МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ МУРМАНСКОЙ ОБЛАСТИ

**Государственное автономное профессиональное образовательное**

**учреждение Мурманской области**

**«Мурманский медицинский колледж»**

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**УЧЕБНО-МЕТОДИЧЕСКАЯ РАЗРАБОТКА**

**ПРАКТИЧЕСКОГО ЗАНЯТИЯ**

**ПО ТЕМЕ: «DIABETES»**

|  |  |
| --- | --- |
| **По специальности:** | 34.02.01 Сестринское дело,  31.02.01 Лечебное дело |
| **Курс:** | 3 курс (на базе СОО),  4 курс (на базе ООО). |
| **УД:** | ОГСЭ.03. Иностранный язык (Английский)  Раздел. Болезни. |
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| **Разработчик (составитель) разработки:** | Рачок Антонина Анатольевна |

Мурманск, 2022

Учебно-методическая разработка практического занятия «**Diabetes»** разработана с целью учебно-дидактического сопровождения занятия по теме «**Diabetes**» в качестве раздаточного материала для работы студентов.

Содержание учебно-методической разработки соответствует требованиями рабочей программы по учебной дисциплине ОГСЭ.03. Иностранный язык (Английский) по специальностям СПО 34.02.01 Сестринское дело, 31.02.01 Лечебное дело.

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# ПОЯСНИТЕЛЬНАЯ ЗАПИСКА

Учебно-методическая разработка практического занятия по теме «Diabetes» составлена в соответствии с требованиями Федерального государственного образовательного стандарта среднего профессионального образования и рабочей программы по учебной дисциплине ОГСЭ.03. Иностранный язык (Английский) и предназначена для студентов медицинских колледжей, реализующих программу подготовки специалистов среднего звена по специальностям 34.02.01 Сестринское дело и 31.02.01 Лечебное дело.

Учебно-методическая разработка практического занятия по теме «Diabetes» может быть интересна для преподавателей английского языка.

Тема «Diabetes» является интегративной частью тематического раздела «Diseases».

Данная разработка составлена с учетом современных тенденций в методике преподавания английского языка и демонстрирует реализацию компетентностного подхода в преподавании иностранных языков в профессиональной образовательной организации.

**Цель:** развивать и совершенствовать навыки устной речи по теме: «DIABETES» в соответствии лексико-грамматическим требованиям английского языка.

**Задачи:**

* **образовательные:** учить студентов рассказывать о типах сахарного диабета, его причинах и рекомендациях по лечению в соответствии с лексико-грамматическими требованиями английского языка;
* **развивающие:** развивать умение анализа предъявляемой информации и на его базе делать необходимые выводы; способствовать формированию логического мышления и развитию памяти; формировать универсальные учебные навыки и продуктивные формы самостоятельной работы; развивать коммуникативные навыки;
* **воспитательные:** воспитать ответственное отношение к выполняемой работе; интерес к предмету; содействовать формированию когнитивных способностей, рефлексии.

Методическая разработка содержит упражнения:

* на изучение новых лексических единиц;
* предтекстовые (mind map);
* послетекстовые (ответы на вопросы, поиск лексических единиц; подстановочные, упражнения на содержательный и смысловой выбор ответов и суждений, который осуществляется путем соотнесения предлагаемых высказываний с содержанием прочитанного текста; упражнения на сопоставление, порядок слов в предложении и тренировку построения различных типов вопросов.

Упражнения направлены на формирование навыков устной речи по данной теме.

Данная разработка может быть использована при реализации самостоятельной работы студентов.

Используя данную тематическую разработку, студенты имеют возможность самостоятельно:

* осуществлять самоконтроль, используя прилагаемые ключи;
* совершенствовать навыки употребления лексико-грамматических структур в устной речи;
* совершенствовать монологическую речь.

# SECTION 1. DIABETES

**Relevance** of the chosen topic is due to the fact that diabetes mellitus is one of the most common diseases of the endocrine system of the human body. The steady growth of morbidity rates in age groups. The occurrence of complications of diabetes, leading to early disability of patients.

The prevalence of diabetes mellitus in Western countries is 2 - 5% of the population, and in developing countries it reaches 10 - 15%. Every 15 years, the number of patients doubles. In Russia, about 8 million people suffer from diabetes mellitus. Diabetes mellitus is an urgent medical and social problem of our time, which, in terms of prevalence and morbidity, has all the features of an epidemic covering most economically developed countries of the world. According to WHO, there are currently more than 180 million patients worldwide and their number is increasing every year. According to scientists, by 2025 their number will reach 350 million.

In many countries of the world, including Russia, appropriate programs have been developed that provide for the detection of diabetes mellitus at the early stages of its treatment, prevention of vascular complications, which are the cause of early disability and high mortality observed with this disease. The fight against diabetes mellitus and its consequences depends not only on the coordinated work of all units of the specialized medical service, but also on the 4 patients themselves, without whose participation the targets for compensation of carbohydrate metabolism in diabetes mellitus cannot be achieved.

The relevance of the chosen topic is due to the high severity of the disease, the acute issue of competent selection of adequate treatment that can reduce blood glucose levels and prevent complications.



**Task 1. Study the words.**

1. diabetes [daɪəˈbiːtiːz] - диабет
2. glucose [ˈgluːkəʊs] - глюкоза
3. insulin [ˈɪnsjʊlɪn] - инсулин
4. gestational [ʤeˈsteɪʃnəl] - гестационный
5. stroke [strəʊk] - удар; инсульт
6. to delay [dɪˈleɪ] - отложить, отсрочить
7. CDC (Centers for Disease Control and Prevention) - центр по контролю и профилактике заболеваний

**Task 2. Fill in the mind map with the symptoms of diabetes.**

**Task 3. Read and translate the text.**

**WHAT IS DIABETES?**

Diabetes is a chronic (long-lasting) health condition that affects how your body turns food into energy.

Most of the food you eat is broken down into sugar (also called glucose) and released into your bloodstream. When your blood sugar goes up, it signals your pancreas to release insulin. Insulin acts like a key to let the blood sugar into your body’s cells for use as energy.

If you have diabetes, your body either doesn’t make enough insulin or can’t use the insulin it makes as well as it should. When there isn’t enough insulin or cells [stop responding to insulin](https://www.cdc.gov/diabetes/basics/insulin-resistance.html), too much blood sugar stays in your bloodstream. Over time, that can cause serious health problems, such as [heart disease](https://www.cdc.gov/diabetes/library/features/diabetes-and-heart.html), [vision loss](https://www.cdc.gov/diabetes/managing/diabetes-vision-loss.html), and [kidney disease](https://www.cdc.gov/diabetes/managing/diabetes-kidney-disease.html).

There isn’t a cure yet for diabetes, but losing weight, eating healthy food, and being active can really help. Taking medicine as needed, getting [diabetes self-management education and support](https://www.cdc.gov/diabetes/managing/education.html), and keeping health care appointments can also reduce the impact of diabetes on your life.

Types of Diabetes

There are three main types of diabetes: [type 1](https://www.cdc.gov/diabetes/basics/type1.html), [type 2](https://www.cdc.gov/diabetes/basics/type2.html), and [gestational diabetes](https://www.cdc.gov/diabetes/basics/gestational.html) (diabetes while pregnant).

Type 1 Diabetes

Type 1 diabetes is thought to be caused by an autoimmune reaction (the body attacks itself by mistake) that stops your body from making insulin. Approximately 5-10% of the people who have diabetes have type 1. Symptoms of type 1 diabetes often develop quickly. It’s usually diagnosed in children, teens, and young adults. If you have type 1 diabetes, you’ll need to take insulin every day to survive. Currently, no one knows how to prevent type 1 diabetes.

Type 2 Diabetes

With type 2 diabetes, your body doesn’t use insulin well and can’t keep blood sugar at normal levels. About 90-95% of people with diabetes have type 2. It develops over many years and is usually diagnosed in adults (but more and more in children, teens, and young adults). You may not notice any symptoms, so it’s important to get your blood sugar tested if you’re at [risk](https://www.cdc.gov/diabetes/basics/risk-factors.html). Type 2 diabetes can be prevented or delayed with healthy lifestyle changes, such as losing weight, eating healthy food, and being active.

Gestational Diabetes

Gestational diabetes develops in pregnant women who have never had diabetes. If you have gestational diabetes, your baby could be at higher risk for health problems. Gestational diabetes usually goes away after your baby is born but increases your risk for type 2 diabetes later in life. Your baby is more likely to have obesity as a child or teen, and more likely to develop type 2 diabetes later in life too.

Prediabetes

In the United States, 96 million adults—more than 1 in 3—have [prediabetes](https://www.cdc.gov/diabetes/basics/prediabetes.html). What’s more, more than 8 in 10 of them don’t know they have it. With prediabetes, blood sugar levels are higher than normal, but not high enough yet to be diagnosed as type 2 diabetes. Prediabetes raises your [risk](https://www.cdc.gov/diabetes/basics/risk-factors.html) for type 2 diabetes, heart disease, and stroke. The good news is if you have prediabetes, a CDC-recognized [lifestyle change program](https://www.cdc.gov/diabetes/prevention/lcp-details.html) can help you to take healthy steps to reverse it.

**Task 4. Answer the questions.**

1. What is diabetes?
2. How many types of diabetes are there?
3. Diabetes cannot cause serious health problems, such as heart disease, vision loss, and kidney disease, can it?
4. What causes type 1 diabetes?
5. How to prevent or delay type 2 diabetes?
6. Does gestational diabetes develop in pregnant women who have never had diabetes?
7. Which program can help you to take healthy steps to reserve diabetes?

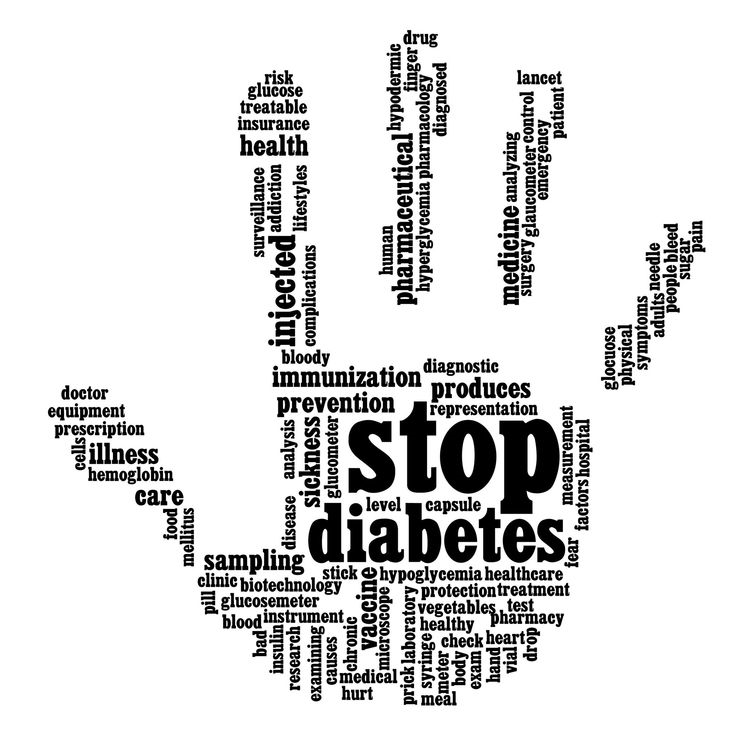
**Task 5. Find 15 hidden words.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| a | n | s | r | o | g | u | g | q | v | y | i | w | p |
| t | p | b | s | a | h | v | q | k | i | d | n | e | y |
| w | i | g | t | r | l | i | f | e | s | t | y | l | e |
| c | h | e | a | l | t | h | y | p | i | k | s | g | x |
| e | d | s | d | j | y | x | n | c | o | g | i | p | f |
| a | x | t | i | n | s | u | l | i | n | o | m | h | j |
| v | d | a | a | i | d | h | s | z | l | t | w | e | w |
| a | i | t | b | l | o | o | d | s | t | r | e | a | m |
| u | s | i | e | c | k | l | o | c | v | l | i | r | h |
| r | e | o | t | q | e | k | g | a | z | n | g | t | s |
| o | a | n | e | r | e | m | e | r | m | h | h | e | u |
| d | s | a | s | t | r | o | k | e | g | m | t | j | g |
| c | e | l | l | b | f | c | u | y | f | n | d | o | a |
| d | t | v | b | m | c | w | z | f | j | k | x | h | r |
| b | s | e | z | a | q | b | f | q | l | r | p | u | n |

**Task 6. Find the missing word.**

1. Diabetes is a (long-lasting) health condition that affects how your body turns food into energy.
2. There isn’t a cure yet for diabetes, but , , and can really help.
3. Approximately of the people who have diabetes have type 1.
4. About of people with diabetes have type 2.
5. Gestational diabetes develops in women who have never had diabetes.
6. In the United States, adults—more than 1 in 3—have prediabetes.

**Task 7. Read and translate the text.**



Diabetes is one of the most prevalent lifestyle diseases in modern world but still the awareness about the risks and benefits of exercises to patients with diabetes is limited. There are two distinct types of diabetes mellitus: lnsulin dependent (type 1) and Non insulin dependent (type 2) with distinct challenges associated with exercises.

**Insulin dependent diabetes mellitus (IDDM)**

It is an inherited autoimmune disease in which antibodies are produced against the beta cells of pancreas. Type 1 diabetes represents approximately 10-15% of the diabetic cases. It is characterized by absence of endogenous insulin production. Therefore insulin administration is essential to prevent ketosis, coma, and death.

**Non-Insulin dependent diabetes mellitus (NIDDM)**

Type 2 diabetes is linked to both genetic and lifestyle factors. It is characterized by diminished insulin secretion relative to serum glucose levels in conjunction with peripheral insulin resistance, both of which result in chronic hyperglycemia. Type 2 diabetes is characterized by three major metabolic abnormalities:

* Impairment in pancreatic beta cell insulin secretion in response to a glucose stimulus.
* Reduced sensitivity to the action of insulin in major organ systems such as muscle, liver and adipose tissue.
* Excessive hepatic glucose production in the basal state.

When considering exercise prescription for a diabetic patient target should be to achieve at least 30 minutes of continuous moderate activity (e.g. brisk walking) five or six days a week provided that cardiovascular and hypertensive problems are accounted for.

Both insulin and exercise independently facilitate glucose transport across the mitochondrial membrane and their action is also cumulative, therefore special care must be taken in patients taking insulin. Other points that should be taken care of include:

* Blood sugar levels should be monitored before and after every workout.
* Supplementary glucose may be required in case of extreme heat or strong winds.
* Adequate amount of fluids should be consumed to prevent dehydration.
* Patient should be able to identify signs of hypoglycemia and should carry a source of glucose with them.

**Task 8. Determine whether the statement is true or false, and prove or disprove it.**

1. Diabetes is not one of the most prevalent lifestyle diseases in modern world.
2. There are four distinct types of diabetes mellitus.
3. Insulin dependent diabetes mellitus (IDDM) is an inherited autoimmune disease in which antibodies are produced against the beta cells of pancreas.
4. Type 2 diabetes is linked only to genetic factor.
5. Blood sugar levels should be monitored before every workout.
6. Patient should be able to identify signs of hypoglycemia and should carry a source of glucose with them.

**Task 9. Match the words with their definitions.**

|  |  |
| --- | --- |
| 1. Diabetes | 1. movements and activities done to keep your body healthy or make it stronger. |
| 1. Physical exercises | 1. is a condition arising from an abnormal immune response to a functioning body part. |
| 1. An autoimmune disease | 1. is a peptide hormone produced by beta cells of the pancreatic islets; it is considered to be the main anabolic hormone of the body. |
| 1. Insulin | 1. is a condition in which an excessive amount of glucose circulates in the blood plasma. |
| 1. Hyperglycemia | 1. is one of the most prevalent lifestyle diseases in modern world but still the awareness about the risks and benefits of exercises to patients with diabetes is limited. |

**Task 10. Put the words in the right order to make sentences.**

**Exercise checklist for people with diabetes.**

1. to/ the right exercise/ for/ doctor/ talk/ you/ about/ your/
2. check/ before/ your/ exercising/ sugar/ after/ blood/ exercising/ level/ and
3. socks/ wear/ shoes/ the/ and/ proper
4. after/ plenty/ before/ drink/ of/ during/ fluid/ and/ exercising
5. up/ exercising/ down/ before/ warm/ cool/ afterward/ and
6. level/ too/ have/ low/ a/ in/ blood/ case/ drops/ handy/ snack/ your/ sugar

**Task 11. Choose synonyms to the adjective.**

1. chronic
2. healthy
3. active
4. prevalent
5. moderate

|  |  |
| --- | --- |
| energetic, alive |  |
| frequent, common |  |
| constant, continuing |  |
| balanced, limited |  |
| fresh, athletic |  |

**Task 12. Write four types of questions to the sentence (general, special, alternative and tag question).**

Diabetes is one of the most prevalent lifestyle diseases in modern world.

**Task 13. Study the tips to control diabetes and add some more.**



1. Take your medication and your meals on time according to your Doctor’s or Diabetes Educator’s recommendation.
2. Try to eat at about the same time every day.
3. Choose foods that are high in fiber.
4. Limit alcohol consumption and stop smoking.
5. Exercise or go for a walk regularly.

**Task 14. Study the facts about diabetes in numbers.**

1. Approximately 537 million adults (20-79 years) are living with diabetes.
2. The total number of people living with diabetes is projected to rise to 643 million by 2030 and 783 million by 2045.
3. 3 in 4 adults with diabetes live in low- and middle-income countries.
4. Almost 1 in 2 (240 million) adults living with diabetes are undiagnosed.
5. Diabetes caused 6.7 million deaths.
6. Diabetes caused at least USD 966 billion dollars in health expenditure – 9% of total spending on adults.
7. More than 1.2 million children and adolescents (0-19 years) are living with type 1 diabetes.
8. 1 in 6 live births (21 million) are affected by diabetes during pregnancy.
9. 541 million adults are at increased risk of developing type 2 diabetes.

# SECTION 2. KEYS TO THE TASKS

**Task 2. Fill in the mind map with the symptoms of diabetes.**

1. Urinate (pee) a lot, often at night.
2. Are very thirsty.
3. Lose weight without trying.
4. Are very hungry.
5. Have blurry vision.
6. Have numb or tingling hands or feet.
7. Feel very tired.
8. Have very dry skin.
9. Have sores that heal slowly.
10. Have more infections than usual.

**Task 4: Answer the questions.**

1. Diabetes is a chronic (long-lasting) health condition that affects how your body turns food into energy.
2. There are three main types of diabetes: type 1, type 2, and gestational diabetes (diabetes while pregnant).
3. No, it cant.
4. Type 1 diabetes is thought to be caused by an autoimmune reaction (the body attacks itself by mistake) that stops your body from making insulin.
5. Type 2 diabetes can be prevented or delayed with healthy lifestyle changes, such as losing weight, eating healthy food, and being active.
6. Yes, it does.
7. A CDC-recognized [lifestyle change program](https://www.cdc.gov/diabetes/prevention/lcp-details.html) can help you to take healthy steps to reverse it.

**Task 5: Find 15 hidden words.**

Down: vision, gestational, disease, diabetes, care, weight, heart, sugar

Across: kidney, lifestyle, health, insulin, bloodstream, stroke, cell.

**Task 6: Find the missing word.**

1. chronic
2. losing weight, eating healthy food, being active
3. 5-10%
4. 90-95%
5. pregnant
6. 96 million

**Task 8: Determine whether the statement is true or false, and prove or disprove it.**

1. False (Diabetes is one of the most prevalent lifestyle diseases in modern world).
2. False (There are two distinct types of diabetes mellitus).
3. True
4. False (Type 2 diabetes is linked to both genetic and lifestyle factors).
5. False (Blood sugar levels should be monitored before and after every workout).
6. True

**Task 9: Match the words with their definitions.**

1. e
2. a
3. b
4. c
5. d

**Task 10: Put the words in the right order to make sentences.**

1. Talk to your doctor about the right exercise for you.
2. Check your blood sugar level before and after exercising.
3. Wear the proper shoes and socks.
4. Drink plenty of fluid before, during and after exercising.
5. Warm up before exercising and cool down afterward.
6. Have a snack handy in case your blood sugar level drops too low.

**Task 11: Choose synonyms to the adjective.**

|  |  |
| --- | --- |
| energetic, alive | active |
| frequent, common | prevalent |
| constant, continuing | chronic |
| balanced, limited | moderate |
| fresh, athletic | healthy |

**Task 12: Write four types of questions to the sentence (general, special, alternative and tag question).**

1. Is diabetes one of the most prevalent lifestyle diseases in modern life?
2. What disease is one of the most prevalent in modern life?
3. Is diabetes one of the most prevalent or not common diseases in modern life?
4. Diabetes is one of the most prevalent lifestyle diseases in modern life, isn’t it?

**Task 13: Study the tips to control diabetes and add some more.**

1. Take your medication and your meals on time according to your Doctor’s or Diabetes Educator’s recommendation.
2. Try to eat at about the same time every day.
3. Eat at least three meals per day.
4. Don’t skip meals. Skipping meals may lead to large swings in blood sugar levels.
5. Eat about the same amount of food at each meal.
6. Choose foods that are low in fat and saturated fat. Choose foods that are low in simple sugar.
7. Choose foods that are high in fiber.
8. Choose foods that are low in sodium.
9. Limit alcohol consumption and stop smoking.
10. Use artificial sweeteners in place of sugar and consume diet drinks instead of regular drinks.
11. Exercise or go for a walk regularly.
12. Get your blood sugar and blood pressure levels checked regularly.

# БИБЛИОГРАФИЧЕСКИЙ СПИСОК

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