МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ

УЧРЕЖДЕНИЕ ОБРАЗОВАНИЯ
«ВИТЕБСКИЙ ГОСУДАРСТВЕННЫЙ ОРДЕНА ДРУЖБЫ НАРОДОВ
МЕДИЦИНСКИЙ УНИВЕРСИТЕТ»

КАФЕДРА ИНОСТРАННЫХ ЯЗЫКОВ

И.С. Андреева

АНГЛИЙСКИЙ ЯЗЫК

PROFESSIONAL ENGLISH

Методические рекомендации для студентов фармацевтического факультета и магистрантов

(часть II)

Витебск
ВГМУ
2020

УДК 811.111 (075.8)
ББК 81.432.1я73
А 65

Рецензенты: кафедра иностранных языков УО «Витебская государственная академия ветеринарной медицины»;
заместитель директора Витебского филиала Учреждения образования Федерации профсоюзов Беларуси «Международный университет «МИТСО»», кандидат филологических наук, доцент Костырева С.С.

Андреева И.С.

А 65 Английский язык. Professional English: метод. рекомендации по англ. языку для студентов фармацевтического факультета и магистрантов: в 3 ч./ метод. реком. И.С. Андреева. – Витебск: ВГМУ, 2020. – Ч. 2. – 60 с.

Методические рекомендации по английскому языку предназначены для студентов фармацевтического факультета (факультативный курс), освоивших обязательный курс по учебной дисциплине «Иностранный язык» (английский) для специальности «Фармация» и магистрантов. Представленная в рекомендациях тематика подготовит студентов и магистрантов к чтению, переводу и интерпретации аутентичных профессиональных текстов и аннотаций к лекарствам.

Методические рекомендации соответствуют учебному плану и Типовой учебной программе и могут быть использованы как для аудиторной, так и для управляемой самостоятельной работы студентов и магистрантов.

УДК 811.111 (075.8)
ББК 81.432.1я73

PREFACE

Методические рекомендации по английскому языку “Professional English” предназначены для студентов фармацевтического факультета, продолжающих изучение профессионального английского языка на факультативном курсе, и магистрантов.

Целью данных рекомендаций является развитие навыков чтения и перевода аутентичных текстов, обработки полученной информации, а также формирование умения обобщать и презентовать информацию в тезисном виде в устной и письменной форме.

Рекомендации состоят из 2 разделов: “Action of the drugs”, “Drugs as medicines” (OTC and prescription drugs), что отражает профессиональную и познавательную направленность языкового материала.

Каждый раздел рекомендаций состоит из следующих частей: 1. Vocabulary and grammar learning. 2. Reading comprehension. 3. Rendering. 4. Follow-up activity.

Лексический материал отобран исходя из частотности употребления общей и научно-профессиональной лексики с последующим закреплением её при выполнении серии упражнений.

Выбор грамматического материала основывался на необходимости изучения тех грамматические явлений, которые широко используются в научно-популярных текстах и представляют трудность в переводе их на родной язык, а именно: “Infinitive as a subject and an attribute”, “Complex Subject”, “Complex Object”, “Modals with Perfect Infinitive”, “Participial Constructions”, “Gerund and Gerundial constructions”.

Текстовой материал подобран из аутентичных источников путём компиляции. Интерпретация текстов с русского языка на английский по тематике устных тем, представленных в рекомендациях, способствует как совершенствованию языковых навыков, так и углублению профессиональных знаний студентов и расширению их кругозора.

В разделе “Follow-up activity” представлены упражнения на развитие навыков монологической, диалогической речи и проектной деятельности студентов.

TOPIC “ACTION OF THE DRUGS”

I. *VOCABULARY LEARNING.*

Exercise 1. *Practise the pronunciation of the following words.*
laxative ['læksətɪv], antacid ['ænt'æsɪd], antidiarrheal ['ænti'daɪə'riəl], buccal ['bʌk(ə)l], conjunctiva [ˌkɔnʤʌŋk'taɪvə], vagina [və'ʤaɪnə], nausea ['nɔ:sjə], nitroglycerin ['nɪtrɔ'glisərin], syringe ['sɪrɪnʤ], intraperitoneal [ˌɪntrəˌperɪtəu'ni:ə], pleural ['pluərəl], intrathecal [ˌɪntrə'θi:k(ə)l], cerebrospinal [ˌserɪbrə(ʊ)'spʌɪn(ə)l], meninges [mɪ'nɪnʤi:z], subcutaneous ['sʌbkju(:)'teɪnjəs], mucosa [mju:'kəusə], saliva [sə'laɪvə], salivary ['sælɪv(ə)rɪ], distal ['dɪst(ə)l], rectum ['rektəm], parenteral [pæ'rent(ə)r(ə)l], buttocks [bʌtəks], aerosol ['ɛərəusɔl], endocarditis [ˌendəuka:daɪtɪs], synergism ['sɪnəʤizm], idiosyncrasy [ˌɪdɪə'sɪŋkrəsɪ], cocain [kəu'keɪn], theophylline [θɪə'fɪli:n], neurotoxicity [ˌnjurotɔk’sisiti], fatigue [fə'ti:g], impotence ['impotəns], edema [i'di:mə], dyspepsia [dis'pepsiə], bradycardia [brædika:diə], palpitation [pælpi'teiʃn], arthralgia [a'θrælʤiə], asthenia [ə'θi:niə], paresthesia [pæres'θi:siə], myalgia [mai'ælʤiə], neuropathy [njuə'rɔpəθi], dyscrasia [dis'kreiziə].

Exercise 2. *Read and memorize the following words:*

1.	to alter ['ɔ:ltə] *v*. – изменять(ся), менять(ся), вносить изменения, переделать; to ~ one’s mind – передумать, принять другое решение;
2.	to anticipate [æn'tɪsɪpeɪt] *v*. – ожидать, предвидеть, предчувствовать;
3.	spinal cord – спинной мозг;
4.	rate of breathing – частота дыхания;
5.	withdrawal [wɪð'drɔ:(ə)l] *n*. – синдром отмены; абстиненция;
6.	swelling ['swelɪŋ] *n*. – опухание, опухоль, вздутие;
7.	fatigue [fə'ti:g] *n*. – утомление, усталость;
8.	labored breathing – затрудненное дыхание;
9.	throbbing *n*. – биение, пульсация;
10.	otherwise ['ʌðəwaɪz] *adv*., *a*. – иначе, иным способом, или же в противном случае; иной, другой;
11.	patch [pæʧ] *n*. – кусочек наклеенный пластыря;
12.	eliminate [ɪ'lɪmɪneɪt] – физиологически очищать, выделять, удалять (из организма);
13.	insert [ɪn'sə:t] *v*. – включать; вводить (направлять вакцину); ['ɪnsə:t] *n* – вставка, вкладыш;
14.	exert [ɪg'zə:t] *v*. – оказывать давление; влиять;
15.	hinder ['hɪndə] *v*. – мешать, препятствовать, быть помехой;

16.	suspend [sə'spend] *v*. – задерживать; приостанавливать; тормозить;
17.	sheath [ʃi:θ] *n*. – влагалище, оболочка, капсула;
18.	angina pectoris [æn'ʤaɪnə'pektərɪs] – грудная жаба;
19.	shallow ['ʃæləu] *a*. – неглубокий, поверхностный; мелкий;
20.	leakage ['li:kɪʤ] *n*. – утечка; истечение; просачивание, подтекание;
21.	abrasion [ə'breɪʒ(ə)n] *n*. – ссадина, царапина, очистка (*напр*. раны);
22.	antipruritic [ˌæntɪprʊˈrɪtɪk] *n*., *a*. – противозудное средство; снимающий зуд;
23.	lesion ['li:ʒ(ə)n] *n*. – повреждение, поражение (органа, ткани);
24.	diminish [dɪ'mɪnɪʃ] *v*. – уменьшать(-ся), углублять(-ся), ослаблять;
25.	meninges [mɪˈnɪndʒi:z] – мягкие мозговые оболочки;
26.	outcome ['autkʌm] *n*. – результат, последствие, исход;
27.	malignancy [mə'lɪgnən(t)sɪ] *n*. – *мед*. злокачественность;
28.	deprive [dɪ'praɪv] *v*. – лишать (*of* – чего-либо);
29.	complication [ˌkɔmplɪ'keɪʃ(ə)n] *n*. – осложнение;
30.	warrant ['wɔr(ə)nt] *v*. – оправдывать, служить оправданием, подтверждать;
31.	breakthrough ['breɪkθru:] *n*. – крупное достижение, открытие, шаг вперед в какой-то области;
32.	consent [kən'sent] *n*., *v*. – согласие; соглашаться, давать согласие.

Exercise 3. *Give the cognate words.*

	VERB	***NOUN***	***ADJECTIVE /ADVERB***
Model:	• absorb	• absorbent • absorbtives • absorbtion • absorbtivity • absorber	• absorbent • absorbtive • absorbing
	• *derive*	• *derivative* • *derivation*	• *derivative*
	• *malign*	• *malignancy* • *malignity*	•
	•	•	• *recurrent*
	• *anticipate*	• •	• •
	• *hinder*	•	• *hinder*
	•	• • • *suspensory*	• *suspended* • •
	• *leak*	• •	•

•	•	• *complicated* •
•	• *warrant* • •	•
• *withdraw*	•	•
•	• • *eliminator*	•
•	• *alterative* •	• • •

Exercise 4. *Compare the following words and state their difference.*

through – throughout – though – thorough	to exhale – to inhale
breakthrough – breakdown	side reactions – side effects
to effect – to affect	minor – severe
excretion – secretion	wastes – metabolic products
to double – to triple	to enter – to eliminate
to occur – to take place	anterior – posterior
breath – to breathe	helpful – harmful
	diminish – decline – reduce

Exercise 5. *Find the synonyms.*

1) release;	9) additional;	a) to take place;	i) carry;
2) orally;	10) insert;	b) prescribe;	j) supplementary;
3) according to;	11) administer;	c) senseless;	k) change;
4) deliver;	12) attach;	d) break;	l) in conformity with;
5) destroy;	13) transformation;	e) per os;	m) changing;
6) alter;	14) create;	f) fix;	n) produce;
7) occur;	15) eliminate.	g) discharge;	o) excrete.
8) unconscious;		h) put in;	

Exercise 6. *Read and translate the following word combinations.*

To attach to a receptor molecule, a complete attachment, to be inserted in the body, to seep through the skin to the bloodstream, to alter cell activities (speed of all activities); to exert too great an effect, to obtain the desired effect, to be involved in sensing pain, the rate of breathing, to anticipate reactions, to be eliminated in the urine, the outcome of a disease, to fight the malignancy, exaggerated effect, recurrence rates, to be deprived of oxygen, healing rates,

breakthrough bleeding, caution is warranted, to be aware of potential toxic effects, to be cautious in drug' s use, a package insert.

II. *READING COMPREHENSION.*

Read the text and do exercises that follow it.

Text 1

HOW DRUGS WORK

"Drugs", from a pharmaceutical point of view, are substances used in the manufacture of medicine. Today's colloquial understanding of the term, includes those "recreational substances" that are associated with the less desirable elements of society. It's an important consideration when questioning a patient, and it will probably create a more comfortable atmosphere if you refer to "drugs" as medications.

Different drugs are administered (given) in different ways. But once in the body, almost all drugs work the same way – by altering the speed of cell activities.

Entrance into the body. Most drugs are administered orally. But drugs may also be given in several other ways. For example, they may be injected, inhaled, or applied to the skin. The method of administration depends on the form and purpose of a drug. An anesthetic gas, for example, must be inhaled to produce unconsciousness. Ointments are applied directly to the area being treated.

Each method of administration has advantages and disadvantages. For example, the easiest and safest way to take a drug is by swallowing it. But some drugs cannot be taken orally because stomach juices destroy them. Injected drugs act quickly in the body. But injection is somewhat painful, and it presents greater risk of infection than do other methods of administration.

Researchers are constantly developing new methods of administration. A device called a *transdermal patch* contains a layer of medication and is attached to the skin like a bandage. The patch slowly and continuously releases the drug, which seeps through the skin to the bloodstream. The coronary vasodilator nitroglycerin may be administered in this way. Another device, the *implantable pump,* consists of a small, metal disc with a chamber that can be filled with a drug. The pump is inserted in the body surgically and delivers the medication continuously. It may be refilled by injection.

Action in the body. Most drugs that are swallowed, inhaled, or injected enter the blood stream and travel throughout the body. They pass from the blood into the cells of the tissues where the drug action occurs. Only a few kinds of

drugs – such as eye drops, local anesthetics, and nasal sprays – act before entering the bloodstream. When these drugs eventually enter the blood, the amount is usually too small to produce additional effects on the cells.

Almost all drugs create their effects by altering cell activities. To explain how drugs act on cells, pharmacologists developed the *receptor theory*. According to this theory, chemical reactions in every living cell control the cell's activities. Each controlling reaction causes a particular cell activity to begin, to speed up, or to slow down. A drug acts on a cell by altering one or more of these chemical reactions. It does so by attaching to *receptor molecules* in each cell that are normally involved in the controlling chemical reaction.

The receptor theory not only explains how drugs work, but it also points up what drugs can and cannot do. Because they react with receptors that control cell activities, drugs can only alter the speed of those activities. They cannot create new cell activities.

In most cases, the chemical reaction between a drug and the body is not a one- way process. Drugs alter cell activity, but normal body processes also change most drugs. These processes transform a drug into one or more new substances, most of which are weaker than the original drug. This changing of drugs is called *biotransformation* or *drug metabolism*. It is one way in which the body protects itself against drugs. Most biotransformation occurs in the liver. A diseased liver takes longer than a healthy liver to change a drug into a weaker substance. As a result, doctors generally reduce drug dosage for a patient with liver disease. Otherwise, the drug would last longer in the body and thus exert too great an effect.

Effect on the body. All drugs can affect the body in both helpful and harmful ways. For example, a particular drug may produce a stronger heartbeat, relief from pain, or some other desired effect. But that drug, like all drugs, can also cause undesired effects – especially if the dose is too large.

Most drugs produce changes throughout the body because the drugs circulate through the bloodstream. As a result, most drugs used to affect one part of the body also affect other parts. For example, doctors sometimes prescribe morphine to relieve pain. Morphine alters the activities of cells in the brain and spinal cord and thus reduces the sensation of pain. But morphine also alters the function of cells in the body that are not involved in sensing pain. It may decrease the rate of breathing, cause vomiting, produce constipation, and create other undesired effects.

In general, a drug's effects are strengthened as the dose is increased and weakened as the dose is decreased. But all people do not react the same to a change in the dose of a drug. Doubling the dose, for example, may triple the strength of the drug effects in one person and not increase the effects in someone else.

Effects other that those desired are called *adverse reactions*. Drugs produce three main kinds of adverse reactions: (1) side effects, (2) hypersensitivity reactions, and (3) toxic reactions.

Elimination from the body. The body eliminates drugs with other waste materials. Most drugs travel from the cells through the bloodstream to the kidneys and are eliminated in the urine. The body also eliminates drugs in sweat, tears, and solid wastes. Some anesthetics are eliminated almost entirely in exhaled breath.

Exercise 1. *Find the following equivalents in the text and translate them into English.*

Воздух, поступивший при вдохе, выдыхаемый воздух, дышать глубоко, глубокое дыхание, удваивать эффект, проглатывать лекарство, действие лекарства происходит, изменять химические реакции, в большинстве случаев, в противном случае, назначать противозудное средство, выводить лекарство из организма, назначаться перорально; лекарства, введенные путем инъекции; попадать в кровоток; согласно теории; снижать дозу лекарства; вызывать изменения во всем организме; вызывать синдром отмены; удваивать дозу; развитие физической и психологической зависимости.

Exercise 2. *Match the terms in A) with associated terms in B)*

A) 1. dosage (dose); 2. form of the medication; 3) rout of drug administration; 4) contraindications; 5) indications; 6) side-effects; 7. action of the drug; 8) generic name; 9) brand name; 10) chemical name.

B) a) the prescribed method of introducing the drug into the body; b) trade name of drug privately owned by manufacturer; c) conditions which forbid the use of a particular drug; d) official name; noncommercial name for a drug; e) a toxic effect which results from the routine use or a drug; f) the amount of medication given to the patient; g) drug name which gives the chemical formula; h) therapeutic uses for any particular medication; i) the “vehicle” used to administer the drug.

Exercise 3. *Define the following notions.*

1) drug; 2) transdermal patch; 3) implantable pump; 4) receptor theory; 5) drug metabolism; 6) adverse reactions; 7) hypersensitivity reactions; 8) drug dependence; 9) drug addiction; 10) withdrawal symptom; 11) tolerance.

Exercise 4. *Answer the following questions.*

Entrance into the body

1. How are most drugs administered?
2. What does the method of administration of a drug depend on?
3. What methods of administration can you name?

Action

4. Where does the drug action occur?
5. Which drugs act before entering the blood stream?
6. How does the receptor theory explain drug action?
7. Can the drugs create new cell activities?
8. Is the chemical reaction between a drug and the body a one-way process?
9. What is drug metabolism?
10. Where does most biotransformation occur?
11. Why do doctors generally reduce drug dosage for a patient with liver disease?

Effect on the body

12. Can drugs cause both desired and undesired effects? Give examples.
13. What are kinds of adverse reactions can you name?

Elimination from the body.

14. In what way does the body eliminate drugs?

Read the text and do the tasks that follow it.

Text 2

TERMINOLOGY OF DRUG ACTION

There are certain terms which describe the action and interaction of drugs in the body once they are administered and have been absorbed into the bloodstream. These terms are listed below with explanations of their meanings:

Potentiation (Synergism). Various drugs also can interact with one another. For example, certain antibiotics when used in combination can produce an effect that is greater than either drug could cause individually. Such interaction is called *potentiation*. Other drugs called *inhibitors* can interfere with metabolism or actions of other drugs.

Additive Action. In this drug action, the combination of two similar drugs is equal to the sum of the effect of each. For example, if drug A gives 10 per cent tumor kill as a cancer chemotherapeutic agent and drug B gives 20 per cent tumor kill, using A and B together would give 30 per cent tumor kill. If these drugs were synergistic in their action, a combination of drugs would give greater than 30 per cent tumor kill.

Cumulation. If a drug is given in short intervals and the body cannot dispose of it rapidly enough, the drug concentration will rise in the body tissues with each successive dose. This cumulation may cause toxic effects in the body. There are some instances, however, in which cumulation is desired for therapeutic purposes. The use of digitalis in management of cardiac insufficiency is an example of a therapeutic build-up of a drug to promote the efficient working of the heart.

Tolerance. Habitual use of certain drugs may create a tolerance (a decreased body responce after a single or repeated exposure). In this drug action, the effects of a given dose diminish as treatment goes on, and larger doses must be given to maintain the desired effect. Tolerance is a feature of addiction to drug such as morphine and meperidine (Demerol).

Drug dependence. The repeated use of alcohol, narcotics, and certain other drugs may create a condition called *drug dependence*.

People who repeatedly take large amounts of such drugs as alcohol, amphetamines, barbiturates, or narcotics may become dependent on the drugs. These people have an intense psychological or physical need for a drug's effects. *Tolerance*, or resistance to a drug's effects, usually develops along with drug dependence. As drug use continues, tolerance increases. The drug user must thus take larger and larger doses to obtain the desired effects. The development of physical or psychological dependence, or both, is commonly called *drug addiction*. In most cases, a severe withdrawal illness occurs if a person stops taking the drug.

Idiosyncrasy. In some instances, a patient may display unexpected effects following the administration of a drug. Idiosyncratic reactions reproduced in very few patients taking a drug, but may be life-threatening in those few instances. For example, the penicillin reaction, a severe allergic responce to the antibiotic known as *anaphylaxis* (acute type of hypersensitivity, including asthma and shock), can develop from the administration of the drug. Difficulty in breathing, unconsciousness, and even death can occur if emergency tratment is not given in time. Sensitivity to bee stings and various foods also can result in anaphylaxis.

Task 1. *Match the terms in A) with associated terms in B).*

A) 1. cumulation; 2) additive action; 3) potentiation; 4) tolerance; 5) idiosyncrasy

---

a) unpredictable, individual reaction to a drug; b) combination of two drugs together gives an effect which is greater than sum or each drug alone; c) building up of drug in the body due to inability to excrete it as fast as it is taken in; d) effect of the drug diminishes as larger and larger doses are needed to produce desired effect; e) a combination of two drugs together is equal to the sum of the effects of each.

Task 2. *Give the meaning of the following terms illustrating your explanation with an example.*
1. Idiosyncrasy; 2. Synergism; 3. Cumulation; 4. Tolerance; 5. Additive action; 6. Drug dependence; 7. Drug addiction

Read the text and do the tasks that follow it.

Text 3

DRUG TOXICITY

Drug toxicity refers to the poisonous and potentially dangerous effects of some drugs. Idiosyncrasy is an example of an unpredictable type of drug toxicity.

Other types of drug toxicity are more predictable and based on the dosage of the drug given. If the dosage of certain drugs is increased, unfavorable effects may be produced. Physicians are trained to be aware of the potential toxic effects of all drugs they prescribe and must be cautious with their use. A condition caused by drug treatment is known as **iatrogenic**, and is usually related to drug toxicity.

Side effects result from the physiologic reactions caused by a drug that are not related to the desired therapeutic effect. A number of signs and symptoms are associated with side-effects and iclude loss of appetite, nausea, itching, headache, fever, vomitting, and discoloration of nails. Many of these effects are related to the usual therapeutic dosage of a drug and are usually tolerable. In addition, they tend to dissapear as a patient adjusts to the medication. Doctors can anticipate these reactions and tell a patient what to expect.

Hypersensitivity reactions, also called *allergic reactions*, occur only in people allergic to a particular drug. Some of these reactions are minor but others are severe. Any drug may cause an allergic reaction in people highly sensitive to that drug. Some people cannot take such common drugs as aspirin or penicillin because they are allergic to them.

Toxic reactions result from drug poisoning. Such reactions damage cells and may kill a person. All drugs can have a mild toxic effect, and a large enough overdose of any drug will produce a severe toxic reaction.

Adverse reactions include any other undesirable effects saused by drugs. They may be opposite to the desired effect, or may be allergic. Adverse events reported in U.S.-controlled studies include bradycardia, edema, headache, dizziness, fatigue, lethargy, insomnia, nervousness, bizarre dreams, depression, impotence, dyspnea, pharyngitis, rhinitis, upper respiratory infection, dyspepsia, nausea, diarrhea, chest pain, arthralgia, and rash.

In European-controlled clinical trials the following adverse reactions were noted: bradycardia, palpitation, edema, cold extremities, headache, dizziness, fatigue, asthenia, insomnia, paresthesia, nausea, dyspepsia, diarrhea, chest pain, joint pain, and myalgia.

Contraindications are those factors in a patient's condition that make the use of particular drugs dangerous; they should not be given The package inserts accompanying drugs are carefully prepared by manufacturers to indicate any and all contraindications for drugs.

Among the most dangerous toxic complications of drug usage are blood dyscrasias (blood diseases) such as aplastic anemia and leucopenia, cataract formation (eye disorder), cholestatic jaundice (biliary obstruction leading to yellow discoloration of skin), neuropathy, collagen disorders (connective tissue damage such as arthritis), and photosensitivity (abnornmal sensitivity to light, sinus bradycardia, heart block, cardiogenic shock, and overt cardiac failure.

Task 3. *Give the meaning of the following terms illustrating your explanation with an example.*

1. drug toxicity; 2. iatrogenic disorders; 3. adverse reaction; 4. indications; 5.contraindications; 6. hypersensitivity reactions;

Task 4. *Match the names of adverse reactions with their explanations.*

1. pain in joint	a. bradycardia
2. localized swelling	b. edema
3. inability to achieve or maintain an erection	c. insomnia
4. painful or labored breathing	d. impotence
5. sore throat	e. dyspnea
6. inability to sleep	f. pharyngitis
7. nasal inflammation	g. rhinitis
8. abnormal sensitivity	h. dyspepsia
9. slow heart beat	i. arthralgia
10. painful digestion	j. hypersensitivity

1. feeling of springing	a. palpitation
2. loss of strength	b. asthenia
3. feeling usually before vomiting	c. paresthesia
4. frequency of fluid bowel movements	d. myalgia
5. muscle pain	e. dizziness
6. feeling of tiredness	f. nausea
7. feeling of numbness	g. diarrhea
8. rapid or violent throbbing	h. fatigue

Read and translate the following passage without a dictionary.

People with congestive heart failure are often treated with the drug digitalis. Digitalis appears to bind to and inhibit the action of Na^+/ K^+ pumps in the cell membranes, causing a use in the intracellular concentrations of Na^+. The increased availability of Na^+, in turn, stimulates the activity of another membrane transport carrier, which exchanges Na^+ for extracellular Ca^{++}. As a result, the intracellular concentrations of Ca^{++} are increased, which strengthens the contractions of the heart.

One of the newer classes of drugs that can be used to treat hypertension (high blood pressure) are the angiotensin converting enzyme or ACE, inhibitors. These drugs (such as Captopril) block the formation of angiotension, thus reducing its vasoconstrictor effect.

The ACE inhibitors also increase the activity of bradykinin a polypeptide that promotes vasodilation. The reduced formation of angiotensin and increased action of bradykinin results in vasodilatation, which decreases the total peripheral resistance. Because this reduces the after load of the heart, the ACE inhibitors are also used to treat left ventricular hypertrophy and congestive heart failure (недостаточность работы сердца, сопровождающаяся застойными явлениями).

Read the following article and translate it.

A PRESCRIPTION FOR TROUBLE: WHEN MEDICATIONS DON'T MIX

Medications can be lifesaving. Often, however, someone needs to take more than one medication at a time. When this happens, there is a risk of one drug affecting how the other drug acts. Such reactions can also occur with certain food and drug combinations, or a drug's activity can be hindered by cigarette smoking. Usually these effects are minor – the person taking the drugs might not even notice the changes – but, occasionally, the outcome is more serious. Certain interactions increase a patient's risk of adverse effects.

What Is a Drug Interaction?

A drug interaction is a change in the effect of a drug that occurs when a person is taking another drug at the same time. The change may be desirable, adverse or inconsequential. One example of a desirable drug interaction is in cancer treatment. Patients with cancer often receive combinations of drugs that act in concern to fight the malignancy.

Increased effect of a medication.

In one of the most common drug interactions, one drug causes an "increased effect" of another medication. This does not mean that the affected drug works better, rather, it indicates an abnormal, exaggerated effect.

This exaggerated effect may be associated with various undesirable symptoms, such as sweating, nausea or rapid heartbeat. The type of symptoms that develop, as well as their severity, depends on the specific drugs being taken and on the individual variability of the patient's own body. If severe undesirable symptoms develop, the increased effect is termed a "toxic" effect. When cimetidine (brand name, Tagamet), a drug used to treat stomach and intestinal ulcers, is taken with theophylline, a medication used to relieve asthma, the result may be an increased amount of theophylline in the blood, possibly resulting in theophylline toxicity. The symptoms of theophylline toxicity can include nausea, vomiting, diarrhea, headache, irritability, restlessness, nervousness, rapid heartbeat, insomnia, tremor and even seizure.

Decreased effect of a medication.

Another common drug interaction involves just the converse of the interaction described above. One drug may decrease the effectiveness of another drug. The end result depends on the degree of the decreased effect. In the decrease is small, the affected drug may still retain most of its pharmacologic activity. If the decrease is large, however, the effectiveness of the drug may be greatly diminished – or it may not work at all. If ciprofloxacin (Cipro), an antibiotic used to treat various bacterial infections, is combined with antacids that contain aluminum or magnesium (such as Maalox or Mylanta), the absorption of Cipro is greatly diminished, as is the bacteria – fighting ability of the antibiotic.

Are Drug Interactions Preventable?

Drug interactions are preventable in virtually every case. However, physicians and pharmacist must know what medications a patient is taking in order to head off trouble. Patients should inform physicians and pharmacist about other prescriptions as well as any vitamin or mineral supplements or over the counter medications they take routinely.

If a person is receiving (or is about to receive) interacting drug, there are several ways to head off potential problems. Sometimes the best way to avoid an adverse drug interaction is simple for the doctor not to prescribe the interacting drugs. Several different medicines are available for the treatment of most disorders, and it may be possible to select an alternative to one of the interacting drugs.

If a patient truly needs both interacting drug, other preventive measures may be called for. Sometimes the dose of one of the drugs can be adjusted to correct for the alteration caused by the drug interaction. Sometimes the physician will need to monitor the patient's response more carefully. Sometimes the interaction can be prevented by spacing the doses of the interacting drugs appropriately or by giving one of the drugs by a different route of administration.

Using these and other methods a doctor can typically prevent the adverse effects of drug interactions. But prevention must be a cooperative effort between the patient, the doctor and the pharmacist.

Study the following tables and do the task that follows them.
Selected drug-drug interactions are listed in Table 1 and 2. The interactions included were chosen because of the widespread use of some of these medications, and because their effects are seemed "clinically significant"- that is, their effects have been detected in the human body as opposed to being observed only in animal studies.

It is very important to note here that anyone taking any of the medications listed in the tables should not alter the dose of his or her medication without the prescribing doctor's consent and supervision. Patients should discuss all medication-related questions with their physicians and pharmacists.

Table 1

INTERACTIONS WITH DRUGS TAKEN FOR HYPERTENSION

(Brand names of drugs are shown in boldface in the table, generic names are in plain type.)

DRUGS	INTERACTS WITH	RESULTS AND PRACTICAL TIPS
diltiazem (Cardizem)	lithium (**Cibalith–S, Eskalith, Lithane, Lithobid** and other)	This interaction could lead to neurotoxicity. Possible symptoms include nausea, vomiting, muscular incoordination and ringing in the ears.
nifedipine **(Adalat, Procardia XL)**, diltiazem **(Cardizem CD)**	cimetidine **(Tagamet)**	May increase the amount of nifedipine in the blood, thereby increasing the antihypertensive effect. Possible nifedipine toxicity– evidenced by symptoms such as dizziness, flushing and headache – may occur.
nifedipine **(Adalat, Procardia XL)**	barbiturates	Significantly decreases the amount of nifedipine available in the body, possibly leading to a decreased effect of the

		nifedipine. This effect is particularly likely when nifedipine is taken orally. (Much of the evidence for this interaction comes from studies of phenobarbital, but other barbiturates are expected to interact similarly.)

Table 2

INTERACTIONS WITH DRUGS TAKEN TO FIGHT INFECTION

(Brand names of drugs are shown in boldface in the table, generic names are in plain type.)

DRUGS	INTERACTS WITH	RESULTS AND PRACTICAL TIPS
amoxicillin (**Amoxil, Larotid**, and other); penicillin V (**Ledercillin VK, Pen-Vee K, V-Cillin K, Veetids**)	estrogen containing oral contraceptives such as **Brevicon, Demulen, Enovid, Lo/Ovral, Norinyl, Ortho Novum, Ovcon, Ovral, Tri-Norinyl,Tri-Phasil** and many others.	Although aminopenicillins (such as amoxicillin) may reduce the efficacy of oral contraceptives, this result is probably rare. Menstrual irregularities, such as spotting or breakthrough bleeding, may be a sign that this interaction is occurring. Other types of penicillins and other oral antibiotics in general may produce similar effects. *Recommendation*: Women wishing to avoid pregnancy would be prudent to institute another from of contraception – in addition to use of their oral contraceptive – while taking amoxicillin or other penicillins in this class (i.e., aminopenicillins).
ciprofloxacin **(Cipro)**	- dairy products - multivitamin supplements	Greatly diminishes absorption of ciprofloxacin.

	- antacids that contain aluminum or magnesium	Cations (e.g., calcium, magnesium, iron, aluminum, etc.) bind with ciprofloxacin and markedly reduce its absorption, possibly leading to decreased antibiotic effect. Do not take ciprofloxacin and cations (such as iron-containing vitamin supplements, dairy products, antacids, etc.) simultaneously. Ciprofloxacin should be taken at least two hours before or six hours after taking diary products vitamins or antacids to minimize the occurrence of this interaction.
erythromycin	terfenadine (**Seldane**), astemizole (**Hismanal**)	Erythromycin may cause increased plasma levels of **Seldane** or **Hismanal**, which could lead to cardiac arrhythmias. Changes in the EKG namely prolonged QT interval – have been observed in patients combining erythromycin with these allergy medications. This interaction is serious. How often this interaction occurs is unknown, yet caution is certainly warranted.
Erythromycin	theophylline **(Primatene Tablets, Slo-Bit, Theo-Dur, Theo-24, Uniphyl** and other)	Erythromycin may increase the amount of theophylline in the blood. Although most people do not seem to have much

		trouble with this interaction, some develop theophylline toxicity. Symptoms of theophylline toxicity include nausea, vomiting, diarrhea, headache, irritability, nervousness, rapid heartbeat, insomnia and tremor. In serious cases, seizure can occur. The effect is usually delayed, so that theophylline concentrations start to rise after 5-7 days of treatment with erythromycin.
Erythromycin	**triazolam (Halcion)**	This combination can lead to a substantial increase in the concentration of triazolam in the blood, possibly increasing its sedative effect, which could lead to drowsiness, impaired ability to concentrate and forgetfulness. *Recommendation:* if signs of triazolam toxicity are present, a patient may wish to discuss this with his or her physician; dosage reduction may be necessary.
tetracyclines	calcium • milk • dairy products • calcium supplements • calcium containing multivitamins	Calcium supplements, calcium- fortified vitamins and foods containing calcium may substantially reduce the absorption of tetracycline, thereby diminishing its effects. The absorption of related compounds (i.e.,

		doxycycline, minocycline) when taken with calcium is also reduced, but to a lesser extent. Foods with moderate to high amounts of calcium include milk, yogurt, cheese, sardines, salmon, soybeans, tofu, broccoli and turnip greens. *Recommendation:* Do not take tetracycline and calcium products simultaneously. In fact avoid taking any cations (e.g., iron, magnesium, zinc, aluminum) with tetracycline at least two hours before or at least four hours after eating dairy products or calcium containing vitamins.

Table 3 identifies some well-documented effects cigarette smoking has on certain medication. (it's important to note here that – regardless of the effect a patient's smoking may have on a prescribed medication – patient should never change the dose of a medication he or she is receiving without checking with the prescribing physician.

Table 3

EFFECT OF CIGARETTE SMOKING ON MEDICATIONS

DRUG	EFFECT ON CIGARETTE SMOKERS
theophylline (used to treat asthma)	Smoking may lead to a decrease in the effect of theophylline. Cigarette smoke increases the production of the enzymes in the liver responsible for metabolizing this medication as a result. Less of the medication enters the blood, and a decreased response may ensue*.
tacrine (used to help manage Alzheimers disease)	Smoking may lea to a decrease in the effect of tacrine.

insulin (used to manage diabetes mellitus, a condition that results in excessively high amounts of sugar in the blood and urine)	An insulin-dependent who smokes heavily may require a 15% to 30% higher dose of insulin that a nonsmoker.
flecainide (used to treat life threatening arrhythmias – irregularities of the heartbeat and heart rhythm of the heart)	Smoking may decrease the amount of flecainide in the body. A doctor may decrease the amount of flecainide in body. A doctor may need to prescribe a higher dose of this medication to a smoker than to otherwise similar nonsmokers.

* to ensue – получаться в результате

Task. *Give the written summary of the article. Concentrate on the following:*

1. Drug interaction and its consequences:
   a) desirable; b) adverse; c) inconsequential.
2. Increased effect of a medication; the type and severity of symptoms that develop.
3. Decreased effect of a medication.
4. Cigarette smoking, efficacy of drugs and adverse health effects.

III. *RENDERING.*

Read the passages, entitle each of them and render information into English.

***

Лекарства, поступившие в организм, могут оказывать или локальное или общее действие. При локальном действии они не впитываются в кровь или поступают в нее в небольших количествах, причем действие ограничивается местом применения при непосредственном контакте с тканью (слизистая оболочка, кожа). К таким лекарствам относятся: вяжущие средства (astringent) , дубильные вещества (tannins), соли цинка, соли металлов третьей группы периодической системы Менделеева, защитные средства (слизи, масла, силиконы), адсорбирующие средства (лечебный уголь (activated charcoal), крахмал, тальк), средства местной анастезии (кокаин, понтокаин, нуперкаин, анастезин и другие), антисептические (йод, пантоцид, пиоктанин, нитрофуразон).

***

Общее действие лекарства на организм наступает после его всасывания и доставки (delivery) с кровью к тканям и органам, на которые оно должно производить свое действие – возбуждение, торможение или поражение функций.

Некоторые лекарства, действующие выборочно на клетки центральной нервной системы, называются «лекарствами центрального действия»; лекарства, влияющие на периферическую нервную систему или на другие органы, носят название «лекарств периферического действия».

Характер действия лекарства зависит от применяемой дозы, способа введения в организм (через рот, под кожу, в мышцы, вены, прямую кишку) и, конечно, от вида самого препарата. Действие лекарства может быть обратимым (reversible) и необратимым.

***

Обратимое действие лекарства длится до тех пор, пока активное вещество не распадется (break down) в организме на неактивные соединения или пока не будет удалено из него в неизменном виде. Этот процесс продолжается обычно от ½ до 6 и даже 8 часов, поэтому для сохранения постоянного действия лекарства следует применять его через определенные промежутки времени, как правило, 3 раза в день.

Действие лекарства зависит от того, каким образом, оно распространяется в организме равномерно (evenly) во всех тканях, плазме и крови, например, этанол, бром, или только в отдельных органах, которые определенным образом накапливают данное лекарство. Таким выборочным (selective) действием обладают например, сердечные гликозиды (гликозиды наперстянки, строфанта), которые накапливаются в сердечной мышце в значительно большей концентрации, чем в других органах и тканях.

Однако, довольно редко действие лекарства распространяется только на какой-нибудь один орган или систему органов, чаще оно охватывает другие органы и тогда, помимо основного действия лекарства появляются побочные явления.

***

Некоторые препараты действуют непосредственно на причину болезни – это так называемые причинные лекарства. Другие снимают болезненные симптомы – это симптоматические лекарства. К причинным относятся, прежде всего, антибиотики, сульфаниламиды и другие с химиотерапевтическим действием. Они уничтожают болезнетворные (pathogenic) микроорганизмы, являющиеся причиной многих заболеваний. К причинным относятся лекарства, «исправляющие» нарушения самого организма, например, авитаминоз (deficiency disease), недостаток (lack of) калия, вызванный некоторыми мочегонными средствами, или заболевания, возникшие в результате неправильного питания (nutritional disorders). В этих случаях процесс не ведет к излечиванию болезни, он является скорее заменяющим лечением, например, применение инсулина при диабете.

К группе симптоматических лекарств относятся: обезболивающие, жаропонижающие, противоспазматические и другие. Такие лекарства снимают неприятные, мучительные ощущения во время болезни. К этой группе относятся также лекарства успокаивающие, понижающие давление крови при гипертонии, противокашлевые и другие. Симптоматические средства используются обычно как вспомогательные (subsidiary) при лечении многих болезней.

IV. *FOLLOW-UP ACTIVITY.*

I. *Finish the sentences adding more information.*

1. A doctor prescribing a certain dose of a drug to be taken by a patient should take into consideration not only the strength of the drug but also … .
2. A patient taking the drug prescribed by a doctor must know well its indications, … .
3. There are several types of parenteral injections. They are … .
4. There are certain terms to describe the action and interaction of drugs in the body. They are … .
5. All drugs can affect the body in both helpful and harmful ways. For example, … .

II. *Prove that*:

1. Any drug, if given in high enough doses can have harmful actions on the body.
2. The prescribed method for administering the medication depends upon the “form” of the medication.
3. It is necessary to reduce drug dosage for a patient with liver disease. Certain interactions of drugs can increase a patient’s risk.

III. *Extend the idea.*

1. The reception theory explains how drugs act on the cell.
2. The chemical reaction between a drug and the body is not a one-way process.
3. Interactions can occur not only with drug combinations.
4. Patients should discuss all medication-related questions with their physicians or pharmacist.

IV. *Speak about actions of the drugs using the following outline.*

1. Actions of the drug in the body. 2. Different effects of drugs. 3. Drug interactions. 4. Elimination of drugs from the body.

TOPIC “DRUGS AS MEDICINES”

PART I. “OVER-THE-COUNTER (OTC) DRUGS”

I. *VOCABULARY AND GRAMMAR LEARNING.*

Exercise 1. *Memorize the following words.*

1.	interfere [ˌɪntəˈfɪə] *v*. – (in) вмешиваться; (with) служить препятствием, мешать; ~ with one’s health – вредить чьему-либо здоровью;
2.	impair [ɪmˈpɛə] – ослаблять, уменьшать; ухудшать(ся), портить(ся); ~ one’s health – портить свое здоровье;
3.	avoid [əˈvɔɪd] *v*. – 1) избегать, сторониться, уклоняться; 2) юр. отменять, аннулировать, делать недействительным;
4.	trigger [trɪgə] *v*., *n*. – 1) вызывать, быть причиной; 2) начальный центр цепной реакции; 3) тормоз;
5.	spinal cord [ˈspaɪnlˈkɔ:d] – спинной мозг;
6.	joint [dʒɔɪnt] *n*. – сустав, сочленение;
7.	fever [ˈfɪ:və] *n*. – 1) жар, лихорадочное состояние, лихорадка; 2) нервное возбуждение;
8.	itching [ˈɪtʃɪŋ] *n*. – зуд;
9.	fatigue [fəˈtɪ:g] *n*. – утомление, усталость;
10.	sneezing [snɪ:zɪŋ] *n*. – чихание;
11.	swell [swel] *v*. – набухать, опухать, вздуваться, вспучиваться;
12.	swelling [ˈswelɪŋ] *n*. – набухание, опухание, разбухание; вздутие, припухлость, опухоль;
13.	antitussive [æntɪˈtʌsɪv] *a*. – успокаивающий кашель;
14.	lozenge [ˈlɔzɪndʒ] *n*. – лепешка, таблетка;
15.	syringe [ˈsɪrɪndʒ] *n*., *v*. – шприц; спринцевать, вводить посредством шприца;
16.	rash [ræʃ] *n*. – высыпание, сыпь;
17.	moisten [mɔɪsn] *v*. – увлажнять(ся), смачивать;
18.	upset [ʌpˈset] *v*. – расстраивать здоровье (особ. желудок);
19.	stomach [ˈstʌmək] *n*. – желудок;
20.	confusion [kɔnˈfju:ʒ(ə)n] *n*. – 1) смущение, замешательство; 2) путаница, смешение;
21.	agitation [ˌædʒɪˈteɪʃ(ə)n] *n*. – волнение, возбуждение; смятение, беспокойство;
22.	beverage [ˈbevərɪdʒ] *n*. – питье, напиток;
23.	seizure [ˈsɪ:ʒə] *n*. – припадок, приступ, апоплексический удар;

24.	fake [ˈfeɪk] *n*. – 1) подделка, подлог, фальшивка; 2) плутовство, мошенничество.

Exercise 2. *Practise pronouncing the following words:*
stomach ['stʌmək], kidney ['kɪdnɪ], bleeding ['blɪ:dɪŋ], blood [ˈblʌd], caffeine ['kæfɪ:n], codeine ['kəudɪ:n], nephropathy [nɪˈfrɔpəθɪ], sedation [sɪ'deɪʃ(ə)n], sedative ['sedətɪv], pseudoephedrine [sju:dəʊˈɛfədrɪ:n], nervousness [ˈnərvəsnis], urine ['juərɪn], antihistamine [ˌæntɪ'hɪstəmɪn], acetaminophen [ə,sɪ:tə'mɪnəfɛn], antidepressant ['æntɪdə'presnt], insulin ['ɪnsjəlɪn], disorder [dɪ'sɔ:də], breast [brest], ache [eɪk], asthma ['æsθmə], throat [θrəut], analgesic [ˌænæl'dʒesɪk], anemia [ə'nɪ:mɪə], thyroid ['θaɪrɔɪd], anticoagulant ['æntɪkəu'ægjulənt], colitis [kɔ'laɪtɪs], epilepsy ['epɪlepsɪ], lethargy ['leθədʒɪ], antihypertensive ['æntɪˌhaɪpə'tensɪv], glaucoma [glɔ:'kəumə], nausea ['nɔ:sɪə], expectorant [ɪk'spekt(ə)r(ə)nt], rheumatic [ru:'mætɪk], constipation [ˌkɔn(t)stɪ'peɪʃ(ə)n], lining ['laɪnɪŋ], palpitation [ˌpælpɪ'teɪʃ(ə)n], tourniquet ['tuənɪkeɪ], bandage ['bændɪdʒ], digest [dɪ'dʒest], confusion [kən'fju:ʒ(ə)n], agitation [ˌædʒɪ'teɪʃ(ə)n], decongestant [ˌdɪ:kən'dʒestənt], drowsiness ['drauzɪnəs].

Exercise 3. *Read and translate the following pairs of words.*

a muscle	muscular	a lung	pulmonary
a skin	cutaneous	a bone	bony (osseous)
a chest (thorax)	thoracic	a mouth	oral
a kidney	renal	a nose	nasal
a vessel	vascular	a tooth	dental
a liver	hepatic	a stomach	gastric
an abdomen	abdominal	a face	facial
a heart	cardiac	a neck	cervical
a spine	spinal	a cell	cellular
a skull	cranial	an eye	visual

Exercise 4. *Fill in the blanks with the cognate words.*

	Verb	***Noun***	***Adjective|Adverb***
Model:	• absorb	• absorbent • absorbtives • absorbtion • absorbtivity • absorber	• absorbent • absorbtive • absorbing
	• irritate	• irritability •	• •

•	• sedation	• sedative •
• suppress	•	•
•	• constipation	-
• expectorate	• expectoration •	-
-	• pregnancy	•
•	• blood	• bloody • •
-	• reverse • reversion • •	•
• interfere	•	-
• impair	• impairment	•
• suppress	• •	•
• relieve	•	-
•	• loosener •	-
• moisten	•	•
•	• •	• excretive •
•	• fatigue	-
•	• inflammation •	• •
• confuse	•	•

Exercise 5. *Translate word combinations from English into Russian.*

To pose (little, much) risk, to use occasionally, reversible information, to increase the risk of falling, to cause temporary dry mouth and eyes, to lose one's appetite, to retain urine, alcoholic beverage, impaired motor skills, swollen tissue, to make one's symptoms less bothersome, to gargle the throat, to relieve a sore throat, a toll-free telephone number, to treat a symptom, a caregiver, to keep the track of smb., to make the existing blockages worse, nursing (breast-fed) infant, seizure disorder, secondhand smoke, blood clotting disorder, the upset stomach, pain relief.

Exercise 6. *Translate word combinations from Russian into English.*
принимать лекарство, употреблять алкогольные напитки, вызывать тошноту, управлять транспортными средствами и механизмами, купировать боль, снижать жар (лихорадку), противовоспалительный препарат, блокировать болевые ощущения в головном и спинном мозге, противокашлевое средство, отхаркивающее средство, краткосрочный, долгосрочный, грудное молоко, комбинированные препараты, снотворное.

GRAMMAR LEARNING.

Subject Infinitive Construction (Complex Subject) is the infinitive construction consisting of a noun or a personal pronoun in a nominative case as a subject and the infinitive (Simple or Perfect Active/Passive). The predicate of a sentence is formed by 1) verbs in Active voice denoting knowledge, thinking, supposition, perception, expectation, belief, finding, etc.; 2) certain verbs in Active voice; 3) the verb to be + adjective/adverb. The verb is usually translated as an introductory phrase/ impersonal construction whereas the infinitive as a predicate of a subordinate clause.

Exercise 7. *Translate the following sentences, paying attention to the verbs used with Complex Subject. Divide the underlined predicates into three groups and write them down adding some other verbs which are used with Complex Subject as a predicate.*

1. Expectorants, on the other hand, <u>are thought</u> to thin mucus and make coughing more productive in clearing the mucus from the airway.
2. These problems can range from upset stomach to GI bleeding, a serious event that <u>is</u> more <u>likely</u> to occur in older people.
3. Although safe in the majority of users, long-term use of high doses of acetaminophen, especially in products that also contain caffeine (such as Excedrin) or codeine (such as Tylenol with Codeine), <u>has been shown</u> to cause a form of kidney disease called analgesic nephropathy.
4. Acetaminophen <u>is</u> much less <u>likely</u> than NSAIDs to be associated with GI problems, including bleeding.
5. Some groups of people <u>may be</u> particularly <u>liable</u> to have the side effects associated with OTC products.
6. Children who are allergic to aspirin <u>are likely</u> to have problems using ibuprofen.
7. Antihistamines <u>proved</u> to be excreted in breast milk and may cause side-effects such as sedation, irritability, crying, and sleep disturbances in nursing infants.

8. Aspirin during pregnancy happens to cause abnormalities in the baby or problems during delivery.
9. Acetaminophen is generally considered to be safe for short-term pain relief during pregnancy.
10. Aspirin and NSAIDs turn out to make high blood pressure worse or interfere with blood pressure medicines.
11. Codeine, when used as a cough suppressant is expected to cause nausea, sedation and constipation.
12. Pseudoephedrine has been described to cause nervousness, dizziness and sleeplessness.

Exercise 8*. Insert the suitable verb in the proper form in the Subject Infinitive Construction.*

1. Moderate use of many medicines …to be beneficial. 2. Immoderate use of medicines … to be harmful. 3. Some medications … to be prepared by pharmacists at the chemists'. 4. The data obtained … to be identical with the previous findings. 5. Most of these substances … to be included into the protein structure. 6. The extent of absorption … to depend on the compound being absorbed. 7. This new antibiotic … to be successfully used in surgery and dermatology. 8. The reaction … to be accelerated due to phenyl radical.

Exercise 9*. Transform the sentences using Complex Subject. The first sentence has been done for you.*

1. It *appeared* that the ancient Egyptians *had* a well-developed pharmacopoeia. The ancient Egyptians *appeared to have* had a well-developed pharmacopoeia. 2. It appears that an increased use of tranquillizers, sedatives and hypnotics may be due to numerous stresses. 3. They say that papaverine easily degrades in the light. 4. It is known that most part of the medicinal preparations had been discovered by the twentieth century. 5. It is highly likely that barbiturates, sedatives and tranquillizers used improperly may result in addiction. 6. It has been proved that the pharmacological effects of a drug play a primary role in the incidence of drug abuse. 7. It seems that the active constituents of plants have been fully investigated. 8. They consider that indomethacin is not the drug of choice because of its toxicity.

II. *READING COMPREHENSION.*

Read the following information and do the tasks which follow it.

OTC DRUGS

OTC is short for over-the-counter. These are medicines you can buy without a prescription from your doctor. Chances are, you've used OTC medicines many times to relieve pain and treat symptoms of the common cold, the flu, and allergies. You'll learn about four of the most common types of OTC products and how each works.

Pain Relievers

The OTC products that relieve your headache, fever, or muscle aches are not all the same. That's because the pain relievers you see in the aisles of your local store or pharmacy are either nonsteroidal anti-inflammatory drugs (called NSAIDs), which include aspirin, ibuprofen, naproxen and ketoprofen, or acetaminophen. Each of these drugs has a different way of working.

Aspirin and NSAIDs relieve pain by stopping the production of prostaglandins, which are natural chemicals in the body. Prostaglandins irritate nerve, triggering the sensation of pain.

Commonly used NSAIDs include:

- Aspirin, the medicine in products such as Bayer and St. Joseph
- Ibuprofen, the medicine in products such as Advil and Motrin IB
- Naproxen, the medicine in products such as Aleve
- Ketoprofen, the medicine in products such as Orudis KT

Acetaminophen relieves pain and reduces fever. We don't completely understand way acetaminophen relieves pain. We do know that unlike aspirin and NSAIDs, which work in the skin, muscles, and joints, acetaminophen blocks painful sensation in the brain and the spinal cord.

Antihistamines

Antihistamines work by blocking the receptors that trigger itching, nasal irritation, sneezing, and mucus production. The three types of antihistamines are:

- Diphenhydramine, the medicine in products such as Banophen, Benadryl Allergy, and Diphenhist
- Brompheniramine, the medicine in products such as Dimetapp Allergy
- Chlorpheniramine, the medicine in products such as Aller-Chlor, Chlo-Amine and Chlor-Trimeton Allergy

Decongestants

Decongestants work by narrowing blood vessels in the lining of the nose. As a result, less blood is able to flow through the nasal area, and swollen tissue inside the nose shrinks. Pseudoephedrine is the only decongestant used in OTC

products. Pseudoephedrine is in products such as Allermed, Genaphed and Sudafed.

Cough Medicines

Cough medicines are grouped into two types: *antitussives* and *expectorants*. Antitussives, or cough suppressants, block the cough reflex. *Dextromethorphan* is a common antitussive and is in products such as Delsym, Drixoral, Pertussin CS, and Robitussin Pediatric.

Expectorants, on the other hand, are thought to thin mucus and make coughing more productive in clearing the mucus from the airway. *Guaifenesin* is the only expectorant used in OTC products and is in products such as Guiatuss, Robitussin, and Tusibron.

Timeline of symptoms Associated with the Common Cold

There is no cure for the common cold. Medicine can only make your symptoms less bothersome until your body can fight off the virus. Medicine won't make your cold go away completely. The following are tips to help you feel better when you have a cold:

- Stay home and rest, especially while you have a fever.
- Don't smoke and avoid secondhand smoke.
- Drink plenty of fluids like water, fruit juices and clear soups.
- Don't drink alcohol.
- Gargle with warm salt water a few times a day to relieve a sore throat. Throat sprays or lozenges may also help relieve the pain.
- Use salt water (saline) nose drops to help loosen mucus and moisten the tender skin in your nose.

Many cold medicines are available over-the-counter. If you decide to use an over-the-counter (OTC) medicine to treat your cold symptoms, consult the chart below.

Day Symptoms	OTC Medicine
1. Fatigue, mild sore throat	Acetaminophen (some brand names: Panadol, Tempra, Tylenol) or nonsteroidal anti-inflammatory drug (ibuprofen [some brand names: Advil, Manadol, Motrin])
2. Runny nose	Antihistamine (diphenhydramine [some brand names: Benadryl Allergy, Banophen, Diphenhist], chlorpheniramine [some brand names: Aller-Chlor, Chlo-Amine, Chlor-Trimeton Allergy])
3. Stuffy nose	Decongestant (preseudoephedrine [some brand names: Allermed, Genaphed, Sudafed])

4. Dry cough	Antitussive (dextromethorphan [some brand names: Drixoral, Pertussin CS, Robitussin Pediatric])
5. Moist, productive cough	Expectorant (guiafenesin [some brand names: Guiatuss, Robitussin, Tusibron])
6. Voice disappears altogether	No medicine will help your voice come back sooner. Resting is the only thing that will help.

Drug-Drug Interactions

The body processes or metabolizes every drug differently. If drugs are used together, their metabolism and effect on the body can change. When this happens, the chance that you will have side effects for each drug may become greater.

Potential Side Effects of OTC Medicines in Adults

While OTC medicines have a low risk of side effects when used occasionally by healthy adults, they can pose risks for very young children, the elderly, people with kidney problems, and people taking more than one medicine. These people have an increased risk of side effects when they use OTC medicines.

How to Read an OTC Drug Label

You don't need a prescription to buy OTC medicine. But like prescription drugs, OTC medicines can also cause unwanted and sometimes dangerous side effects. Before you buy an OTC medicine, it's important to read and thoroughly understand the information on the drug label. Use the following as a guide. If you have questions about a medicine, ask your pharmacist or family doctor.

1. Active Ingredient – The active ingredient is the chemical compound in the medicine that works to relieve your symptoms. It is always the first item on the label. There may be more than one active ingredient in a product. The label will clearly show this.
2. Uses – This section lists the symptoms the medicine is meant to treat. The U.S. Food and Drug Administration (FDA) must approve these uses. Uses are sometimes referred to as *indications*.
3. Warnings – This safety information will tell you what other medicines, foods, or situations (such as driving) to avoid while taking this medicine.
4. Directions – Information about how much medicine you should take and how often you should take it will be listed here.
5. Other Information – Any other important information, such as how to store the product, will be listed here.
6. Inactive Ingredients – An inactive ingredient is a chemical compound in the medicine that isn't meant to treat a symptom. Inactive ingredients can include preservatives, binding agent, and food coloring. This section is especially

important for people who know they have allergies to food coloring or other chemicals.

7. Questions or Comments – A toll-free number is provided to address any questions or comments you may have about the medicine

The illustration below shows you how this information appears on an actual OTC drug label.

Name of product→

Ingredients→

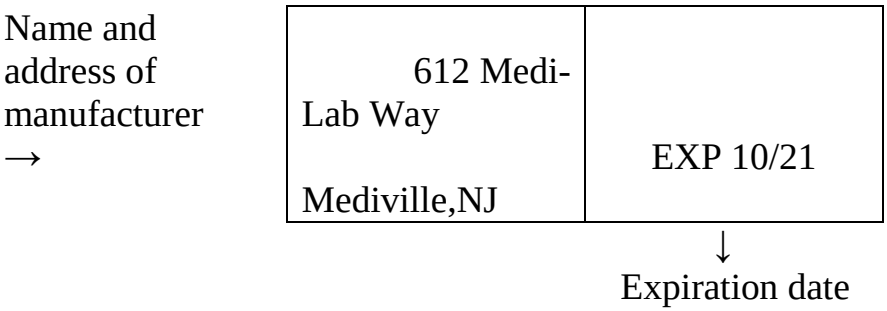
Exact measurement of package contents→

	PAIN OFF
PAIN OFF **ACETAMINOPHEN** TABLETS FOR FAST RELIEF OF MINOR PAIN Active ingredient: acetaminophen 325 mg. Tablets 200 **DO NOT USE IF PROTECTIVE SEAL IS BROKEN** **Medi-Labs**	**PAIN OFF** provides temporary relief from: simple headaches; minor muscle aches; and aches, pain and fever due to colds and "flu" (Caution: if condition persists for more than 10 days, consult a physician.) Warning: Keep out of reach of children. As with any drugs, if you are pregnant or nursing a baby, seek the advice of a health professional before using this product. Usual Adult Dose: 2 tablets four times a day as needed. For children under 12, consult a physician. NO.GT 123

___ Purpose of medicine

___ Cautions on use

___ Directions for safe use



Exercise 1. *Explain the following:*
double dosing, OTC drugs, NSAIDs, Reye's syndrome (гепатоцеребральный синдром: внезапный отек головного мозга в сочетании с жировым перерождением печени и почечных канальцев у детей после инфекции верхних дыхательных путей), brand name, combination products.

Exercise 2. *Answer the questions.*
Pain relievers
1. What medicines are called OTC?
2. What are some non-steroidal anti-inflammatory drugs?
3. How do aspirin, NSAIDs and acetaminophen relieve pain?
4. In what way do antihistamines work? What are their types?
5. What are decongestants used for? Name decongestant which is used as OTC product.
6. What are the main types of cough medicines?
7. What is a common antitussive?
8. What are expectorants used for? Give the example of an OTC expectorant.

Common cold
9. How common cold is treated?
10. Which OTC medicines are recommended in case of:
    a) runny nose;
    b) stopped nose;
    c) dry cough;
    d) moist, productive cough;
    e) fatigue, mild sore throat.

OTC Drug label
11. Why is it necessary to read and understand the information on the drug label?
12. What information does an OTC drug label contain?

Potential side effects
13. What category of population can OTC medicines pose risk of side effects to?

Exercise 3. *Study the table and list the specific risks of the most common OTC drugs given here.*

RISK OF SOME COMMON OVER-THE-COUNTER DRUGS

Drug	Side effects	High-risk groups ①	Interactions
PAIN RELIEVERS			
Aspirin Bayer Empirin Norwich	Common: Stomach upset ②, heartburn, gastrointestinal bleeding, nausea, vomiting, decreased clotting. Less common or rare: Bloody or tarry stools, bloody urine, ringing in the ears, loss of hearing, allergic reaction (skin rash, hives, itching, tightness in chest). Signs of overdose: Confusion, severe diarrhea, fast or deep breathing, severe drowsiness, convulsions.	People with allergies to aspirin or other nonsteroidal anti-inflammatory drugs, ulcers, anemia, bleeding disorders, overactive thyroid, asthma, high blood pressure, kidney or liver disease; children or teenagers with flu or chicken pox.	Can increase effect of anticoagulants. Can alter urine-sugar tests for diabetics.
Acetaminophen Actamin Tylenol Valadol	Common: None. Rare: Bloody or decreased urination, allergic reaction (skin rash, hives, itching, tightness in chest).	People with kidney or liver disease; active alcoholics.	Can alter urine-sugar tests for diabetics.

	Signs of overdose: Diarrhea, increases sweating, loss of appetite, nausea, vomiting, or stomach pain.		
Ibuprofen Advil Motrin-IB Nuprin	Common: Stomach upset②, gastrointestinal bleeding, heartburn, nausea, vomiting, dizziness, drowsiness, lightheadedness, headache. Less common or rare: Bitter taste, gas, constipation, loss of appetite, allergic reaction (skin rash, hives, itching, tightness in chest). Signs of overdose: Lethargy, low blood pressure, irregular heartbeat, difficulty breathing.	People with diabetes, asthma, kidney or liver disease, colitis, ulcers, congestive heart failure, high blood pressure, epilepsy.	Can increase effect of anticoagulants. Side effects increase when taken with aspirin. Can decrease effect of antihypertensive drugs.
Naproxen Aleve	Generally same as ibuprofen.②	Generally same as ibuprofen.③	Same as ibuprofen.
ANTIHISTAMINES④			
Brompheniramine Dimetane	Common: Drowsiness, thickening of	People with glaucoma, liver disease, enlarged	Increase sedative effect if taken with alcohol,

Chlorpheniramine Aller-Chlor Clor- Trimeton Pfeiffer's Allergy Clemastine Tavist-1 Diphenhydramine Benadryl 25 Benylin cough Sominex	mucus. Less common or rare: Blurred vision, confusion, difficulty urinating, dizziness, dryness of mouth, nose, or throat, loss of appetite, nervousness, restlessness, irritability. Sings of overdose: Clumsiness or unsteadiness, facial, flushing, difficulty breathing, severe drowsiness, seizures.	prostate, difficulty urinating.	narcotics, sleeping medications, or tranquilizers. Can cause increased drowsiness or dry mouth if taken with or up to two weeks after a monoamine oxidase inhibitor (antidepressant drugs). Can cause dry mouth if taken with anticholinergics (drugs for stomach cramps).
ORAL DECONGESTANTS			
Pseudoephedrine Efidac/24 Halofed Sudafed Phenylpropanolamine ⑤ Propagest	Common: Insomnia, nervousness, restlessness, irritability. Less common or rare: Difficulty urinating, dizziness, fast, slow, or irregular heartbeat, headache, sweating, nausea, vomiting. Sings of overdose: Convulsions, fast breathing,	People with diabetes, enlarged prostate, heart disease, high blood pressure, or overactive thyroid	Can reduce effect of beta blockers. Can cause high blood pressure, fever, or seizures if taken with or up to two weeks after a monoamine oxidase inhibitor (antidepressant drugs). Can cause insomnia, irritability, irregular heartbeats, or seizures if taken with asthma

	hallucinations, increase in blood pressure, irregular heartbeat, difficulty breathing.		medications, caffeine, or amphetamines.
TOPICAL DECONGESTANTS⑥			
Oxymetazoline Afrin 12-Hour Dristan 12-Hour Duration 12-Hour Phenylephrine Alconefrin Neo-Synephrine Vicks Sinex	Common: Prolonged use may cause rebound congestion. Less common or rare: Rapid heartbeat, lightheadedness, trembling, insomnia, nervousness.	People with diabetes, heart disease, high blood pressure, or overactive thyroid.	May increase risk of serious side effects if taken with or up to two weeks after a monoamine oxidase inhibitor (antidepressant drugs).

① People with these conditions should avoid drug or check with doctor.

② Aspirin causes the most stomach upset; naproxen causes somewhat less, but more than ibuprofen.

③ People over age 65 must follow lower dosage instructions.

④ Antihistamines vary in their sedative effects: Diphenhydramine is highly sedating, clemastine moderately sedating, and the others mildly sedating.

⑤ More likely than pseudoephedrine to increase blood pressure sharply. Phenylpropanolamine is also found in all over-the-counter diet pills and in many cold medicines.

⑥ Available in drops or sprays.

Exercise 4. *Translate the sentences from Russian into English. Before translating the sentences study the pronunciation and the translation of the following side-effects.*

1.	bloody (tarry) stool – испражнение с кровью (дегтеобразные);
2.	blurred vision – затуманенное зрение;
3.	clotting ['klɔtɪŋ] *n.* – свертывание, образование сгустков;
4.	confusion [kən'fju:ʒn] *n.* – спутанность сознания;
5.	congestion [kən'dʒestʃ(ə)n] *n.* – застой;
6.	constipation [,kɔnstɪ'peɪʃ(ə)n] *n.* – запор;
7.	dizziness ['dɪzɪnəs] *n.* – головокружение;

8.	drowsiness ['drauzınəs] *n*. – сонливость;
9.	heartburn ['hɑ:tbɜ:n] *n*. – изжога;
10.	hives [haıvz] *n*. – крапивница;
11.	insomnia [ın'sɔmnıə] *n*. – бессонница;
12.	irritability [ˌırıtə'bılətı] *n*. – раздражительность;
13.	itch [ıtʃ] *n*., *v*. – зуд; чесаться, зудеть;
14.	lethargy ['leθədʒı] *n*. – летаргия;
15.	light-headedness – умственное расстройство, головокружение;
16.	rash [ræʃ] *n*. – сыпь;
17.	restlessness ['restləsnəs] *n*. – беспокойство, возбужденное состояние;
18.	seizure ['si:ʒə] *n*. – припадок, апоплексический удар;
19.	stomach upset – расстройство желудка;
20.	sweating ['swetıŋ] *n*. – потение;
21.	tightness in chest – чувство сдавления в груди;
22.	trembling ['tremblıŋ] *n*. – дрожь, тремор.

1. Признаками передозировки аспирина является спутанность сознания, сильная диарея, быстрое и глубокое дыхание, сильная сонливость.
2. Основным побочным действием аспирина является расстройство желудка, изжога, тошнота, рвота, желудочное кровотечение.
3. При приеме аспирина диабетиками могут наблюдаться изменение в тестах на наличие сахара в моче.
4. Аспирин может усилить эффект антикоагулянтов.
5. Ибупрофен снижает действие гипотензивных средств.
6. Головокружение, головная боль, умственное расстройство и некоторые другие побочные действия часто встречаются при приеме ибупрофена.
7. Побочные действия ибупрофена усиливаются при совместном применении аспирина.
8. Признаками передозировки ибупрофена являются: летаргия, низкое кровяное давление, затрудненность дыхания.
9. Ацетаминофен не имеет побочных действий.
10. Иногда при приеме ацетаминофена наблюдаются аллергические реакции (кожная сыпь, крапивница, зуд) и сдавление в груди.
11. Людям с глаукомой, болезнью печени необходимо принимать антигистамины с осторожностью.
12. Обычным побочным действием при приеме антигистаминов является сонливость.
13. Антигистамины вызывают сухость во рту или сонливость при приеме их через 2 недели после приема антидепресантов.
14. Комбинированные препараты, в состав которых входят несколько активных веществ, без назначения врача принимать не следует.

15. Комбинированные препараты могут вызвать поражение почек, аллергические реакции, вплоть до анафилактического шока.

Exercise 5. *Read and translate the text using a dictionary.*

DRUG INTERACTIONS

Over-the-counter drugs can become more dangerous when they're taken with other medications – an all-too-common practice. According to a recent survey, one out of three people who take antihistamines for allergies take other drugs at the same time. But many common medications can make antihistamines even more sedating than they are when taken alone. The alcohol in a cough syrup such as Comtrex Liquid, Tylenol Cough with Decongestant Liquid, or Vicks Formula 44 Multi-Symptom Cough Medicine can combine with antihistamines to cause excessive drowsiness. In addition, you can get an unexpected double dose of antihistamines by taking an allergy drug along with a cold remedy such as Alka-Seltzer Plus Cold or Contac Severe Cold Formula or with a sleep aid such as Nytol or Sominex, all of which contain antihistamines.

Nonprescription drugs can also change the way other, more vital medications are supposed to work. Taking an antacid to prevent an antibiotic from upsetting your stomach may also prevent your body from absorbing the medicine, so it never reaches the infection. Conversely, taking a stool-softening laxative may ease constipation caused by the antihypertensive drug verapamil (Isoptin, Calan) – but it may also increase absorption of the drug, leading to an excessive reduction in blood pressure and, in turn, possibly to fainting.

Even ordinary foods can turn a seemingly innocuous drug into a hazardous one. For example, trying to calm your stomach by drinking large quantities of milk and taking antacids containing either calcium, magnesium, or sodium bicarbonate can eventually cause kidney failure.

People with certain chronic diseases are particularly vulnerable to the adverse effects of over-the-counter medications. But by far the most common condition that increases such vulnerability is simply old age.

Older people have more diseases and take more drugs than younger people, which may increase all drug-related risks. In addition, the body becomes less efficient at breaking down and eliminating drugs as it ages. As a result, drugs may reach higher levels in the bloodstream and remain there longer. Even at normal levels, many medications have more pronounced effects on the brain and other parts of the aging body. Unfortunately, researchers rarely test new drugs on older people, so the recommended doses are often set too high for them.

PART II. "PRESCRIPTION DRUGS"

I. *VOCABULARY LEARNING.*

Exercise 1. *Memorize the following words.*

1.	alert [ə'lɜ:t] *v*. – предупреждать об опасности;
2.	angina [æn'dʒaɪnə] *n*. – 1. ангина; 2. стенокардия, грудная жаба;
3.	chicken-pox ['tʃɪkɪn ˌpɔks] *n*. – ветряная оспа, ветрянка;
4.	clarify ['klærɪfaɪ] *v*. – вносить ясность;
5.	commonplace ['kɔmənpleɪs] *a*. – банальный, избитый;
6.	delivery [dɪ'lɪv(ə)rɪ] *n*. – роды;
7.	expiration [ˌekspɪ'reɪʃ(ə)n] (expiry) [ɪk'spaɪərɪ] date – окончание, истечение срока;
8.	guideline ['gaɪdlaɪn] *n*. – директива, руководящие указания;
9.	gum [gʌm] *n*. – десна;
10.	harm [hɑ:m] *v*. – вредить, наносить ущерб;
11.	heartburn ['hɑ:tbɜ:n] *n*. – изжога;
12.	hoarseness ['hɔ:snəs] *n*. – дисфония, охриплость голоса, хрипота;
13.	insert ['ɪnsɜ:t] *n*. – вставка, включение; package ['pækɪdʒ] ~ – листовка; вкладыш в упаковке, содержащая информацию о лекарственном средстве;
14.	lupus erythematosus ['lu:pəs ˌerɪθɪ:mə:təʊsəs] – красная волчанка;
15.	rectum (pl-ta) ['rektəm] *n*. – прямая кишка;
16.	resume [rɪ'zju:m] *v*. – возобновлять, продолжать (после перерыва);
17.	scare [skeə] *v*. – пугать; ~ away, ~ off – отпугивать; вспугивать;
18.	skew [skju:] *v*. – искажать, извращать;
19.	skip [skɪp] *v*. – пропускать;
20.	specify ['spesɪfaɪ] *v*. – 1. точно определять, устанавливать; 2. уточнять;
21.	stroke [strəuk] *n*. – внезапный приступ, припадок, удар;
22.	supplement ['sʌplɪmənt] *n*. – добавление, дополнение, приложение;
23.	swallow ['swɔləu] *v*. – глотать, проглатывать;
24.	valve [vælv] *n*. – клапан (сердца);
25.	wheezing [(h)wɪ:zɪŋ] *n*. – тяжелое дыхание, одышка;
26.	yeast [jɪ:st] *n*. – дрожжи.

Exercise 2. *Practise the pronunciation of the following words.*

Rheumatoid [ˊru:mətɔɪd], osteoarthritis [ˌɔstiəa:'θraitis], rheumatologic [ˌru:mətə'lɔdʒɪk], ischemic [ɪ'ski:mɪk], haemorrhagic [ˌhɛmərɪdʒ], chewable [ˊtʃu:əbl], suppository [sə'pɔzɪt(ə)rɪ], virus ['vaɪ(ə)rəs], tonsil ['tɒnsl], throat [θrəut], adult ['ædʌlt], polyp ['pɔlɪp], anemia [ə'ni:mɪə], hemophilia [ˌhi:mə'fɪlɪə], fetus ['fi:təs],

surgery ['sæ:dʒərɪ], dietary ['daɪət(ə)rɪ], schedule ['ʃedju:l], severe [sɪ'vɪə], hives [haɪvz], tongue [tʌŋ], tarry ['tɑ:rɪ], hallucination [hə'lu:sɪ'neɪʃn], consciousness ['kɒnʃəsnɪs], antacid [ˌænt'æsɪd], rectal ['rekt(ə)l].

II. *READING COMPREHENSION.*

Read the following information about prescription medicines and do the tasks which follow it.

PRESCRIPTION DRUGS

In the USA, the safety of drugs is a concern of the government. The Food and Drug Administration (FDA) makes sure that all drugs sold to the public are safe. Before a new drug can be sold, the FDA requires the drug maker to state the following facts:

- What the drug is
- What medical use the drug has
- Any possible side effects the drug maker knows of

The drug is then tested, sometimes for many years, before it is released for sale.

The FDA takes other steps to make sure that medicines are safe when used according to directions. One step is to allow certain *drugs to be sold only with a written order from a doctor*. These **prescription drugs** come with instructions from the doctor. The instructions are typewritten on the container. These directions tell you the following:

- How to take the medicine
- How often to take it
- How much of it to take each
- Whether the medicine needs to be taken in a special way (for example, with food or with a milk product).

A SAMPLE PRESCRIPTION LABEL

Neighborhood Pharmacy Pharmacy's name, address and phone number →	672 Miller Road Oakville, TX (214) 555-6666	
	Pharmacist: T.Newhouse	← Name of pharmacist who filled prescription
Prescription number →	Rx 7578	

	Dr.Herring	← Name of prescribing doctor
Date prescription was filled →	Date 3/27/80	
Name of patient →	Name Maria Cora	
	Refills O	← Whether refills are allowed
Directions from doctor →	One teaspoon every 6 hours as Needed for hives	
	Hydroxyzine nydrochloride syrup	← Name of medicine
	240 ml	← Amount in container

THE LIMITS OF LABELS

Labels of drugs do print certain crucial directions and precautions. Some packages also contain an insert, which may give more complete information. But neither labels nor inserts tell you everything you need to know about using these drugs, in part because the manufacturers don't want to scare people away.

The label or insert usually specifies how long you can safely use the medication – but it doesn't always. Some label or inserts say nothing about possible side effects, interactions with food or other medications, or conditions that might make using the drug risky; those that do list such risks omit a good deal of potentially significant information. For example, neither the label nor the insert for *Aleve* mentions two relatively common side effects, dizziness and gastrointestinal bleeding. And neither label nor insert warns that the drug can harm people who have liver or kidney disease, or that it can neutralize the effect of antihypertensive medications.

Here's how to get more complete information about drugs than the manufacturer provides.

ASK THE PHARMACIST

Not only neighborhood pharmacies but also mail-order ones typically provide, a toll-free hotline staffed by pharmacists who will answer customers questions.

Read the package insert or label before you leave the store – or after you receive the drug in the mail – so you can ask the pharmacist to clarify anything that you don't understand or that the packaging doesn't specify, such as the following:

What's the maximum length of time you should take the medication on your own without consulting your doctor?
Does the drug interact with any of the other medications you might be taking or with any food or beverage?
Are there any unlisted side effects you should know about?
Should you take the drug with meals or on an empty stomach?
Should you take the drug at bedtime?
Can anything help you minimize minor side effects such as an upset stomach?
How should you store the drug?
In addition to those questions, older people may want to ask the pharmacist whether the medication poses any increased risk for them.

ASK THE DOCTOR

Call your doctor before starting to take the drug if you have an unfamiliar symptom.
Keep your doctor up to date on all the over-the-counter medications you're taking, including vitamins, minerals, or other supplements. If you're experiencing symptoms, those drugs or supplements may actually be the cause of the problem; or they may interact with prescribed medications or skew the results of laboratory tests. Even better, throw all your medications in a bag and bring them with you on your next office visit, so your physician can review your entire drug regimen.

In addition to talking with a pharmacist or doctor, consult a consumer drug-information book such as The Complete Drug Reference, available in most libraries or from Consumer Reports Books.

USING MEDICINE SAFELY

Sometimes medicines are not used properly. Some people take too much of a medicine. They may take four aspirin pills instead of two, hoping to get relief twice as fast. Or a teen may use a medicine prescribed for a parent, brother, or sister.

These practices are not safe. Medicines have powerful effects on the body. When the FDA approves a drug, it says that the drug is "safe and effective when used as directed." That means that using the drug without following directions may not be safe.

Some tips for using medicines are as follows:

- Use OTC drugs as specified on the label. If you are ill and an OTC drug does not help you, you may need a stronger medicine. Call a doctor.
- Remember that prescription drugs are only meant for the person for whom they were prescribed. These drugs should not be shared.

- Destroy drugs that have passed their expiration date.
- Keep drugs safely sealed in childproof containers, and keep them out of the reach of children.
- Drugs should never be mixed with alcohol.
- Never mix medicines without your doctor's approval.

By using prescription and OTC drugs safely, you can enhance your health. If you are not sure how to use a medicine, ask the pharmacist or call your doctor.

Exercise 1. *Translate the following word combinations.*

Crucial directions and precautions, package insert, to list risks, to omit a good deal of information, a toll-free hotline, to clarify significant information, a mail-order pharmacy; to skew the results of laboratory tests, to review the entire drug regimen, to follow the directions and warnings.

Exercise 2. *Translate from Russian into English.*

Принимать лекарство как указано на этикетке; предупреждать о потенциально опасном лекарственном взаимодействии; выяснить все о побочных эффектах; неупомянутые побочные действия лекарства; расстройство желудка; головокружение; желудочное кровотечение; бесплатная «горячая линия», отвечать на вопросы покупателей; принимать препарат на голодный желудок (с едой, перед сном); обычные симптомы; хроническое расстройство.

Exercise 3. *Answer the questions.*

A. What is meant by?

1) a prescription drug;
2) product safety information;
3) the expiration date;
4) the drug regimen;
5) consumer drug information book;
6) a mail-order pharmacy.

B. What is the difference between?

1. a label and an insert; 2. the label on over-the-counter and on prescription medicines; 3. label directions and warnings; 4. drug interactions and allergic reactions; 5. a mail-order pharmacy and a neighborhood pharmacy; 6. commonplace symptoms and unfamiliar symptoms.

Exercise 4. *Complete the main guidelines for using medicines.*

1. Read the label carefully.
2. All medicine labels should list … … …
3. Prescription medicines will list … … …

4. Ask the pharmacist if you have questions about … … …
5. Follow directions and warnings … … …
6. Take the medicine for the length of time suggested by the doctor, even … …
7. Call your doctor immediately if … … …
8. Keep medicines … … …
9. Store medicines … … …
10. Do not take anyone else's medicine, … … …
11. Destroy medicines if … … … and if they have changed in … … …
12. Do not use alcohol or … … …

Exercise 5. *Make up the list of questions to be asked:*
1. the pharmacist in buying medicines;
2. the doctor before starting to take an OTC or prescription drug.

Read the information about aspirin and answer the italisized questions in short.

ASPIRIN

Why is this medication prescribed?
Prescription aspirin is used to relieve the symptoms of rheumatoid arthritis (arthritis caused by swelling of the lining of the joints), osteoarthritis (arthritis caused by breakdown of the lining of the joints), systemic lupus erythematosus (condition in which the immune system attacks the joints and organs and causes pain and swelling) and certain other rheumatologic conditions in which the immune system attacks parts of the body. *Nonprescription aspirin* is used to reduce fever and to relieve mild to moderate pain from headaches, menstrual periods, arthritis, colds, toothaches, and muscle aches. Nonprescription aspirin is also used to prevent heart attacks in people who have had a heart attack in the past or who have angina (chest pain that occurs when the heart does not get enough oxygen). Nonprescription aspirin is also used to reduce the risk of death in people who are experiencing or who have recently experienced a heart attack. Nonprescription aspirin is also used to prevent ischemic strokes (strokes that occur when a blood clot blocks the flow of blood to the brain) or mini-strokes (strokes that occur when the flow of blood to the brain is blocked for a short time) in people who have had this type of stroke or mini-stroke in the past. Aspirin will not prevent hemorrhagic strokes (strokes caused by bleeding in the brain). Aspirin is in a group of medications called salicylates. It works by stopping the production of certain natural substances that cause fever, pain, swelling, and blood clots. Aspirin is also available in combination with other medications such as antacids, pain relievers, and cough and cold medications. This monograph only includes information about the use of aspirin alone.

How should this medicine be used?

Prescription aspirin comes as an extended-release tablet (tablet that releases medication slowly over a period of time). Nonprescription aspirin comes as a regular tablet, an enteric-coated, delayed-release tablet (tablet that first begins to release medication some time after it is taken), a chewable tablet, and a gum to take by mouth and a suppository to use rectally. Prescription aspirin is usually taken two or more times a day. Nonprescription aspirin is usually taken once a day to lower the risk of a heart attack or stroke. Nonprescription aspirin is usually taken every 4-6 hours as needed to treat fever or pain. Take aspirin exactly as directed. Do not take more or less of it or take it more often than directed by the package label or prescribed by your doctor.

Swallow the extended-release tablets whole with a full glass of water. Do not break, crust, or chew them. Swallow the tablets with a full glass of water. Chewable aspirin tablets may be chewed, crushed, or swallowed whole. Drink a full glass of water, immediately after taking these tablets.

Ask a doctor if you give aspirin to your child or teenager. Aspirin may cause Reye's syndrome (a serious condition in which fat builds up on brain, liver, and other body organs) in children and teenagers, especially if they have a virus such as chickenpox or the flu. If you have had oral surgery or surgery to remove your tonsils in the last 7 days, talk to your doctor about which types of aspirin are safe for you. Delayed-release tablets begin to work some time after they are taken. Do not take delayed-release tablets for fever or pain that must be relieved quickly. Stop taking aspirin and call your doctor if your fever lasts longer than 3 days, if your pain lasts longer than 10 days, or if the part of your body that was painful becomes red or swollen. You may have a condition that must be treated by a doctor.

To insert an aspirin suppository into rectum, follow these steps: remove the wrapper; dip the tip of the suppository in water; lie down on your left side and raise your right knee to your chest. (If you are left-handed, lie on your right side and raise your left knee.); using your finger, insert the suppository into the rectum, about ½ to 1 inch in infants and children and 1 inch in adults. Hold it in place for a few moments; do not stand up for at least 15 minutes. Then wash your hands thoroughly and resume your normal activities.

Other uses for this medicine.

Aspirin is also sometimes used to treat rheumatic fever (a serious condition that may develop after a strep throat infection and may cause swelling of the heart valves) and Kawasaki disease (an illness that may cause heart problems in children). Aspirin is also sometimes used to lower the risk of blood clots in patients who have artificial heart valves or certain other heart conditions and to prevent certain complications of pregnancy.

What special precautions should I follow?
Before taking aspirin,
- tell your doctor and pharmacist if you are allergic to aspirin, other medications for pain or fever, tartrazine dye, or any other medications.
- if you are taking aspirin on a regular basis to prevent heart attack or stroke, do not take ibuprofen (Advil, Motrin) to treat pain or fever without talking to your doctor. Your doctor will probably tell you to allow some time to pass between taking your daily dose of aspirin and taking a dose of ibuprofen.
- tell your doctor if you have or have ever had asthma, frequent stuffed or runny nose, or nasal polyps (growths on the linings of the nose). If you have these conditions, there is a risk that you will have an allergic reaction to aspirin. Your doctor may tell you that you should not take aspirin.
- tell your doctor if you often have heartburn, upset stomach, or stomach pain and if you have or have ever had ulcers, anemia, bleeding problems such as hemophilia, or kidney or liver disease.
- tell your doctor if you are pregnant, especially if you are in the last few months of your pregnancy, you plan to become pregnant, or you are breast-feeding. If you become pregnant while taking aspirin, call your doctor. Aspirin may harm the fetus and cause problems with delivery if it is taken during the last few months of pregnancy.
- if you are having surgery, including dental surgery, tell the doctor or dentist that you are taking aspirin.
- if you drink three or more alcoholic drinks every day, ask your doctor if you should take aspirin or other medications for pain and fever.

What special dietary instructions should I follow?
Unless your doctor tells you otherwise, continue your normal diet.

What should I do if I forget a dose?
If your doctor has told you to take aspirin on a regular basis and you miss a dose, take the missed dose as soon as you remember it. However, if it is almost time for the next dose, skip the missed dose and continue your regular dosing schedule. Do not take a double dose to make up for a missed one.

What side effects can this medication cause?
Aspirin may cause side effects. Tell your doctor if any these symptoms are severe or do not go away: nausea; vomiting; stomach pain; heartburn.
Some side effects can be serious. If you experience any of the symptoms, call your doctor immediately: hives; rash; swelling of the eyes, face, lips, tongue, or throat; wheezing or difficulty breathing; hoarseness; fast heartbeat; fast breathing; cold, clammy skin; ringing in the ears; loss of hearing; bloody vomit; vomiting material that looks like coffee grounds; bright red blood in stools; black or tarry stools.

Aspirin may cause other side effects. Call your doctor if you experience any unusual problems while you are taking this medication.

What storage conditions are needed for this medicine?
Keep this medication in the container it came in, tightly closed, and out of reach of children. Store it at room temperature and away from excess heat and moisture (not in the bathroom). Store aspirin suppositories in a cool place or in a refrigerator. Throw away any medication that is outdated or no longer needed and any tablets that have a strong vinegar smell. Talk to your pharmacist about the proper disposal of your medication.

In case of emergency/overdose
Symptoms of overdose may include: burning pain in the throat or stomach; vomiting; decreased urination; fever; restlessness; irritability; talking a lot and saying things that do not make sense; fear or nervousness; dizziness; double vision; uncontrollable shaking of a part of the body; confusion; abnormally excited mood; hallucination (seeing thing or hearing voices that are there); seizures; drowsiness; loss of consciousness for a period of time.

III. *RENDERING.*

Read and render the following information into English.

СКОЛЬКО «ЖИВУТ» ЛЕКАРСТВА

Обычно срок хранения лекарств в таблетках колеблется от 3 до 5 лет, то есть изготовитель гарантирует, что в течение этого времени формула вещества в препарате останется стабильной, а значит, лечебный эффект можно прогнозировать. После долгого хранения таблетки могут изменять цвет (с белого на желтоватый), становиться рыхлыми, с них может осыпаться оболочка драже. Последнее чаще всего происходит со старым аллохолом и витаминами. Настои и микстуры могут изменять цвет, появляется осадок, так как в них заводятся грибки. Если настой спиртовой, то со временем спирт улетучивается и препарат становится непригодным к потреблению, поскольку именно спирт является проводником действующего начала лекарства и консервантом.

Антибиотики после истечения срока годности изменяют свою химическую формулу и при приеме внутрь могут образовывать совершенно непредсказуемые соединения в организме человека, что чревато сильнейшими побочными эффектами, вплоть до отравления.

Кроме того, нужно соблюдать правила хранения лекарственных препаратов, которые обычно указаны на упаковке. В разорванных

упаковках лекарства хранятся меньше: например, из валидола испаряется действующее мятное начало и остается только сахар, который, естественно, лечебного эффекта уже не имеет. Другими словами, все лекарства с истекшим сроком годности, как правило, становятся в лучшем случае бесполезными, а в худшем – опасными.

Чем запить лекарство?

Недавно я болела гриппом, и мне пришлось принимать много лекарств: и таблетки от температуры, и витамины, и даже антибиотики. После лечения гриппа у меня заболел желудок. Чтобы такого больше не случилось, подскажите, чем лучше запивать лекарства?

Кристина

Аспирин и прочие препараты, содержащие ацетилсалициловую кислоту, следует принимать после еды или же до еды, но запивать при этом чем-нибудь обволакивающим (например, рисовым отваром или киселем). Таким образом, кислота не нанесет удар по слизистой желудка, а также быстрее и лучше подействует.

- **Лекарства на основе парацетамола** нужно принимать после еды и запивать простой водой. Не сочетать с кислыми (особенно уксусом) и копчеными продуктами.
- **Аскорбиновая кислота** плохо сочетается с мясными, растительными и молочными белками. Так что лучше всего пить аскорбинку до еды.
- Если вы принимаете **тетрациклин или другие содержащие его антибиотики**, воздержитесь от молочных продуктов. Йогурт, кефир или сметана снижают действие этих лекарств на 80 %! Также не стоит запивать молоком препараты, содержащие пенициллин.
- **Сульфаниламидные препараты** следует запивать минеральной водой. В кислой и нейтральной среде продукты распада, к примеру, сульфадимезина образовывают камни, а щелочная минеральная вода их растворяет и выводит из организма.

Поэтому чтобы не ошибиться, запивайте лекарство теплой водой (не менее ½ стакана на препарат), она подойдет всегда.

Еще лучше конечно, обходиться без всяких лекарств и, если здоровье позволяет, предпочесть им «натуральную аптеку» - фрукты, овощи, травы.

Когда нужен рецепт?

Как узнать, нужен ли рецепт на лекарственный препарат? Есть ведь, наверное, какие-то справочники, из которых фармацевт узнает, что нужен рецепт?

Л.С. Борисова

Препараты, отпускаемые без рецепта, определены приказом Минздравсоцразвития РФ № 578 «Об утверждении лекарственных средств, отпускаемых без рецепта врача». Этот приказ постоянно изменяется и дополняется, так как рынок лекарственных средств расширяется очень быстро. А остальные лекарства (например, антибиотики, гормональные средства) отпускаются строго по рецепту и назначению врача. Как же узнать, нужен ли рецепт?

- **Позвонить или прийти в аптеку.** Специалисты вам подскажут необходимую информацию, или вы сами сможете ознакомиться со списком безрецептурных препаратов.
- **Связаться с лечащим врачом.** В поликлинике также имеется распечатка этого приказа.
- **Внимательно прочитать инструкцию по применению препарата, осмотреть упаковку.** Там всегда пишется, как отпускается препарат – по рецепту или без него.

IV. *FOLLOW-UP ACTIVITY.*

I. *Whenever a drug is prescribed, to you, take time to ask your doctor the questions:*

- Does the drug cause side-effects?
- Is there any food, such as milk products, that I should avoid eating while taking this drug?
- …… *Go on enumerating the questions.*

II. *Answer the questions with more than one sentence.*

1. Read the label of any drug you might be taking at the moment. Are you following all directions exactly?
2. Drugs affect each person in a different way, depending upon certain chemicals the body contains. Some body reactions to drugs are unhealthy. What unhealthy reactions must a pharmacist (doctor) be concerned about?
3. People with allergies in the USA should have a Medi-Alert bracelet or necklace. Such bracelets and necklaces have saved the lives of people with allergies who had an accident that left them unconscious. Are there any such devices in our country? Do you, or does someone in your family have a serious allergy to some drugs?
4. If you buy your prescription and over-the-counter medicines, ask the pharmacist to clarify anything you don’t understand or that the label doesn’t specify. What points should be clarified?

III. *Study the example of information leaflet and comment on its content.*

SOME MEDICINES WRONGLY USED CAN MAKE YOU REALLY SICK.

D O	**D O N ' T**
Prevent surprises by familiarizing yourself with the exact effects of your medication. Before you take it, always talk over potential effects and side effects with your doctor. **Carefully follow the instructions on your medication.** Remember, take too little and it may not work. Take too much and it may cause real harm. **Talk to your doctor about alternatives to medication.** Every medication affects the body. Ask your doctor about the benefits of a healthier lifestyle. **Talk over your prescriptions if you see more than one doctor.** Make sure each one knows what the other has prescribed. This you can ensure you won't encounter the problems of medications interacting badly. And you'll avoid the possibility of one medication cancelling out the positive effects of another. **Ask your doctor or pharmacist how to take your medication and what precautions to observe.** Your doctor or pharmacist can advise you of exactly how to take your medicine and of any precautions you should take, like not mixing it with alcohol. **Check with your pharmacist about over-the-counter medication.** Make sure that it's safe to use in conjunction with any other prescription or non-prescription medication you are taking.	**Don't take prescription medication not prescribed for you or share your medication with somebody else.** Remember, similar symptoms may not have the same cause. Remember, also, that different medications may affect different people in different ways. **Don't hoard** (запасать) **your medicines or use them after their expiry date.** Hoarded medicines are dangerous. Once they have passed their expiry date they may have no effect at all, or worse, an entirely unexpected effect. Don't let the dangers of hoarded medicine occur in your household. **Don't keep medicines where children can reach them.** Children can often mistake medication, particularly pills and capsules, for lollies. The results can be lethal. So don't put your children at risk. Make sure all medication is kept well out of their reach at all times. **Don't assume you're safe to drive.** Research, both here and overseas, has found medication in the blood of one in 10 people who die on the road. If you are taking a medication and feel drowsy, dizzy, shaky, aggressive, nauseous, or if you have blurred or double vision, pull over and stop the car. You may be driving under the influence of medication.

Your Pharmaceutical Benefits Scheme.
A Commonwealth Government Health Care Program.

IV. *Prove that:*
1. Medicines are safe when used according to instructions.
2. Every OTC drug has a label that carries very important information for its user.
3. While using medicines everybody must know certain rules.
4. Sometimes medicines are not used properly.

PART III. "MEDICINE CHEST KNOW-HOW"

Exercise 1. *Read and memorize the words:*

1.	medicine chest ['medɪsɪn tʃest] – домашняя аптечка;
2.	accessible to smb. – доступный, общедоступный;
3.	to deteriorate [dɪ'tɪərɪəreɪt] *v*. – портиться, разрушаться;
4.	clutter ['klʌtə] *n*. – беспорядок;
5.	emergency [ɪ'mɜ:dʒ(ə)n(t)sɪ] *n*. – непредвиденный случай, крайняя необходимость; крайность;
6.	household ['haushəuld] *n*. – домашнее хозяйство;
7.	makeup of the family – состав семьи;
8.	to swallow ['swɔləu] *v*. – глотать, проглатывать;
9.	overstocking drugs – избыток лекарственных средств;
10.	to avoid [ə'vɔɪd] *v*. – избегать;
11.	to seem like a bargain – казаться выгодной покупкой;
12.	health care items – предметы ухода за больными;
13.	to keep medicines out of the reach of children – хранить лекарства в недоступном для детей месте;
14.	child-resistant caps – трудно открываемые колпачки;
15.	druggist ['drʌgɪst] *n*. – аптекарь (*амер.*);
16.	to get to smth. – добраться до чего-либо;
17.	locking box – запирающийся шкафчик;
18.	to avoid confusion – избегать путаницы;
19.	to ran low – истощаться, иссякать;
20.	to get rid of – избавиться;
21.	to become outdated – становиться устаревшим;
22.	date of purchase – дата покупки;
23.	to become crumbly – крошиться, рассыпаться;
24.	rescue squad – спасательная бригада;
25.	emergency phone list – список телефонов экстренной помощи.

Exercise 2. *Read the text, translate the sentences with italicized words and do the tasks which follow the text.*

MEDICINE CHEST

A bleary-eyed man rummages through the bathroom cabinet, tossing various bottles and boxes aside until, with a sigh of relief, he finds the remedy for his indisposition.

This scene, enacted frequently in television commercials, may help sell the sponsor's product, but is not one to be recommended for the viewer's home. What's wrong with the picture is that the bathroom is not the proper place to store medicines. Bathroom cabinets are usually right over the sink and too **accessible** to young children. What's more, the warm moist air of the bathroom can cause drugs to **deteriorate**. Not only that, but **the clutter** found in the man's cabinet, which obviously made it difficult for him to find what he wanted**, s**uggests that he probably had more drug products than he really needed.

Of course, it's a good idea to have useful medical supplies on hand for **emergencies** and to treat minor ills, but the family medicine chest does not have to be a mini drug store. What should be kept in the average **household** will depend on **the makeup of the family –** for instance, when there are young children the medicine chest might include baby aspirin, antibacterial topical ointments, and medicine to treat symptoms of diarrhea. For that family, syrup of ipecac to induce vomiting and activated charcoal are important for emergency treatment for some accidental poisonings. Persons who are likely to use or administer them, however, should understand the types of poisoning for which they should not be used, as when a caustic agent has been **swallow**ed, for instance.

Generally, medicine chests should include only those health care products likely to be used on a regular basis. **Overstocking** drugs in the household should be **avoid**ed. Some drug products lose their potency on the shelf in time, especially if they are opened. Milk of magnesia, for instance, dries out if it remains on the shelf for a while after opening.

Buying the large "family size" of a product not used frequently may **seem like a bargain**, but it's a poor economy if it has to be thrown out before the contents are used up. Ideally, supplies in the medicine chest should be bought to last over a period of no more than 6 to 12 months.

When it comes to storing these **health care items**, the cardinal rule is to **keep all medicines out of the reach of children**. In addition, be sure all medications have **child-resistant** caps. Elderly people who have difficulty opening, such caps can ask the **druggist** for regular caps. However, there should be extra careful to see that young visitors can't **get to** these drugs.

Both prescription and non-prescription drugs should be kept in a cool, dry place away from foods and other household products. Some drugs may need to be kept in the refrigerator.

This should be indicated on the label. If in doubt, ask the pharmacist.

Many people keep medicines on a high shelf in a bedroom closet. Some experts suggest using a **locking box**. A word of warning: Be sure all responsible adults in the family know where the key is kept.

To avoid confusion, keep prescription and non-prescription drugs in separate boxes clearly labeled to distinguish one type of drug from the other. A list of what's in each box, attached to the outside if possible, will make it easier to find specific items, particularly in an emergency.

The medicine chest should be checked periodically to be sure supplies haven't **run low** and to **get rid of** drugs that may have gone bad or **become outdated**. Many drug labels have an expiration date beyond which the product should not be used. If there isn't a date, put a label on the container with the date of **purchase** and the date it was first opened**.** Then, if there are any questions in the future, a pharmacist can tell whether the product is safe to use.

Tablets that have **become crumbly,** medicines that have changed color, odor, or consistency, or are outdated should be destroyed. Empty the bottle of medicine into the toilet, flush it down, and rinse out the bottle. Don't leave leftover drugs in the trash basket where they can be dug out by inquisitive youngsters. Newly purchased drug products that don't look right should be returned to the pharmacy. Drug products that have lost their labels also should be destroyed.

Keep the telephone numbers of the local poison control center, physician, **rescue squad,** fire and police departments near every phone in the house. Tape the **emergency phone list** inside the medicine cabinet door and also keep it with the emergency supplies.

Each family's medicine chest is bound to contain some different items. For help in selecting appropriate health care supplies, check with a physician and a pharmacist.

Exercise 3. *Find the answers to the questions in the text.*

1. Why isn't it recommended to keep medicine chest in a bath room?
2. What is the proper place for medicine chest?
3. What health care products should medicine chest include?
4. Over what period should supplies be bought to last?
5. What is the cardinal rule in keeping all drugs?
6. What are the main rules for keeping health care products?
7. Why is it recommended to keep prescription and non-prescription drugs in separate boxes?
8. Why is it necessary to check medicine-chest periodically?

9. When and what products should be destroyed and in what way?
10. What lists should be kept with the emergency supplies?
11. What professionals can help in selecting appropriate health care supplies?

Exercise 4. *Give your recommendations to anyone who needs them in selecting medicines and health care products for medicine chest and keeping them properly. These are the main points for you to remember. Continue the sentences …*

1. Medicine chest should have some different items:

a) … b) … c) …

2. Overstocking drugs in household should be avoided because …
3. Medicine chest should be checked periodically to …
4. Medicine chest should be kept in proper place …
5. It's preferable to have a list of … and a list of … attached outside the box.

You may add some other points.

Exercise 5. *Read the article from the magazine "Lechebnye vesty" and render it into English.*

АПТЕЧКА В ВАШЕМ ДОМЕ

Несомненно, в каждом доме есть ящик (пакет, шкафчик или полочка) с медикаментами. Мы называем это домашней аптечкой. В некоторых ситуациях домашняя аптечка может даже спасти жизнь вам и вашим близким.

СОСТАВЬТЕ СПИСОК

Существует много различных списков для домашней аптечки. Сразу отбросьте списки советских времен – они устарели (be outdated). Сейчас на фармацевтическом рынке многих лекарств тех времен нет. Ежегодно появляются новые лекарства – часто более эффективные и менее вредные, чем в старые времена (это особенно важно, когда речь идет о детских лекарственных формах). Так что в первую очередь срочно избавьтесь от (get rid of) всего лишнего, если вы этого еще не сделали.

КАК ХРАНИТЬ ЛЕКАРСТВА

Прежде чем покупать медикаменты, сначала давайте вспомним, какие проблемы со здоровьем чаще всего у нас случаются:

- сердечные приступы (attacks), стрессы, бессонница, повышенная раздражительность (irritability) и утомляемость (fatigability);
- порезы и ушибы (injury), ожоги, потертости от неудобной обуви;
- диарея, изжога (heartburn), тяжесть (distress) в желудке;

- боли (менструальная, зубная), желудочные, кишечные и почечные колики;
- аллергия (бывает с сыпью, раздражением (irritation) – например, от косметики, средств после бритья);
- насморк, простуда, грипп, острые воспаления (inflammation) дыхательных путей.

Во многих случаях, конечно, требуется вмешательство врача, но для облегчения состояния необходимо иметь кое-что под рукой (at hand). А с некоторыми проблемами надо уметь справляться (cope with) и самостоятельно.

Итак, в соответствии с этим списком мы и будем формировать аптечку.

ПРОВЕРЬТЕ СРОКИ ГОДНОСТИ (EXPIRY DATE**)**

Остается только раз в 1-2 месяца следить за сроками годности и пополнять (supplement) заканчивающиеся лекарства или изделия медицинского назначения.

Напишите на листке все, что есть в вашей аптечке (с указанием сроков годности, если они ограничены (have limits), и положите этот список туда, где хранятся ваши медикаменты.

ЧТО ДОЛЖНО БЫТЬ В АПТЕЧКЕ

1. Седативные и сердечные лекарства. Чтобы снять боль в сердце (relieve pain), успокоиться (sedate), обязательны средства на основе растительных компонентов, такие как настойка пустырника (Leonorus cardiaca L), валерианы, или, например, корвалол. На случай обморока (fainting) или потери сознания – раствор аммиака (нашатырный спирт) (ammonium chloride), конечно же, сердечные лекарства, хотя бы валидол.

2. Средства для обработки ран (wounds) **и ожогов** (burns)**, остановки кровотечения** (bleeding)**.** Это перекись водорода (hydrogen peroxide) (она останавливает кровь и дезинфицирует рану), а также жгут (tourniquet). Кроме того, нужны зеленка (brilliant green) и йод, который надо хранить отдельно от других лекарств, лучше всего в стеклянной банке с герметично закрывающейся крышкой. Для перевязки нужны бинты (bandages) разной ширины, стерильные салфетки (napkins), вата (cotton wool), ватные палочки (удобны для обработки ран). Запаситесь и лейкопластырем (adhesive plaster), лучше бактерицидным.

3. Обезболивающие препараты. При головной, зубной, суставной (joint) боли подходят анальгетики, а при менструальной, желудочной, почечной и печеночной коликах – спазмолитики. Посоветуйтесь с врачом или провизором (фармацевтом).

4. Средства, снимающие интоксикацию, и адсорбенты (absorbents**).** Кроме лекарств от расстройства (upset) желудка при пищевых отравлениях (poisoning), адсорбентов, имейте в своей аптечке и ферментные препараты, которые помогают желудку переваривать (digest) пищу.

5. Средства от аллергии. Такие лекарства нужны и от укусов (bites) насекомых.
6. Комбинированные препараты от простуды. Они должны снимать высокую температуру и первые симптомы заболевания: озноб (fever), насморк (running nose), слезоточивость (lacrimation), поднимать общий тонус (tonicity) организма. Такие препараты могут быть в таблетках или растворимых пакетах (для взрослых).
7. Изделия медицинского назначения. Это пипетки, несколько разных одноразовых шприцов (disposable syringes), термометр, спринцовка (syringe), медицинские перчатки, грелка.

Exercise 6. *Work in pairs asking each other questions. Report about the information received.*

1. Do you have medicine chest at home?
2. Who in your family is responsible for buying supplies for the medicine chest?
3. What medicines does your medicine chest include? Does its content depend upon the makeup of the family?
4. Do you check the expiry date of medicines? If yes, how often?
5. Where is your medicine chest kept?
6. Do you use a locking box for keeping health care products?
7. Is there a list of medicines in the box?
8. Do all medicines in your medicine-chest have labels?
9. What do you usually do with the drug products which have lost their labels?
10. In what way do you get rid of outdated medicines?

REFERENCES

1. Английский язык. «Reader»: учеб. пособие/ Р.В. Кадушко, [и др.]; под общ. ред. Р.В. Кадушко. – Витебск: ВГМУ, 2016. – 231 с.

2. Chabner, D.E. The language of medicine/ D.E. Chabner. – 11th edition. – Saunders, 2017. – 430 p.

3. Орлова, Е.С. Английская грамматика по-новому. University Univelsal: Курс английского языка для университетов/ Е.С. Орлова. – М.: ЗАО Центрполиграф, 2003. – 479 с.

4. Англо-русский словарь синонимов. Тезаурус. – М.: Ин.язык, 2001. – 412 с.

5. Petrov, V.I. Russian-English Medical Dictionary Phrase book/ V.I. Petrov. – Медиа, 2000. – 595 p.

6. Health 96/97 / Rchard Yarian [at el]. – Dushkin Publishing Group/ Brown & Benchmark Publishers, Guilford, 1996. – 246 p.

7. Karen J. Carlson, M.D. Harvard Guide to Women's Health/ Karen J. Carlson, M.D., Stephanie A. Eisenstat, M.D., Terra Ziporyn, Ph.D. – Harvard University Press, Cambridge, Massachusetts, and London, England, 1996. – 718 p.

8. The World Book/ Rush-Presbyterian-St. Luke's Medical Center Medical Encyclopedia/ Rush Medical College, Rush-Presbyterian-St. Luke's Medical Center. – Chicago: World Book, Inc., 1995. – 1072 p.

9. George A. Wistreich. Medical Terminology in Action/ George A. Wistreich. – Wm. C. Brown Publishers, 1994. – 605 p.

CONTENTS

Учебное издание

Андреева Ирина Сергеевна.

АНГЛИЙСКИЙ ЯЗЫК

PROFESSIONAL ENGLISH

Методические рекомендации для студентов фармацевтического факультета и магистрантов

(часть II)

Методические рекомендации

Редактор Р.В. Кадушко
Технический редактор И.А. Борисов
Компьютерная верстка и дизайн М.М. Мироевская
Корректор И.С. Андреева

Подписано в печать _____. Формат бумаги 64х84 $^{1}/_{16}$.
Бумага типографская №2. Гарнитура Таймс. Усл.печ.листов _____.
Уч. -изд. л. _____. Тираж _____ экз. Заказ № _____.

Издатель и полиграфическое исполнение УО «Витебский государственный медицинский университет»
ЛП №02330/453 от 30.12.2013.
Пр-т Фрунзе, 27, 210023, Витебск