gallbladder	[ˈgɒlblædə]	жовчний міхур
heart	[hɑːt]	серце
intestines	[ɪnˈtestɪns]	кишечник
jaw	[dʒɔː]	щелепа
joint	[dʒɔɪnt]	суглоб
kidney	[ˈkɪdni]	нирка
ligament	[ˈlɪɡəmənt]	зв'язка
limb	[lɪm]	кінцівка
muscle	[ˈmʌsl]	м'яз
pelvic	[ˈpelvɪk]	тазовий
shin	[ʃɪn]	гомілка
skull	[skʌl]	череп
spine	[spaɪn]	хребет
stomach	[ˈstʌmək]	шлунок, черво, живіт
temple	[ˈtempəl]	скроня
thigh	[θaɪ]	стегно
thorax	[ˈθɔːræks]	грудна клітка
trunk	[trʌŋk]	тулуб
urinary	[ˈjʊərɪnəri]	сечовий
vertebrae	[ˈvɜːtɪbrɪː]	хребці

The human body is the collection of tissues, organs, and systems that makes up a human being. The skeleton is the bony framework of the body. It consists of 208 bones of various size and shapes. The skeleton gives support to soft tissues. It protects delicate structures such

as the brain, the heart and the lungs. The joints, cartilages and ligaments between the bones determine the degree and the quality of the motion. The bones forming the skeleton are divided into the bones of the head, the trunk and of the upper and lower extremities.

26 bones of the head form the skull which protects the brain. The bones of the skull are composed of cranial and facial parts. The forehead the temples, the cheeks, the cheekbones, the two jaws and the mouth compose the face.

The trunk consists of the spine, the chest and the pelvic bones. In the spine there are many vertebrae. The trunk is divided into the upper cavity called thorax and the lower one called abdomen. The thorax includes 12 pairs of ribs and the breastbone. The ribs are connected with the breastbone by cartilages. The lungs and the heart are located above the diaphragm in the upper cavity. In the lower cavity we find inner organs such as stomach, liver, urinary bladder, gallbladder, kidneys, spleen and intestines.

The upper limb is divided into the shoulder, the forearm and the hand.

The lower limb consists of the thigh-bone, the shin-bone, the fibula and the foot.

The muscles form about 40 per cent of the body weight. They are attached to bones, inner organs and blood vessels. Muscles allow us to make internal or external movements. The body is covered by the skin. There are blood vessels and nerves in all the tissues of our body.

Answer the questions:

1. What parts does the human body consist of?
2. What is the skeleton?
3. What is the function of the skeleton?
4. What parts are the skeletal bones divided into?
5. What parts are the bones of the skull composed of?
6. What does the trunk consist of?
7. What cavities is the trunk divided into?
8. What organs are there in the upper and lower cavities?
9. What parts are the upper and lower limbs divided into?
10. What are the muscles attached to?

Summary

The human body is the collection of tissues, organs, and systems. The skeleton is the bony framework of the body. The skeletal bones are divided into the bones of the head, the trunk, and the limbs. The main part of the head is called the skull. The trunk consists of the spine, the chest and the pelvic bones. The trunk is divided into the upper cavity called thorax and the lower one called abdomen. The lungs and the heart are located above the diaphragm in the upper cavity. In the lower cavity we find inner organs such as stomach, liver, urinary bladder, gallbladder, kidneys, spleen and intestines. The upper limb is divided into the shoulder, the forearm and the hand. The lower limb consists of the thigh-bone, the shin-bone, the fibula and the foot.

The muscles form about 40 per cent of the body weight. They are attached to bones, inner organs and blood vessels. The body is covered by the skin.

AT THE CHEMIST 'S SHOP

Increase your vocabulary:

access	['ækses]	доступ
administration	[əd'mɪnɪ'streɪʃən]	застосування, призначення
ampoule	['æmpu:l]	ампула
appropriate	[ə'prəʊpriət]	відповідний
composition	['kɒmpə'zɪʃ(ə)n]	склад
to confuse	[kən'fju:z]	плутати (що-небудь)
contraindication	[kɒn'treɪndɪ'keɪʃ(ə)n]	протипоказання
cough	[kɒf]	кашель
to dispense	[dɪs'pens]	відпускати (ліки)
to distribute	[dɪ'strɪb.ju:t]	розподіляти
dosage	['dəʊsɪdʒ]	дозування
dropper	['drɒpə]	крапельниця, піпетка
drug	[drʌɡ]	ліки, лікарський препарат
headache	['hedɪk]	головний біль
injection	[ɪn'dʒekʃən]	ін'єкція
intramuscular	[.ɪntrə'mʌskjʊlə]	внутрішньом'язевий
intravenous	[.ɪntrə'vi:nəs]	внутрішньовенний
to label	['leɪb(ə)]	наліплювати етикетку, маркувати
medication	['medɪ'keɪʃ(ə)n]	ліки, лікарський препарат
medicine	['medɪs(ə)n]	ліки, лікарський препарат
to offer	['ɔfə]	пропонувати
overdosage	['əʊvə'dəʊsɪdʒ]	передозування
painkiller	['peɪn.kɪlə]	знеболювальний засіб
prescription	[prɪ'skrɪpʃ(ə)n]	рецепт, призначення
to promote	[prə'məʊt]	сприяти
to provide	[prə'vaɪd]	забезпечувати
remedy	['remɪdɪ]	рр засіб
separately	['seprətli]	окремо
syringe	[sɪ'rɪndʒ]	шприц
therapeutic	[θerə'pjʊ:tɪk]	терапевтичний
thermometer	[θə'mɒmɪtə]	термометр
warning	['wɔ:nɪŋ]	застереження

A chemist's shop (a pharmacy or a drug store) is a specialized shop that sells medicines, *medical supplies and *medical devices. Chemist's shops are staffed by pharmacists and

pharmacy assistants who are trained to dispense medicines, provide medical advice and offer various pharmacy services.

There are usually two departments at a large chemist's shop: the chemist's department and the prescription department. At the chemist's department one can get *over-the-counter medicines, various medical products and supplies. At the prescription department medicines are sold or made up by prescriptions. The pharmacists select the appropriate medication, measure the correct dosage and label the medicine with the patient's name, dosage instructions and warnings.

At the chemist's all medicines are kept in *drug cabinets, open shelves and refrigerators. They are distributed according to their therapeutic effect: sedatives, painkillers, drugs for cough, headache, flu and cold, cardiac medicines, nasal sprays, eye drops, *dietary supplements and vitamins. Disinfectants, herbs and things for medical care such as hot water bottles, medicine droppers, syringes and thermometers are kept separately. Here you can also see *drug products of all kinds: powder medicines, ampoules of drugs for intramuscular and intravenous injections, tubes of ointments, different pills and tablets for internal use. Every package with medicine contains *a drug information leaflet indicating the name of a drug, its composition, dosage and administration, possible side effects, *expiry date, warnings and contradictions. This information is very important for doctors, pharmacists and patients not to confuse different remedies and to avoid severe health problems.

Thus, the chemist's shops are important institutions in providing patients access to medicines and healthcare products, promoting public health and supporting community well-being.

Notes:

- *medical supplies [sə'plaɪz] – матеріали медичного призначення, медичні товари
- *medical devices [dɪ'vaɪsɪz] – вироби медичного призначення, медичні вироби
- *over-the-counter['əʊvədə'kaʊntə] medicines - лікарські засоби, що відпускаються без рецептів
- *drug cabinet ['kæb(ɪ)nɪt] – шафа для зберігання ліків
- *dietary [ˈdaɪət(ə)rɪ] supplements ['sʌplɪmənts] – біологічно активні добавки
- *drug product – лікарський засіб, лікарський препарат
- *drug information leaflet – інструкція з використання лікарського засобу
- *expiry date [ɪks paɪəri deɪt] – дата закінчення терміну придатності

Answer the questions:

1. What is a chemist's shop?
2. What specialists are the chemist's shops staffed by?
3. What departments are there at the chemist's shop?
4. What drugs can be bought at the chemist's department?
5. What medicines are dispensed at the prescription department?
6. What are the duties of pharmacists at the prescription department?

7. Where are all drugs kept at the chemist's?
8. How are medicines distributed at the chemist's?
9. What drug products can you get at the chemist's?
10. What is indicated in the drug information leaflet?

Summary

A chemist's shop is a specialized shop where medicines are sold. A large chemist's shop has two departments: the chemist's department and the prescription department. At the chemist's department you can get medicines without prescriptions. At the prescription department medicines are sold or made up by prescriptions. All drugs are kept in drug cabinets, open shelves and refrigerators. There you can see sedatives, painkillers, drugs for flu and cold, cardiac medicines, nasal sprays, eye drops, tonics and vitamins. There are ampoules of drugs for injections, pills and tablets for internal use, nasal sprays, eye drops, tubes of ointments and other remedies. Every package with medicine contains a drug information leaflet. It indicates the name of a drug, its composition, dosage and administration, side effects, expiry date, and contradictions. At the chemist's shop we can buy everything necessary for medical care.

DRUGS

Increase your vocabulary:

to administer	[əd'mɪnɪstə]	призначати
analgesic	[.ænl'dʒiːzɪk]	знеболюючий засіб
brand name	[brænd neɪm]	заресстрована патентована назва
to cause	[kɔːz]	викликати
competitor	[kəm'petɪtə]	конкурент
to contain	[kən'teɪn]	вміщувати
cough	[kɒf]	кашель
definite	[ˈdefɪnət]	точний, ясний, визначений
generic	[dʒə'nerɪk]	загальний, непатентований
gland	[glænd]	залоза
inhalation	[.ɪnhə'leɪʃn]	інгаляція
laxative	[ˈlæksətɪv]	проносний засіб
major	[ˈmeɪdʒə]	основний, головний
manufacturer	[.mænjə'fæktʃərə]	виробник, підприємець
mixture	[ˈmɪkstʃə]	мікстура, суміш
ointment	[ˈɔɪntmənt]	мазь
orally	[ˈɔːrəli]	через рот
parenterally	[pə'rentərəli]	парентерально
prevention	[pri'venʃn]	профілактика
root	[ruːt]	корінь
secretion	[si'kriːʃn]	секреція, секрет
source	[sɔːs]	джерело
standard	[ˈstændəd]	стандарт, норматив
substance	[ˈsʌbstəns]	речовина
suffering	[ˈsʌfərɪŋ]	страждання
treatment	[ˈtri:tmənt]	лікування
various	[ˈveəriəs]	різноманітні
particular	[pə'tɪkjələ]	особливий
property	[ˈprɒpəti]	якість, властивість
pure	[pjʊə]	чистий, ясний

Drugs are chemical substances used in medicine for treatment or prevention of diseases in man and animals. Drugs can come from different sources and are obtained from various parts of plants such as roots, leaves and fruits. Drugs can also be obtained from animals, for example, hormones and secretions from glands of animals. They can be made from chemical substances in laboratories. Some drugs are contained in food, they are called vitamins.

Drugs often have several names. When a drug is first discovered, it is given a chemical name. When a drug is approved by the Food and Drug Administration, it is given a generic

(official) name and a brand name. The generic name is public property and any drug manufacturer may use it. The brand name is a private property of the drug manufacturer and no competitor may use it.

Two important standards for drugs are that the drug must be clinically useful and available in pure form.

Each drug can be classified into antiseptics and disinfectants, cough mixtures, laxatives, tonics, analgesics, ointments and others.

Therapeutic effect, side effect and allergic reaction are the major characteristics of drugs. Therapeutic effect is the ability to act on an organ or tissues and to restore normal body function. Side effect is a negative reaction to a medicine or treatment. Allergic reactions are sensitivities to substances called allergens that come into contact with the skin, nose, eyes, respiratory tract, and gastrointestinal tract. The proper dosage of the drug is of great importance as well.

Drugs are administered in four ways: orally (through the mouth), parenterally (by injection), rectally (into the rectum), and by inhalation through lungs.

Notes:

*Food and Drug Administration -Управління з контролю за якістю харчових продуктів і медикаментів

Answer the questions:

1. What are drugs?
2. Where are drugs obtained from?
3. What is the chemical name of the drug?
4. What is meant by the generic name of a drug?
5. What can you say about the brand name of a drug?
6. What are the two important standards for a drug?
7. How can the drugs be grouped?
8. What are the major characteristics of drugs?
9. What is therapeutic effect of the drug?
10. In what ways are drugs administered?

Summary

Drugs are chemical substances for treatment or prevention of diseases. They relieve suffering and pain. Drugs come from different sources. They are obtained from plants and animals. And they are made from chemical substances in laboratories. Usually drugs have three names: the chemical name, the generic name and the brand name. All drugs are grouped according to their action. There are antiseptics, analgesics, sedatives, laxatives, tonics and other drugs. The main characteristics of drugs are: therapeutic effect, side effect and allergic reaction. Drugs are administered orally, parenterally, rectally and by inhalation.

VITAMINS

Increase your vocabulary:

amount	[ə 'maunt]	кількість
avitaminosis	[ævi, tæmi 'nəʊsɪs]	авітаміноз
complicated	['kɒmplɪkətɪd]	складний
to contain	[kən 'teɪn]	містити в собі
cornea	['kɔːniə]	рогівка ока
deficiency	[dɪ'fɪj(ə)nsɪ]	дефіцит
erythrocyte	['rɪθrə(ɔ)saɪt]	еритроцит
fatigue	[fə 'tiːg]	втома
fatty tissue	['fæti 'tɪʃuː]	жирова тканина
fish liver oil	[fɪʃ 'lɪvə ɔɪl]	риб'ячий жир
growth	[grəʊθ]	ріст
to heal	[hiːl]	заживати
to increase	['ɪnkriːs]	збільшувати(ся), підвищувати(ся)
irritability	['ɪrɪtə'bɪləti]	дратівливість
nutrition	[njuː 'trɪʃən]	живлення
to prevent	[prɪ'vent]	запобігти
prolonged	[prəʊ'lɒŋd]	тривалий
proper	['prɒpə]	належний, відповідний
purpose	['pə:pəs]	мета, ціль
requirement	[rɪ'kwəɪəmənt]	потреба
to result in	[rɪ'zʌlt]	призводити до
soluble	['sɒljubl]	розчинний
source	[sɔːs]	джерело
to store	[stɔː]	запасати, відкладати
substance	['sʌbstəns]	речовина
varied	['veəriəd]	різноманітний
yeast	[jiːst]	дріжджі

Vitamins are a group of substances that are needed for normal cell function, growth, and development. There are 13 essential vitamins. They are marked by letters A, B, C, D, K, P, etc. Vitamins are grouped into two categories. *Fat-soluble* vitamins are stored in the body's liver, fatty tissue, and muscles. The four fat-soluble vitamins are vitamins A, D, E, and K. *Water-soluble* vitamins are not stored in the body. The nine water-soluble vitamins are vitamin C and all the B vitamins.

Vitamin A is necessary for the proper growth of bones, for the nutrition of the cornea of the eye and for the proper functioning of night vision. The best source of vitamin A is fish liver oil.

Vitamin B is really a complicated group of vitamins, twelve of which are known now. Some of them are necessary for growth, for the proper functioning of the nervous system, for the proper formation of the erythrocytes. B vitamins are found in liver, yeast, eggs and some vegetables.

Vitamin C is necessary for strong bones and teeth, and for healthy blood vessels. It also helps wounds to heal faster. The body stores very little vitamin C. So, we must get it every day with vitamin C-rich foods. These include citrus fruits and fresh vegetables, fruit and berries.

Vitamin D increases the amount of calcium in the blood, which is needed to build strong bones and for proper work of nerves and muscles.

Prolonged deficiency of any vitamin results in a disease known as avitaminosis. Vitamin deficiency can cause a range of symptoms such as fatigue, irritability, skin and hair changes.

Vitamins are widely used for medical purposes, many of them are produced synthetically.

Answer the questions:

1. What are vitamins?
2. What is their function in the human body?
3. How many essential vitamins are known?
4. How are vitamins grouped?
5. What is vitamin A necessary for?
6. Where are B-vitamins found?
7. Why is vitamin C important for the body?
8. What is avitaminosis?
9. What are the main symptoms of avitaminosis?
10. What do the specific symptoms of avitaminosis depend on?

Summary

Vitamins are special organic substances. They help to carry out chemical changes in the cells. There are 13 essential vitamins. They are marked by letters A, B, C, D, E etc. All of them are important for the human organism. Vitamin A is necessary for proper growth of bones and night vision. Vitamin B is a group of vitamins important for growth and the work of nervous system. Vitamin C is necessary for strong bones and teeth and for healthy blood vessels. Vitamin D increases the amount of calcium in the blood. Vitamins are grouped into fat-soluble and water-soluble vitamins. We get most vitamins from food. Vitamins are widely used in medicine, many of them are produced synthetically.

THE RESPIRATORY SYSTEM

Increase your vocabulary:

to bifurcate	[ˈbɪfəkeɪt]	роздвоювати(ся)
bronchi	[ˈbrɒŋkaɪ]	бронхи
bronchus	[ˈbrɒŋkəs]	бронх
bronchial	[ˈbrɒŋkiəl]	бронхіальний
cartilage	[ˈkɑːtɪlɪdʒ]	хрящ
cartilaginous	[ˌkɑːtɪˈlædʒɪnəs]	хрящовий
cone	[kəʊn]	конус
larynx	[ˈlæɪŋks]	гортань
lobe	[ləʊb]	доля, частка
membraneous	[memˈbreɪniəs]	перетинчастий; плівковий мембранний
to occupy	[ˈɔkjəpaɪ]	займати (місце)
pleura	[ˈplʊərə]	плевра
pneumonia	[ˈnjuːˈmeɪniə]	пневмонія
pulmonary	[ˈpʌlmən(ə)rɪ]	пульмональний, легеневий
respiratory	[rɪˈspɪrət(ə)rɪ, ˈresp(ə)rət(ə)rɪ rɪˈspɪr-]	респіраторний, дихальний
root	[ruːt]	корінь
to supply	[səˈplaɪ]	постачати, доставляти
tongue	[tʌŋ]	язик
trachea	[trəˈkiːə]	трахея
tuberculosis	[tjuːˌbɜːkjʊˈləʊsɪs]	туберкульоз

The respiratory system is the organs and other parts of your body involved in breathing, when you exchange oxygen and carbon dioxide. The respiratory system includes the nose, mouth, throat (pharynx), voice box (larynx), windpipe (trachea) and lungs. Air enters the respiratory system through the nose or the mouth. If it goes in the nostrils, the air is warmed and humidified.

Both lungs are covered by a thin serous membrane, the pleura. The lungs are the principal organs of respiration. They are two in number, and are situated in the thorax. Each lung is cone-shaped.

The lungs are divided into lobes. The left lung is slightly smaller than the right. It has two lobes. The right lung is larger and heavier. It has three lobes. The root is composed of the following parts: bronchus, pulmonary artery, pulmonary veins, bronchial vessels, nerves and lymphatics.

Pulmonary artery brings de-oxygenated blood from the right side of the heart to the lungs. It divides into right and left pulmonary arteries.

The right pulmonary artery divides into three smaller branches, supplying the three lobes. The left pulmonary artery divides into two smaller branches supplying the two lobes.

The pulmonary veins pass oxygenated blood from the lungs, into the left side of the heart. The bronchial arteries pass blood for the nutrition of the lung substance.

The most common respiratory diseases are asthma, chronic obstructive pulmonary disease, cystic fibrosis, lung cancer, tuberculosis, bronchitis and pneumonia.

Answer the following questions:

1. What is the respiratory system?
2. What does the respiratory system include?
3. What are the lungs covered by?
4. How many lobes are there in each lung?
5. What is the root composed of?
6. What is the function of pulmonary artery?
7. What branches does the left pulmonary artery divide into?
8. What is the function of the pulmonary vein?
9. What do you know about the bronchial arteries?
10. What diseases of the respiratory system do you know?

SUMMARY

The respiratory system is the organs and other parts of your body involved in breathing, when you exchange oxygen and carbon dioxide. The respiratory system includes the nose, mouth, throat (pharynx), voice box (larynx), windpipe (trachea), and lungs. Air enters the respiratory system through the nose or the mouth. If it goes in the nostrils (also called nares), the air is warmed and humidified.

The lungs are the main organs of respiration. Both lungs are covered by a thin serous membrane, the pleura. They are situated in the thorax. The lungs are divided into lobes. The left lung has two lobes. The right lung has three lobes.

The root is composed of the following parts: bronchus, pulmonary artery, pulmonary veins, bronchial vessels, nerves, and lymphatics.

THE CARDIOVASCULAR SYSTEM

Increase your vocabulary:

aorta	[eɪ'ɔ:tə]	аорта
artery	['ɑ:təri]	артерія
atrium	['eɪtriəm]	пересердя
blood	[blʌd]	кров
capillary	[kə'pɪləri]	капіляр
cardiovascular	[ˌkɑ:diəʊ'væskjələ(r)]	серцево-судинний
chamber	[ˈtʃeɪmbə(r)]	порожнина серця
comprise	[kəm'praɪz]	включати, охоплювати
female	['fi:meɪl]	жінка
heart	[hɑ:t]	серце
hollow	['hɒləʊ]	порожнистий
liquid	['lɪkwɪd]	рідина
male	[meɪl]	чоловік
muscular	['mʌskjələ(r)]	м'язовий
nutrient	['nju:triənt]	поживна речовина
oxygen	['ɒksɪdʒən]	кисень
pericardium	[peri'ka:diəm]	перикард
plasma	['plæzmə]	плазма
platelet	['pleɪtlət]	тромбоцит
pulmonary circulation	['pʌlmənəri ,sɜ:kjə'leɪfɪn]	мале коло кровообігу
septum	['septəm]	перегородка
systemic circulation	[sɪ'stemɪk ,sɜ:kjə'leɪfɪn]	велике коло кровообігу
tissue	['tɪʃu:]	тканина
valve	['vælv]	клапан
vascular	['væskjʊlə]	судинний
vein	[veɪn]	вена
ventricle	['ventrɪkl]	шлуночок
vessel	['vesl]	судина
waste	[weɪst]	відходи
weight	[weɪt]	вага

The cardiovascular system is a system of the body which comprises the heart, the blood, and the blood vessels. This system is responsible for transporting blood.

At the centre of the cardiovascular system is the heart. The heart is an inner hollow muscular organ. It is located in the chest and included in pericardium. The weight of the heart is about 300 grams in the male and about 270 grams in the female.

The heart consists of two separate chambers divided by the septum. Each of the chambers has two connected parts: the atrium and the ventricle. Valves separate the atriums from the ventricles.

The vascular system consists of three groups of vessels – arteries, veins and capillaries. The vessels carrying blood to and from the tissues of the body compose the general system. They are called systemic circulation. The pulmonary circulation is formed by the vessels carrying blood to and from the lungs.

Arteries carry nutrients and oxygenated blood to the body's tissues. The largest artery is aorta. Veins return de-oxygenated blood to the heart. Capillaries are very small blood vessels that have thin walls.

Blood is a liquid that carries nutrients and removes waste. The heart pumps blood through the blood vessels to all parts of the body. Blood is made up of blood cells and plasma. There are three main types of blood cells: red cells, white cells, and platelets.

Answer the following questions:

1. What is the cardiovascular system?
2. What is cardiovascular system responsible for?
3. What is the heart? Where is it located?
4. What is the structure of the heart?
5. What groups of vessels are there?
6. What is systemic circulation?
7. What is pulmonary circulation?
8. What are the functions of arteries and veins?
9. What is blood?
10. What are the main types of blood cells?

SUMMARY

The cardiovascular system is a system of the body which comprises the heart, the blood, and the blood vessels. It is responsible for transporting blood. At the centre of the cardiovascular system is the heart. The heart is an inner hollow muscular organ. It is located in the chest and included in pericardium. It consists of two separate chambers divided by the septum. Each of the chambers has two connected parts: the atrium and the ventricle. Valves separate the atriums from the ventricles.

The vascular system consists of three groups of vessels – arteries, veins and capillaries. The vessels carrying blood to and from the tissues of the body form systemic circulation. Pulmonary circulation is formed by the vessels carrying blood to and from the lungs. Blood is a liquid that carries nutrients and removes waste. The heart pumps blood to all parts of the body.

CARDIOVASCULAR DISEASES

Increase your vocabulary:

acute	[ə'kju:t]	гострий
to affect	[ə'fekt]	вразжати
atherosclerosis	[.æθərəusklə'ræusis]	атеросклероз
arrest	[ə'rest]	зупинка
blood supply	[blʌd sə'plai]	кровопостачання
blood vessels	[ˈ blʌd ,vesəl]	кровоносні судини
blood flow	[blʌd fləʊ]	кровотік
cholesterol	[kə'lest(ə)rəl]	холестерин
coronary	[ˈkɒrən(ə)ri]	вінцевий, коронарний
to include	[in'klu:d]	включати
to impaire	[im'per]	погіршувати
insufficient	[.ɪnsə'fiʃnt]	недостатній
irreversible	[.ɪri'vɜrsəbəl]	незворотній
ischaemic	[i'ski:mɪk]	ішемічний
myocardial infarction	[.maɪə(ʊ)'kɑ:diəl in'fɑ:kʃ(ə)n]	інфаркт міокарда
prevention	[pri'venʃn]	профілактика
pressure	[ˈpreʃər]	тиск
procedure	[prə'si:dʒər]	процедура
rupture	[ˈrʌptʃər]	розрив
stroke	[strəʊk]	інсульт
shortness of breath	[ˈʃɔ:tnəs əv breθ]	задишка
thrombosis	[θrɑ:m'bəʊsɪs]	тромбоз
urgent	[ˈɜ:rdʒənt]	терміновий

Cardiovascular diseases is a group of disorders that affect the heart and blood vessels. Some of the diseases are coronary heart disease, stroke, myocardial infarction and many others.

Coronary heart disease develops when there is an insufficient supply of oxygen to the myocardium because of impaired arterial blood flow. This can be caused by narrowing of the coronary arteries due to atherosclerosis, thrombosis or spasm. The patient may feel acute or dull chest pain, pain in the neck, left shoulder, forearm or back, shortness of breath, rapid pulse and other symptoms.

A stroke is an acute condition that affects the blood vessels in the brain. A stroke occurs when a blood vessel that carries oxygen and nutrients is blocked by a blood clot or ruptures. When this happens, part of the brain cannot get the blood and oxygen it needs, so its cells die. A stroke can lead to disability and, in some cases, death.

Myocardial infarction is damage and necrosis of some parts of the heart due to insufficient blood flow through the coronary arteries. This is an acute condition that requires urgent medical attention. A heart attack causes changes in the myocardium and can lead to cardiac arrest.

Prevention and treatment of cardiovascular diseases involve lifestyle changes such as healthy diet, regular exercise, giving up smoking, medications to control blood pressure, cholesterol and blood sugar levels, and in some cases, medical procedures.

Answer the following questions:

1. What are cardiovascular diseases?
2. What cardiovascular diseases do you know?
3. When does coronary heart disease develop?
4. What are the symptoms of coronary heart disease?
5. What is a stroke?
6. When does a stroke occur?
7. What happens to the brain during a stroke?
8. What is myocardial infarction?
9. What does a heart attack cause?
10. What does the prevention and treatment of cardiovascular diseases include?

SUMMARY

Cardiovascular diseases is a group of disorders that affect the heart and blood vessels. Some of the diseases are coronary heart disease, stroke, myocardial infarction and many others.

Coronary heart disease develops when there is an insufficient supply of oxygen to the myocardium. The patient feel acute or dull chest pain, pain in the neck, left shoulder, shortness of breath, rapid pulse and other symptoms.

A stroke is an acute condition that affects the blood vessels in the brain. A stroke occurs when a blood vessel that carries oxygen and nutrients is blocked by a blood clot or ruptures. When this happens, part of the brain cannot get the blood and oxygen it needs so its cells die. A stroke can lead to disability and, in some cases, death.

Myocardial infarction is damage and necrosis of some parts of the heart. This is an acute condition that requires urgent medical attention.

THE DIGESTIVE SYSTEM

Increase your vocabulary:

absorption	[əb'zɔ:pʃən]	поглинання, всмоктування
alimentary canal	[,æliməntəri kə'næl]	травний канал
caecum	[ˈsi:kəm]	сліпа кишка
cavity	[ˈkævəti]	порожнина
colon	[ˈkoulən]	ободова кишка
diaphragm	[ˈdaɪəfræm]	діафрагма
digest	[daɪ'dʒest], [dɪ'dʒest]	перетравлювати
digestive	[daɪ'dʒestɪv], [dɪ'dʒestɪv]	травний
dilated	[daɪ'leɪtɪd]	розширений
division	[dɪ'vɪʒn]	відділ
duodenum	[ˌdju:ə'di:nəm]	дванадцятипала кишка
elimination	[ɪˌlɪmɪ'neɪʃn]	виведення,
esophagus	[ɪ'sɒfəgəs]	стравохід
fundus	[ˈfʌndəs]	дно (органу)
gallbladder	[ˈgɒlbledər]	жовчний міхур
hard palate	[hɑ:d'pælət]	тверде піднебіння
ileum	[ɪ'liəm]	клубова кишка
intestine	[ɪn'testɪn]	кишківник, кишка
jejunum	[dʒɪ'dʒu:nəm]	порожня кишка
liver	[ˈlɪvə(r)]	печінка
mouth	[ˈmaʊθ]	рот
palate	[ˈpælət]	піднебіння
pancreas	[ˈpæŋkriəs]	підшлункова залоза
pharynx	[ˈfæriŋks]	зів, глотка
rectum	[ˈrektəm]	пряма кишка
salivary	[ˈsælivəri]	слинний
soft palate	[soft'pælət]	м'яке піднебіння
stomach	[ˈstʌmək]	шлунок
teeth	[ti:θ]	зуби
tongue	[tʌŋ]	язик
waste material	[weɪst mə'tɪəriəl]	відходи

The digestive system consists of the mouth, pharynx, esophagus, stomach, small intestine and large intestine. The liver and pancreas are the large glands of the alimentary tract. The main functions of this system are to carry food for digestion, prepare it for absorption and to carry waste material for elimination.

The first division of the digestive system is formed by the mouth. Important structures of the mouth are the teeth and the tongue, the salivary glands, the soft and hard palates. From the mouth food passes through the pharynx to the esophagus and then to the stomach.

The stomach is a dilated portion of the alimentary canal. It is in the upper part of the abdomen under the diaphragm. Different gastric glands are found in the stomach. They produce substances that digest food.

The small intestine is a thin-walled muscular tube about 6.5 meters long. It is composed of the duodenum, jejunum and ileum. The large intestine is about 1.5 meters long. It is divided into caecum, colon and rectum.

The liver is the largest gland in the human body. It is in the right upper part of the abdominal cavity under the diaphragm. The gallbladder is a hollow sac lying on the lower surface of the liver. The pancreas is a long thin gland lying under and behind the stomach.

Answer the following questions:

1. What does the digestive system consist of?
2. What are the main functions of the digestive system?
3. What is the first division of the alimentary tract?
4. What are the important structures of the mouth?
5. What kind of organ is the stomach?
6. What is the small intestine?
7. What kind of organ is the large intestine?
8. What is the largest gland in the human body?
9. What kind of organ is the gallbladder?
10. What kind of organ is the pancreas?

SUMMARY

The gastrointestinal system consists of the mouth, pharynx, esophagus, stomach, small intestine, and large intestine.

The first division of the alimentary tract is the mouth. From the mouth the food passes to the esophagus and then to the stomach. The stomach is in the upper part of the abdomen under the diaphragm. Different gastric glands are found in the stomach.

The small intestine is a thin-walled muscular tube about 6.5 meters long. It is composed of the duodenum, jejunum and ileum. The large intestine is about 1.5 meters long. It is divided into caecum, colon and rectum.

The liver is the largest gland in the human body. It is in the right upper part of the abdominal cavity. The gallbladder is a hollow sac lying on the lower surface of the liver. The pancreas is a long thin gland lying under and behind the stomach.

THE ENDOCRINE SYSTEM

Increase your vocabulary:

adrenal gland	[əd'ri:nl glænd]	надниркова залоза
endocrine	[ˈendəukraɪn]	ендокринний
exocrine	[ˈeksə(o)kraɪn]	екзокринний
gonads	[ˈgəʊnədz]	гонади (статеві залози)
hormone	[ˈhɔ:məʊn]	гормон
hypophysis	[haɪ'pɒfɪsɪs]	гіпофіз
lacrimal gland	[ˈlækri:m(ə)l glænd]	слізна залоза
mammary gland	[ˈmæm(ə)ri glænd]	молочна залоза
mucous gland	[ˈmju:kəs glænd]	слизова залоза
ovary	[ˈəʊv(ə)ri]	яєчник
parathyroid gland	[ˈpærə'θaɪrɔɪd glænd]	пара щитовидна залоза
pineal gland	[ˈpi:niəl glænd]	шишковидна залоза
pituitary gland	[pi'tju:ɪt(ə)ri glænd]	гіпофіз
release	[ri'li:s]	випускати, виділяти
salivary gland	[ˈsæli:v(ə)ri glænd]	слинна залоза
secrete	[si'kri:t]	виділяти
sweat gland	[swet glænd]	потова залоза
testes	[ˈtesti:z]	яєчка
thymus gland	[ˈθaɪməs glænd]	підгрудинна залоза
thyroid gland	[ˈθaɪrɔɪd glænd]	щитовидна залоза

The endocrine system is the body's communication network. It is composed of glands located in many different regions of the body. Endocrine glands produce special substances called hormones which are secreted directly into the blood. These chemical substances can regulate the many functions of an organism.

Hormones play a very important part in the organism. Many of them affect metabolism and the functioning of the cardiovascular, reproductive, immune and other systems, mood, attention, learning and memory, sleep cycles, stress responses, etc. A disturbance in the activity of the endocrine glands is accompanied by changes in the organism. These changes may be due to an increase in the function of gland or a decrease.

There are endocrine and exocrine glands. Pituitary gland, thyroid gland, parathyroid glands, adrenal glands, gonads (ovaries and testes), pineal gland and thymus gland belong to endocrine glands. Mammary, mucous, salivary, lacrimal and sweat glands belong to exocrine ones. The pancreas is known as a mixed gland. It's both an organ and a gland and is also part of digestive system.

Each gland consists of glandular epithelial tissue and has an extensive network of blood vessels and a large number of nerve fibers. The functions of all endocrine glands are interconnected and the glands make up a single system. The hypophysis is the chief gland of

this system. It releases several important hormones and controls the function of many other endocrine system glands.

The activities of endocrine glands are regulated by the nervous system. The hormones in their turn affect functions of different parts of the nervous system.

Answer the following questions:

1. What is the function of the endocrine system?
2. Where are the hormones secreted?
3. What is the role of hormones?
4. What glands are of internal secretion?
5. What glands are exocrine ones?
6. Why is the pancreas called a mixed gland?
7. What does each gland consist of?
8. What is hypophysis?
9. What are the functions of hypophysis?
10. What do the hormones affect?

SUMMARY

The endocrine system is composed of glands. They are located in many different regions of the body. Endocrine glands produce special substances. They are called hormones. These chemical substances can regulate varied functions of an organism.

Hormones play a very important part in the organism. A disturbance in the activity of the endocrine glands is accompanied by changes in the organism. These changes may be due to an increase in the function of gland or a decrease.

There are endocrine and exocrine glands. The functions of all endocrine glands are interconnected. The hypophysis is the chief gland of this system. It releases important hormones and controls the function of endocrine system.

The nervous system regulates the activities of endocrine glands. The hormones in their turn affect functions of different parts of the nervous system.

THE NERVOUS SYSTEM

Increase your vocabulary:

autonomic	[ˌɔːtənɒmɪk]	вегетативний
appropriate	[əˈprəʊpriət]	відповідний, доречний
axon	[ˈæksɒn]	аксон
brain	[breɪn]	головний мозок
cardiac muscle	[ˈkɑːdiækˈmʌs]	серцевий м'яз
cell body	[selˈbɔːdi / selˈbɒdi]	тіло клітини
conduct	[kənˈdʌkt]	проводити
cranial	[ˈkreɪniəl]	черепний
dendrite	[ˈdendraɪt]	дендрит
environment	[ɪnˈvaɪrənmənt]	навколишнє середовище
fiber	[ˈfaɪbə(r)]	волокно
gland	[glænd]	залоза
glia	[ˈgliːə]	глія
impulse	[ˈɪmpʌls]	імпульс, сигнал
major	[ˈmeɪdʒə(r)]	основний, головний
nerve	[nɜːv]	нерв
nervous	[ˈnɜːvəs]	нервовий
neuron	[ˈnjuːrɒn]	нейрон
peripheral	[pəˈrɪfərəl]	периферичний
reflex	[ˈrɪːfleks]	рефлекс
response	[rɪˈspɒns]	відповідь, реакція
skull	[skʌl]	череп
smooth muscle	[smuːðˈmʌs]	гладенький м'яз
spinal cord	[ˈspaɪnəl kɔːd]	спинний мозок
synapse	[ˈsaɪnæps / ˈsɪnæps]	синапс

The nervous system is divided into two parts: the central nervous system and the peripheral nervous system. The central nervous system consists of the brain and the spinal cord. The peripheral nervous system consists of the cranial nerves and the spinal nerves. The peripheral nervous system also includes the autonomic nervous system. It controls the movements of the body's smooth muscles, cardiac muscles, and glands.

A nerve is as a group of nerve fibers located outside the central nervous system. Nerve fibers make up nerve cells, also known as neurons. They are the building blocks of the nervous system. Neurons vary in size, shape, and functions. They consist of the following parts: cell body, dendrite and axon. Neurons are classified into three groups: sensory, motor, and interneurons. The space between two neurons is known as a synapse.

The spinal cord connects the brain to the peripheral nervous system. The functions of the spinal cord are to conduct sensory and motor impulses and to carry out direct reflexes.

The brain is the major organ of the nervous system located in the skull. It consists of over 100 billion neurons and trillions of glia. The brain is covered by fluid, membranes, and bones.

The overall function of the nervous system is to gather and analyze information about the external environment and the body's internal state, and to initiate appropriate responses.

Answer the questions:

1. What does the central nervous system consist of?
2. What does the peripheral nervous system consist of?
3. What is the function of the autonomic nervous system?
4. What is a nerve?
5. What parts does a neuron consist of?
6. What groups are neurons classified into?
7. What is a synapse?
8. What are the functions of the spinal cord?
9. What does the brain consist of?
10. What is the brain covered by?

SUMMARY

The nervous system is divided into two parts: the central nervous system and the peripheral nervous system. The central nervous system consists of the brain and the spinal cord. The peripheral nervous system consists of the cranial nerves and the spinal nerves. A nerve is a group of nerve fibers located outside the central nervous system. Nerve fibers make up nerve cells, also known as neurons. Neurons consist of cell body, dendrites, and axon. Neurons are classified into three groups: sensory, motor, and interneurons. The space between two neurons is known as a synapse. The spinal cord connects the brain to the peripheral nervous system. The brain is the major organ of the nervous system. The function of the nervous system is to gather and analyze information and to initiate appropriate responses.

HUMAN BRAIN

Increase your vocabulary:

adult	[ˈædʌlt], [əˈdʌlt]	дорослий
average	[ˈævərɪdʒ]	середньостатистичний, загальний
brain ~ stem	[breɪn] ~ [stem]	головний мозок стовбур головного мозку
carbohydrate	[ˌkɑːbəʊˈhaɪdreɪt]	вуглевод
cavity	[ˈkævəti]	порожнина
central	[ˈsentrəl]	основний, головний
cerebellum	[ˌserəˈbeləm]	мозочок
cerebrospinal fluid	[ˌserɪbrəʊˈspɑːməɪl ˈfluːɪd]	спинномозкова рідина
cerebrum	[səˈriːbrəm], [ˈserəbrəm]	кінцевий (великий) мозок
cognitive ability	[ˈkɒgnətɪv əˈbɪləti]	пізнавальна здатність
complex	[ˈkɒmpleks]	складний. комплексний
enable	[ɪˈneɪbl]	сприяти, забезпечувати
hollow	[ˈhɒləʊ]	порожнистий
injury	[ˈɪndʒəri]	пошкодження
inside	[ɪnˈsaɪd]	всередині
intelligence	[ɪnˈtelɪdʒəns]	інтелект
layer	[ˈleɪə(r)], [leə(r)]	шар, прошарок
locate	[ləʊˈkeɪt]	розташовуватися
meninges	[məˈnɪndʒiːz]	мозкові оболонки
nervous system	[ˈnɜːvəs ˈsɪstəm]	нервова система
neuron	[ˈnjuːərɒn]	нейрон
per cent	[pə ˈsent]	відсоток
protein	[ˈprəʊtiːn]	білок
provide	[prəˈvaɪd]	забезпечувати, надавати
psychological function	[ˌsaɪkəˈlɒdʒɪkl ˈfʌŋkʃn]	психологічна функція
salt	[sɔːlt], [sɒlt]	сіль
structure	[ˈstrʌktʃə(r)]	структура
surround	[səˈraʊnd]	оточувати
tissue	[ˈtɪʃuː]	тканина
ventricle	[ˈventrɪkl]	шлуночок
weigh	[weɪ]	мати вагу

The brain is the most complex structure in the human body. It is the central organ of the nervous system. An average adult brain weighs about 1.4 kilograms. It is made up of billions

of neurons. The brain is about 60 per cent fat. The remaining 40 per cent is a combination of water, protein, carbohydrates and salts.

The brain is located inside the skull. It is surrounded by the meninges and cerebrospinal fluid. The meninges consist of three layers of tissue that cover the brain and spinal cord and provide protection. Cerebrospinal fluid is a clear, watery substance that helps to protect the brain and spinal cord from injury. The brain has four hollow cavities called ventricles. Cerebrospinal fluid is produced in the ventricles.

The brain is made up of three main parts. They are the cerebrum, cerebellum, and brain stem. Each part has special functions and is made up of several components. The cerebrum is the largest part of the brain. There are areas which enable speech, thinking, problem-solving, emotions and learning. Its other functions relate to vision, hearing, touch and other senses.

The brain controls all functions of the body that are important for survival, such as heartbeat, breathing and temperature regulation. It receives information from sensory receptors, processes and interprets it. The brain also stores memories and controls movements. It is the root of human intelligence as it controls our cognitive abilities and psychological functions.

Answer the questions:

1. What is the brain?
2. How much does an average adult brain weigh?
3. What are the components of the human brain?
4. What do you know about the meninges?
5. How can you characterize cerebrospinal fluid?
6. What parts is the brain made up of?
7. What are the functions of the cerebrum?
8. What functions does the brain control?
9. Where does the brain receive information from?
10. Why is it the root of human intelligence?

SUMMARY

The brain is the most complex structure in the human body. It is the central organ of the nervous system. The brain weighs about 1.4 kilograms. It is made up of billions of neurons. It consists of fat, water, protein, carbohydrates and salts. The brain is located inside the skull. It is surrounded by the meninges and cerebrospinal fluid. The main parts of the brain are the cerebrum, cerebellum, and brain stem. The cerebrum is the largest part of the brain. It enables speech, thinking, problem-solving, emotions and learning. The brain controls all functions of the body such as heartbeat and breathing. It also receives, processes and interprets information. The brain is the root of human intelligence as it controls cognitive abilities.

SENSE ORGANS

Increase your vocabulary:

bud	[bʌd]	сосочок
to convert	[kən'veɜ:t]	перетворювати
comprehensive	[ˌkɒmprɪ'hensɪv]	всеосяжний
debris	[ˈdeɪbrɪ]	сміття
ear	[ɪə]	вухо
to enable	[ɪn'eɪbl]	дати змогу
environment	[ɪn'veɪrənmənt]	середовище
hearing	[ˈhɪərɪŋ]	слух
to gather	[ˈgæðə]	збирати
to interact	[ˌɪntər'ækt]	взаємодіяти
to moisten	[ˈmɔɪsn]	зволожувати
specialized	[ˈspeʃəlaɪzd]	спеціалізований
surroundings	[sə'raʊndɪŋz]	середовище
taste	[teɪst]	смак, смакувати
tongue	[tʌŋ]	язик
vision	[ˈvɪʒ(ə)n]	зір
visual	[ˈvɪʒuəl,]	зоровий, наочний

Sense organs are specialized organs in the human body that enable the perception of the external environment. These organs gather information from the surroundings and transmit signals to the brain for interpretation. The five main sense organs are eyes, ears, nose, tongue, skin.

The eyes are responsible for vision. They are complex structures that work together to gather visual information from the environment and transmit it to the brain.

The ears are responsible for the sense of hearing. They detect sound waves and convert them into electrical signals that are transmitted to the brain through the auditory nerve.

The nose is responsible for the sense of smell. It is part of your respiratory system. It allows air to enter your body, then filters debris, warms and moistens the air. We can sense 10 basic smells and their combinations.

The tongue is responsible for the sense of taste. Taste buds on the tongue detect different flavors like sweet, salty, sour, bitter. At the base of each taste bud there is a nerve that sends the sensations to the brain.

The skin is the largest sense organ and is responsible for the sense of touch. It detects pressure, temperature and pain, with different receptors specialized for each of these sensations.

These sense organs work together to provide a comprehensive understanding of the external world. They allow individuals to interact with and respond to their surroundings.

Answer the following questions:

1. What are sense organs?
2. What sense organs do you know?
3. What do the sense organs do?
4. What is the function of an eye?
5. What are the ears responsible for?
6. What is the function of the nose?
7. What basic tastes are the taste buds able to detect?
8. What is the skin?
9. What is the main function of the skin?
10. What do the sense organs provide?

SUMMARY

Sense organs are specialized organs in the human body. These organs gather information from the surroundings and transmit signals to the brain for interpretation. The five main sense organs are eyes, ears, nose, tongue, skin. The eyes are responsible for vision. The ears are responsible for the sense of hearing. The nose is responsible for the sense of smell. The tongue is responsible for the sense of taste. The skin is the largest sense organ and is responsible for the sense of touch. These sense organs work together to provide understanding of the external world. They allow individuals to interact with their surroundings.

THE SKIN

Increase your vocabulary:

acne	[ˈæk.ni]	акне
aid	[eɪd]	допомога
barrier	[ˈbæriə]	бар'єр
crucial	[ˈkruːʃəl]	ключовий
constriction	[kənˈstrɪʃən]	звуження
dermis	[ˈdɜːmɪs]	дерма
eczema	[ˈeksɪmə]	екзема
environment	[ɪnˈvaɪrənmənt]	навколишнє середовище
epidermis	[ˌepɪˈdɜːmɪs]	епідерміс
follicle	[ˈfɒlɪkl]	фолікул
fungus	[ˈfʌŋɡəs]	грибковий
healing	[ˈhiːlɪŋ]	загоєння
hypodermis	[ˌhaɪpəˈdɜːmɪs]	гіподерма, підшкірна клітковина
to insulate	[ɪnˈsjuːleɪt]	ізолювати
layer	[ˈleɪə]	шар, пласт
melanin	[ˈmeləniːn]	меланін
outer	[ˈaʊtə]	зовнішній
overall	[ˈəʊvəɹ ɔːl]	цілий, загальний
perception	[pəˈsepʃən]	сприйняття
psoriasis	[səˈrɪəriəːsɪs]	псоріаз
sweat gland	[swet]	потова залоза
ultraviolet (UV)	[ˌʌltrəˈvaɪələt]	ультрафіолетове випромінювання
waste	[weɪst]	відходи

The human skin is the largest organ in the body. It is the outer covering of the body which protects internal organs from the environment. The skin has three layers: the epidermis, the dermis and hypodermis.

The epidermis is the outermost layer of the skin, composed mainly of dead skin cells. It provides a protective barrier and contains melanocytes, which produce melanin. The nails and hair are special structures developed from the epidermis. The dermis is the middle layer that contains blood vessels, nerves, hair follicles and sweat glands. Collagen and elastin fibers in the dermis provide strength, elasticity and support. Hypodermis is the bottom layer of skin. The hypodermis insulates and protects the body, stores energy, helps to regulate body temperature and connects the skin to muscles and bones.

The skin is responsible for many functions. The skin acts as a physical barrier against pathogens, chemicals and environmental factors. It protects against UV radiation through melanin production. Nerve endings in the skin allow the perception of touch, pressure, temperature and pain. The skin helps regulate body temperature. Small amounts of waste

products are eliminated through sweat. The skin is a part of the body's immune system, preventing infections and aiding in the healing process.

Some common skin diseases include eczema, psoriasis, acne and fungal infections. A dermatologist is a doctor who specializes in the treatment of skin diseases.

Answer the following questions:

1. What is the skin?
2. What are the layers of the skin?
3. What is the epidermis composed of?
4. What is the function of melanin?
5. What does the dermis consist of?
6. What is the function of elastin and collagen?
7. What is hypodermis?
8. What are the functions of hypodermis?
9. What are the functions of the skin?
10. What skin diseases do you know?

SUMMARY

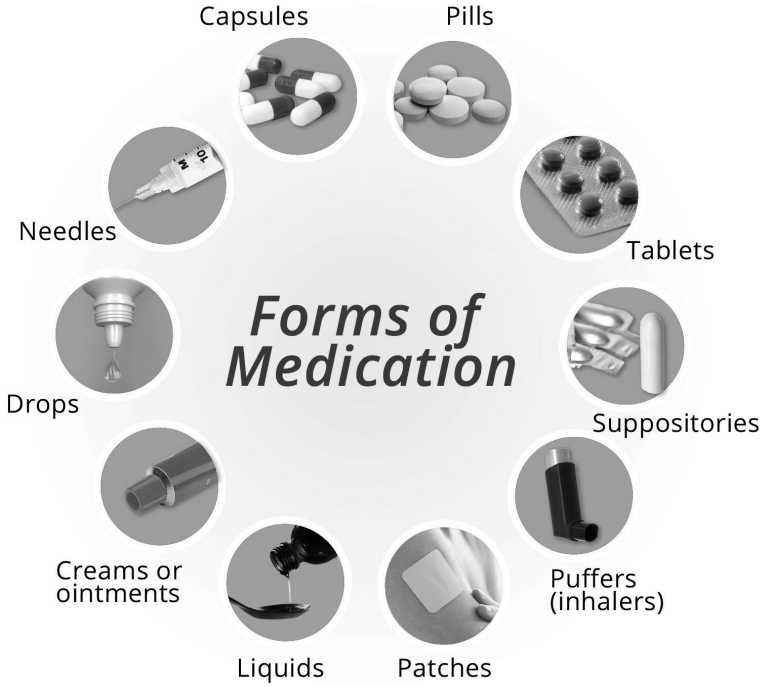
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The epidermis is the outermost layer of the skin, composed mainly of dead skin cells. The dermis is the middle layer that contains blood vessels, nerves, hair follicles and sweat glands. Hypodermis is the bottom layer of skin. It stores energy (in the form of fat), helps to regulate body temperature and connects the skin to muscles and bones.

The skin is responsible for many functions. They are protection, sensation, temperature regulation, excretion, synthesis of vitamin D and taking part in the body's immune system activity.

Some common skin diseases include eczema, psoriasis, acne and fungal infections.

APPENDIX



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