

№ ОРД-ОЗ-23

**Федеральное государственное бюджетное образовательное учреждение
высшего образования «Северо-Осетинская государственная
медицинская академия» Минздрава России**

Кафедра иностранных языков

УТВЕРЖДЕНО

Протоколом заседания
Центрального координационного
учебно - методического совета
от «14» марта 2023 г. № 4

ФОНД ОЦЕНОЧНЫХ СРЕДСТВ

«Английский язык»

основной профессиональной образовательной программы высшего
образования – программы ординатуры по специальности
31.08.71 Организация здравоохранения и общественное здоровье,
утвержденной 13.04.2023 г.

Рассмотрено и одобрено на заседании кафедры
от «10» марта 2023 г. (протокол № 8)

**Заведующий кафедрой
иностраннных языков, к.п.н., доцент**



Д.Т. Хацаева

г. Владикавказ 2023

СТРУКТУРА ФОС

1. Титульный лист
2. Структура ФОС
3. Рецензия на ФОС
4. Паспорт оценочных средств
5. Комплект оценочных средств:
 - тестовые задания (с титульным листом и оглавлением),
 - вопросы к зачету

ПАСПОРТ ФОНДА ОЦЕНОЧНЫХ СРЕДСТВ

| № п/п | Наименование контролируемого раздела (темы) дисциплины | Код формируемой компетенции (этапа) | Наименование оценочного средства |
|-------------------------|---|--|---|
| Вид контроля | Промежуточный | | |
| зачет | Английский язык | УК-1; УК-2; ОПК-1 | Тестовые задания, вопросы к зачету, ситуационные задачи |

**Федеральное государственное бюджетное образовательное учреждение
высшего образования «Северо-Осетинская государственная
медицинская академия» Минздрава России**

РЕЦЕНЗИЯ

на фонд оценочных средств

по английскому языку

по специальности 31.08.71 Организация здравоохранения и общественное
здоровье

Направление подготовки ординатура

Фонд оценочных средств составлен на кафедре иностранных языков на основании рабочей программы учебной дисциплины и соответствуют требованиям ФГОС. Фонд оценочных средств утвержден на заседании Центрального координационного учебно-методического совета и скреплен печатью учебно-методического управления. Фонд оценочных средств включает в себя банк тестовых заданий и билеты к зачету.

Банк тестовых заданий включает в себя следующие элементы: тестовые задания и шаблоны ответов. Все задания соответствуют рабочей программе «Английский язык» и охватывают все её разделы.

Сложность заданий варьируется. Количество заданий по каждому разделу дисциплины достаточно для проведения контроля знаний и исключает многократное повторение одного и того же вопроса в различных вариантах. Банк содержит ответы ко всем тестовым заданиям.

Количество билетов к зачету достаточно для проведения зачета и исключает неоднократное использование одного и того же билета во время зачета в одной академической группе в один день. Билеты выполнены на бланках единого образца по стандартной форме, на бумаге одного цвета и качества. Билет к зачету включает в себя 3 вопроса. Содержание вопросов одного билета относится к различным разделам программы, позволяющее более полно охватить материал учебной дисциплины.

Сложность вопросов в билетах распределена равномерно.

Замечаний к рецензируемому фонду оценочных средств нет.

В целом, фонд оценочных средств английского языка способствует качественной оценке уровня владения обучающимися общекультурными и профессиональными компетенциями.

Рецензируемый фонд оценочных средств по английскому языку может быть рекомендован к использованию для промежуточной аттестации ординаторов

Рецензент:

Председатель ЦУМК по гуманитарным,
социальным и экономическим дисциплинам,
профессор



З.Р. Аликова

**Федеральное государственного бюджетного образовательного
учреждения высшего профессионального образования
«Северо-Осетинская государственная медицинская академия»
Министерства здравоохранения Российской Федерации**

Кафедра иностранных языков

УТВЕРЖДЕНО

**Протоколом заседания Цикловой
учебно-методической комиссии
от «14» марта 2023 г. № 4**

Эталоны тестовых заданий

по английскому языку

**по специальности 31.08.71 Организация здравоохранения и общественное
здоровье**

Направление подготовки ординатура

**Рассмотрено и одобрено на заседании кафедры
от «10» марта 2023 г. (протокол № 4)**

**Заведующий кафедрой
иностраннных языков, к.п.н., доцент**



Д.Т. Хацаева

г. Владикавказ 2023

Оглавление

| № | Наименование контролируемого раздела (темы) дисциплины/модуля | Количество тестов (всего) | Код формируемых компетенций | стр. с ____ по ____ |
|---------------------|---|----------------------------------|------------------------------------|----------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Вид контроля | Промежуточный | | | |
| 1. | Грамматика. Лексика по теме «Организация здравоохранения и общественное здоровье» раздел 1. | 4 | УК 1 | 9 - |
| 2. | Грамматика. Лексика по теме «Организация здравоохранения и общественное здоровье» раздел 2. | 4 | УК 2 | |
| 3. | Грамматика. Лексика по теме «Организация здравоохранения и общественное здоровье» раздел 3. | 4 | УК 1 | |
| 4. | Грамматика. Лексика по теме «Организация здравоохранения и общественное здоровье» раздел 4. | 4 | УК1 | |
| 5. | Грамматика. Лексика по теме «Организация здравоохранения и общественное здоровье» раздел 5. | 4 | УК 2 | |
| 6. | Грамматика. Лексика по теме «Организация здравоохранения и общественное здоровье» раздел 6. | 4 | ОПК 1 | |

Тестовые задания

Тест 1

I. В предложениях 1 - 5 выбрать один правильный ответ:

1. *The muscles constitute approximately ... per cent of the total body weight.*

- | | |
|-------|-------|
| a) 50 | c) 90 |
| b) 20 | d) 70 |

2. *... consists of the atrium and the ventricle.*

- | | |
|---------------|---------------|
| a) the liver | c) the heart |
| b) the spleen | d) the kidney |

3. *Air is breathed ... either the mouth or nose into the oral cavity.*

- | | |
|-------------|---------------|
| a) although | c) though |
| b) through | d) throughout |

4. *The capillaries got their names ... they resemble hairs.*

- | | |
|---------------|------------|
| a) so | c) and |
| b) because of | d) because |

5. *I know Anatomy ... than Physiology.*

- | | |
|-----------|--------------|
| a) gooder | c) the best |
| b) better | d) more good |

II. В предложениях 6 – 10 выбрать 3 правильных ответа из 6:

6. *The bones of the trunk include*

- | | | |
|----------------------|-----------------------|--------------------|
| a) the skull | c) the shoulder-blade | e) the collar bone |
| b) the spinal column | d) the ribs | f) the breastbone |

7. *In such parts of the body as ... blood capillaries are absent.*

- | | | |
|------------------|---------------|--------------|
| a) the epidermis | c) hairs | e) the nails |
| b) the liver | d) the kidney | f) the heart |

8. *Выберите неправильные глаголы:*

- | | | |
|------------|-------------|------------|
| a) to be | c) to found | e) to try |
| b) to like | d) to speak | f) to know |

9. Выберите синонимы:

- | | | |
|------------------|---------------|-------------|
| a) to take place | c) to happen | e) to occur |
| b) to become | d) to produce | f) to begin |

10. Выберите существительные во множественном числе:

- | | | |
|--------------|-------------|-------------|
| a) vertebrae | c) nucleoli | e) bronchi |
| b) fascia | d) nucleus | f) vertebra |

III. В вопросах 11 – 12 найдите английские эквиваленты к русским словосочетаниям:

11.

- | | | |
|---------------------------|-------|-----------------------|
| 1. позвоночное животное | _____ | a) upper limb |
| 2. верхняя конечность | _____ | b) smooth muscle |
| 3. гладкая мышца | _____ | c) circulatory system |
| 4. пищеварительный тракт | _____ | d) vertebrate animal |
| 5. система кровообращения | _____ | e) digestive tract |

12.

- | | | |
|-------------------------|-------|------------------------------|
| 1. нижняя челюсть | _____ | a) contract slowly |
| 2. прекращение дыхания | _____ | b) muscle tissue |
| 3. медленно сокращаться | _____ | c) interruption of breathing |
| 4. вестела | _____ | d) lower jaw |
| 5. мышечная ткань | _____ | e) body weight |

IV. В вопросах 13 – 17 заполните пропуски:

13. The lecture _____ (to start) at 10.15 every day.

14. Student Petrov _____ (to write) a report in the library hall now.

15. We just _____ (to learn) the structure of the respiratory system.

16. His English is _____ (good) than mine.

17. Dr. Brown is one of _____ (experienced) doctors in this hospital.

V. В вопросах 18 – 20 найдите ошибки в предложениях:

18. All the higher animals have a backbone, and they are therefore called invertebrate

animals. _____

19. Striated muscles make up the walls of the internal organs. _____

20. The heart is a hollow muscle which has two chambers.

Тест 2

I. В предложениях 1 - 5 выбрать один правильный ответ:

1. ... muscles are necessary for walking, running, turning the head.

- | | |
|-------------|-------------|
| a) smooth | c) cardiac |
| b) striated | d) visceral |

2. The ... is the largest artery in the body.

- | | |
|--------------|--------------|
| a) capillary | c) arteriole |
| b) vein | d) aorta |

3. Mucous lines the mouth and nasal

- | | |
|-------------|-----------------|
| a) passages | c) passage-ways |
| b) passings | d) passes |

4. The center of the ... system is the heart.

- | | |
|----------------|----------------|
| a) circulate | c) circulatory |
| b) circulation | d) circular |

5. The aorta is ... artery in the body.

- | | |
|---------------|---------------------|
| a) larger | c) the largest |
| b) more large | d) the most largest |

II. В предложениях 6 - 10 выбрать 3 правильных ответа из 6:

6. The lower limb is separable into

- | | | |
|----------------|--------------|----------------|
| a) the thigh | c) the wrist | e) the toes |
| b) the forearm | d) the leg | f) the fingers |

7. Exhaled air ... approximately 16% oxygen and 4% carbon dioxide.

- | | | |
|----------------|---------------|---------------|
| a) is involved | c) produces | e) contains |
| b) consists of | d) is made of | f) contribute |

8. Выберите неправильные глаголы:

- | | | |
|------------|-------------|------------|
| a) to have | c) to write | e) to go |
| b) to work | d) to use | f) to love |

9. Выберите синонимы:

- | | | |
|------------|-------------|-------------|
| a) instead | c) interior | e) inner |
| b) intern | d) inside | f) internal |

10. Выберите существительные во множественном числе:

- | | | |
|---------|------------|-------------|
| a) data | c) nucleus | e) larynx |
| b) feet | d) alveoli | f) stimulus |

III. В вопросах 11 – 12 найдите английские эквиваленты к русским словосочетаниям:

11.

- | | | |
|-------------------------|-------|--------------------|
| 1. грудная полость | _____ | a) waste products |
| 2. набирать вес | _____ | b) cause death |
| 3. продукты распада | _____ | c) gain weight |
| 4. вызывать смерть | _____ | d) heart beat rate |
| 5. частота сердцебиения | _____ | e) thoracic cavity |

12.

- | | | |
|----------------------------|-------|------------------------|
| 1. беспозвоночные животные | _____ | a) bend freely |
| 2. соединительная ткань | _____ | b) invertebrate animal |
| 3. легко сгибаться | _____ | c) pulmonary artery |
| 4. стенки сосудов | _____ | d) connective tissue |

5. легочная артерия _____ e) walls of vessels

IV. В вопросах 13 – 17 заполните пропуски:

13. My sister _____ (to study) at the Medical College.

14. The doctor _____ (to examine) the patient at the moment.

15. I already _____ (to write) a report on Anatomy.

16. Who is _____ (old) in the class.

17. His flat is _____ (little) than mine.

V. В вопросах 18 – 20 найдите ошибки в предложениях:

18. The most important part of the skeleton is the chest. _____

19. Cardiac muscles are necessary for manipulation of the bones of the skeleton. _____

20. Nitrogen, which makes 79 per cent of the atmosphere, is involved in the breathing process.

Тест 3

I. В предложениях 1 - 5 выбрать один правильный ответ:

1. ... muscles make up the walls of the blood vessels and the digestive tract.

- | | |
|------------|-------------|
| a) cardiac | c) striated |
| b) smooth | d) skeletal |

2. ... consists of a colorless fluid, plasma or serum, the corpuscles.

- | | |
|-------------------|----------|
| a) muscle tissue | c) blood |
| b) waste products | d) heart |

3. Nitrogen is not involved in the ... process.

- | | |
|---------------|-------------------|
| a) breathing | c) breathlessness |
| b) breathless | d) breath |

4. *Air is breathed through the mouth or nose into the oral cavity or*

- | | |
|------------|------------|
| a) bronchi | c) trachea |
| b) larynx | d) pharynx |

5. *The veins are ... than capillaries.*

- | | |
|-------------------|----------------|
| a) larger | c) more large |
| b) the most large | d) more larger |

II. В предложениях 6 - 10 выбрать 3 правильных ответа из 6:

6. *The upper limb is separable into*

- | | | |
|----------------|--------------|----------------|
| a) the thigh | c) the wrist | e) the toes |
| b) the forearm | d) the leg | f) the fingers |

7. *Nitrogen ... in the breathing process.*

- | | | |
|----------------------|----------------------|------------------------|
| a) is not involved | c) is provided | e) isn't made of |
| b) doesn't take care | d) doesn't take part | f) doesn't participate |

8. *Выберите неправильные глаголы:*

- | | | |
|---------------|------------|-------------|
| a) to operate | c) to do | e) to study |
| b) to become | d) to form | f) to run |

9. *Выберите синонимы:*

- | | | |
|------------|--------|----------|
| a) because | c) and | e) since |
| b) but | d) as | f) so |

10. *Выберите существительные во множественном числе:*

- | | | |
|-------------|-----------|-------------|
| a) cilium | c) teeth | e) cilia |
| b) bronchus | d) theses | f) vertebra |

III. . В вопросах 11 – 12 найдите английские эквиваленты к русским словосочетаниям:

11.

- | | | |
|--------------------------|-------|----------------------|
| 1. пищеварительный тракт | _____ | a) lose weight |
| 2. медленно сокращаться | _____ | b) internal organs |
| 3. внутренние органы | _____ | c) contract slowly |
| 4. терять вес | _____ | d) the rest of blood |
| 5. остаток крови | _____ | e) alimentary canal |

12.

- | | | |
|----------------------|-------|--------------------------|
| 1. кровяное давление | _____ | a) functions of the lung |
| 2. вдыхать воздух | _____ | b) minute bodies |
| 3. плечевой пояс | _____ | c) inhale air |
| 4. функции легких | _____ | d) shoulder girdle |
| 5. мельчайшие тела | _____ | e) blood pressure |

IV. В вопросах 13 – 17 заполните пропуски:

13. Tom's father _____ (to be) a doctor.
14. The students _____ (to work) in the lab now.
15. The doctor already _____ (to examine) this patient.
16. He is _____ (bad) in our group.
17. Her report is _____ (important) than his one.

V. В вопросах 18 – 20 найдите ошибки в предложениях:

18. The arms join the body at the
elbow. _____
19. The respiratory system is the system of blood
circulation. _____
20. When air is inhaled into the lungs, a portion of nitrogen is passing into the
blood.

Тест 4

I. В предложениях 1 - 5 выбрать один правильный ответ:

1. *A characteristic feature of ... muscle is that fibers have neither a beginning nor an end.*

- | | |
|-------------|-------------|
| a) smooth | c) striated |
| b) visceral | d) cardiac |

2. *The heart lies in the ... cavity.*

- | | |
|--------------|------------|
| a) thoracic | c) cranial |
| b) abdominal | d) pelvic |

3. *Respiration consists of the processes by which the waste ... of respiration are removed.*

- | | |
|----------------|-------------|
| a) productions | c) products |
| b) producings | d) produces |

4. *The blood reaches the arteries ... the contraction of the heart.*

- | | |
|---------------|------------|
| a) but | c) and |
| b) because of | d) because |

5. *The human heart weighs ... than a pound.*

- | | |
|----------------|--------------------|
| a) little | c) less |
| b) more little | d) the most little |

II. В предложениях 6 - 10 выбрать 3 правильных ответа из 6:

6. *The bones which form the skeleton of the body include*

- | | | |
|--------------------------|---------------------------|-----------------------|
| a) the bones of the head | c) the bones of the trunk | e) the backbone |
| b) the breastbone | d) the collar-bone | f) the bones of limbs |

7. *Smooth muscles form the muscular coat of*

- | | | |
|--------------------|------------------|----------|
| a) internal organs | c) skin | e) bones |
| b) heart | d) blood vessels | f) skull |

8. *Выберите неправильные глаголы:*

- | | | |
|---------------|--------------|-------------|
| a) to include | c) to make | e) to speak |
| b) to read | d) to divide | f) to call |

9. Выберите синонимы:

- | | | |
|-----------|-----------|---------|
| a) fine | c) small | e) hour |
| b) minute | d) second | f) big |

10. Выберите существительные во множественном числе:

- | | | |
|-------------|-------------|-------------|
| a) analysis | c) nucleus | e) stimulus |
| b) women | d) analyses | f) alveoli |

III. В вопросах 11 – 12 найдите английские эквиваленты к русским словосочетаниям:

11.

- | | | |
|------------------------------|-------|-----------------------|
| 1. кровеносные сосуды | _____ | a) striated muscle |
| 2. нижняя конечность | _____ | b) blood vessel |
| 3. поперечно-полосатая мышца | _____ | c) bedueto |
| 4. быть вызванным | _____ | d) foreign substances |
| 5. инородные вещества | _____ | e) lower limb |

12.

- | | | |
|-----------------------|-------|-------------------|
| 1. свободно двигаться | _____ | a) pelvic bones |
| 2. спинной хребет | _____ | b) left ventricle |
| 3. коститаза | _____ | c) move freely |
| 4. сердечная мышца | _____ | d) spinal column |
| 5. левый желудочек | _____ | e) cardiac muscle |

IV. В вопросах 13 – 17 заполните пропуски:

13. We usually _____ (to have) three lectures a day.
14. We _____ (to take) an examination on Anatomy now.
15. I never _____ (to be) in this hospital before.
16. For me Chemistry is _____ (difficult) of all the subjects.
17. She is my _____ (old) sister.

V. В вопросах 18 – 20 найдите ошибки в предложениях:

18.Each of the fingers has two bones.

19.Respiration consists of the processes by which the body cells and tissues make use of carbon dioxide._____

20.The trachea divides into two smaller tubes - alveoli._____

Эталоны ответов к тестам 1-4

| | I | II | III | IV |
|------------|--------------|--------------|---------------|--------------|
| 11 | a | b | b | d |
| 22 | c | d | c | a |
| 33 | b | a | a | c |
| 44 | d | c | d | b |
| 55 | b | c | a | c |
| 66 | b,d,f | a,d,e | b,c,f, | a,c,f |
| 77 | a.c.e | b,d,e | a,d,f | a,c,d |
| 78 | a,d,f | a,c,e | b,c,f | b,c,e |
| 89 | a,c,e | c,e,f | a,d,e | a,b,c |
| 110 | a,c,e | a,b,d | c,d,e | b,d,f |
| 111 | d | e | e | b |
| 112 | a | c | c | e |
| 113 | b | a | b | a |
| 114 | e | b | a | c |

| | | | | |
|------------|-------------------------|---------------------|--|---------------------------|
| 115 | c | d | d | d |
| 116 | d | b | e | c |
| 117 | c | d | c | d |
| 118 | a | a | d | a |
| 119 | e | e | a | e |
| 220 | b | c | b | b |
| 221 | starts | studies | is | have |
| 222 | is writing | is examining | are working | are taking |
| 223 | have learnt | have written | has examined | have been |
| 224 | better | the oldest | the worst | the most difficult |
| 225 | most experienced | less | more important | elder |
| 226 | vertebrate | the backbone | the shoulder | three |
| 227 | smooth | striated | cardiovascular/ circulatory | oxygen |
| 228 | four | not involved | oxygen | bronchi |

Вопросы к зачету

1. Прочитайте и переведите письменно фрагмент текста. (Разрешается использование словаря).
2. Прочитайте текст и передайте его содержание на русском языке.
3. Передайте содержание устной темы и примите участие в беседе по ней. (Без подготовки).

CARD 1 FATIGUE

There are many reasons for feeling unusually tired. The causes can be physical, psychological or environmental.

Dietary advice. When you are suffering from fatigue it is not uncommon to try to keep yourself going with stimulants such as tea, coffee, cola, sugary foods or chocolate. Low blood sugar can be a major contributing factor, and if you have low blood sugar it is not unusual to crave for sweet foods. Although these cravings can be quite strong, your body really needs starchy foods, such as rice, potatoes, pasta and bread, which will provide a slow release of blood glucose for energy, over a longer period of time. Surgery foods and refined foods provide you a quick fix but it is not lasting but it is not lasting and you can feel more tired after these types of foods than before. Avoid foods that have a high fat intake because they overload digestion and contribute to sluggishness and overweight conditions. It has been shown that eating fatty or fried foods cause us to crave sweet foods immediately after we eat them.

In case of chronic fatigue, the immune system can be severely depleted, particularly if you have had a serious illness, allergies or recurring infections. If you are prone to recurring infections or allergies it is important to look at the triggers; it is possible that you are not maintaining good nutrition or are under a great deal of stress. Perhaps you are taking on too much strenuous exercise which is leaving you severely depleted of nutrients. Physical problems, such as anaemia or an underlying infection, must be overcome before you can hope to feel better.

If you feel so weak you can hardly lift your arms, you could be lacking in potassium. Eat a banana every day or make potassium both from potato skins and vegetables.

If you do not take salt in your cooking or on your food, it is possible that a lack of sodium is contributing to your fatigue. Try having a small amount of iodized salt and see if it makes a difference. This can indirectly help your thyroid gland as well. The thyroid controls your metabolic rate. If thyroid function is poor due to a lack of iodine then your metabolic rate can also be slow.

Many women who are under a lot of stress have adrenal fatigue. The adrenals rely on vitamin C for proper function so eat plenty of fresh fruit and salads every

Text 2.

TYPE II DIABETES

Ben, a 49-year-old architect, sat worriedly in the eye doctor's examining chair. Ben had never had problems with his vision. But lately, as he purred over plans and drawings, the pages seemed to blur and swim before his eyes. Ben had assumed that his deteriorating eyesight was simply an early sign of aging. But after examining Ben's eyes, his ophthalmologist UNDERSTANDING had other ideas.

To Ben's surprise, she began questioning him about other symptoms. Had Ben lost weight recently, the doctor wanted to know. Yes, Ben said, he had lost some weight, even though he seemed to be eating as much as before. Did he often feel thirsty? Yes, Ben felt he needed to drink constantly. Did he need to urinate more often than he used to? To this question, too, the answer was yes.

The ophthalmologist didn't need to hear any more. She told Ben that he was probably ex-

periencing symptoms of diabetes mellitus (commonly shortened to diabetes), a disease in which the body is unable to use sugar normally. She urged Ben to see his family physician, who would confirm the diagnosis by testing the level of sugar in Ben's bloodstream. As for his vision, the ophthalmologist said, Ben was probably suffering from a symptom of diabetes marked by changes in the lens of the eye. Fortunately for Ben, his diabetes had been diagnosed early enough that treating the disease would reverse the deterioration in his sight.

CARD 2

BRONCHIAL ASTHMA

Definition

Bronchial asthma is an inflammatory disorder of the airways, characterized by periodic attacks of wheezing, shortness of breath, chest tightness, and coughing.

Causes, incidence, and risk factors

Asthma is a disease in which inflammation of the airways causes airflow into and out of the lungs to be sometimes restricted. When an asthma attack occurs, the muscles of the bronchial tree become tight and the lining of the air passages swells, reducing airflow and producing the characteristic wheezing sound. Mucus production is increased.

Most people with asthma have periodic wheezing attacks separated by symptom-free periods. So asthmatics have chronic shortness of breath with episodes of increased shortness of breath. Asthma attacks can last minutes to days, and can become dangerous if the airflow becomes severely restrict.

In sensitive individuals, asthma symptoms can be triggered by inhaled allergens (allergy triggers) such as pet dander, dust mites, cockroach allergens, molds, or pollens. Asthma symptoms can also be triggered by respiratory infections, exercise, cold air, tobacco smoke and other pollutants, stress, food or drug allergies. Aspirin and other non-steroidal anti-inflammatory medications (NSAIDs) provoke asthma in some patients.

Bronchial asthma is found in 3-5% of adults and 7-10% of children. Half of the people with asthma-develop it before age 10 and most develop it before age 30. Asthma symptoms can decrease over time, especially in children.

Many people with bronchial asthma have an individual and/or family history of allergies such as hay fever (allergic rhinitis) or eczema. Others have no history of allergies or evidence of allergic problems.

Prevention

Asthma symptoms can be substantially reduced by avoiding exposure to known allergens and respiratory irritants. If an asthmatic is sensitive to dust mites, exposure can be reduced by encasing mattresses and pillows in allergen-impermeable covers, removing carpets from bedrooms, and by vacuuming regularly. Exposure to dust mites and mold can be reduced by lowering indoor humidity, a person is allergic to, an animal that cannot be removed from the home, the animal should be kept out of the patient's bedroom. Exposure to cigarette smoke, air pollution, industrial dusts, and irritating fumes should also be avoided.

Text 2.

SMOKING AND BREAST CANCER RISK

A woman's risk of dying from breast cancer increases by 25 percent if she is a smoker, according to a study released by the American Cancer Society. The study found that the risk of fatal breast cancer rises as the number of cigarettes smoked daily increased and as the number of years spent smoking increased. Among women who smoke two packs or more per day, the risk of developing fatal breast cancer goes up by 75 percent, compared with non-smokers.

The researchers studied more than 600,000 women who were cancer-free at the start of the study in 1982. After six years, researchers observed 880 cases of fatal breast cancer.

The study did not propose that smoking is a direct cause of breast cancer or that smokers are more likely to get the disease than nonsmokers. Instead, researchers speculate that smokers are at increased risk of fatal breast cancer because of overall poor health or delayed diagnosis.

For example, smokers may be at increased risk of fatal breast cancer because many of them have respiratory and cardiovascular problems that threaten their survival. In addition, data from previous research suggest that smokers are less likely to receive mammograms than nonsmokers or former smokers. Thus, cancerous tumors are less likely to be detected at an early stage.

CARD 3

CONSTIPATION

Constipation refers to the difficult, painful, or infrequent passage of feces that are usually hard and dry. It may develop early in life and persist into adulthood if left untreated, leading to various medical and psychological complications. However, constipation is not always easy to define because normal bowel movements vary from one child to another. Some may have several bowel movements each day, and others may have one every two or three days. As long as the feces are soft and produced with ease or more than moderate effort, there is nothing to worry about. In infancy, constipation is most often related to diet, such as a change from breast milk or infant formula to whole cow's milk. Certain medications, including iron preparations, diuretics, and anticonvulsant agents, also may cause constipation.

Emotional problems such as persistent anxiety or depression may lead to constipation. Stressful events such as the birth of a new baby or separation from parents may also provoke constipation, especially when they occur during toilet training.

Some children develop an irrational fear of toilets. They may have fantasies about being flushed down the drain or respond negatively to the odor. Sometimes, constipation runs in families and appears to be genetically determined. Often, there is no single factor responsible for constipation and it is due to a combination of causes.

Constipation is most common in children between the ages of one and three years, when they are developing bowel control. You should suspect constipation if the bowel movement is infrequent and the child appears in distress while defecating. Sometimes, however, parents mistake constipation for a normal passage of feces, in which the child's face may turn red and he may pull up the legs. The child may attempt to withhold a bowel movement, during which he looks strained with overextended legs and clenched fists, but does not defecate.

Text 2.

LYME DISEASE

The most prevalent illness in the United States is Lyme disease. As with most new maladies (diseases), Lyme disease took doctors completely by surprise.

In the summer of 1975, at least five young children in the town of Lyme, Connecticut, were diagnosed with juvenile rheumatoid arthritis (JRA), a progressive and debilitating disease of the joints. The children suffered from swollen knees, aching joints, and difficulty walking. The children's mothers, though, were skeptical of the diagnosis. It made no sense to them that so many youngsters from the same community would be suffering from an illness that is quite rare. Two of the women took their concerns to the state health department, and through persistence they convinced the professionals that something strange was happening in the town of Lyme.

Scientists began to investigate the supposed outbreak of rheumatoid arthritis in Lyme, looking into every possible explanation for the clustering of cases: a pollutant in the air, radiation from a nearby nuclear power plant, contaminants in the water supply. But the most relevant clues were that most of the victims lived near heavily wooded areas, had been stricken during the summer months, and had developed a round skin rash resembling an insect bite before their other symptoms began. To the researchers, the evidence indicated that the outbreak was an infectious disease spread by an insect, spider, etc.

They were right, though the puzzle wasn't completely solved for another seven years. In 1977, scientists identified the vector as a tiny parasite whose favourite host is white tailed deer. And in 1982, as the disease spread throughout the Northeastern United States, investigators finally identified the bacterium. And luckily, it could be killed with antibiotics. Treated early, Lyme disease is usually completely curable.

But if left untreated for too long, the illness can cause not only joint inflammation but also damage to the heart and nervous system

CARD 4

HEADACHE

Very few adults have never experienced headache. A general practitioner will see, on average, one patient each day with headache as the principal symptom. Every year at least 30% of the population suffers from headache, although the majority will not seek medical advice. When patients do present, it may be reflection of severity, duration or frequency of the pain, the anxieties or expectations of the patient, or the effect of the pain on the patient's lifestyle. The general practitioner must make a careful assessment of the patient. Serious intracranial pathology is rare but obviously important to identify. Patients with headache may present in various ways. Patients with acute headache will only present if the headache is very severe or associated with other symptoms. More commonly, patients present with persistent or recurrent headache.

Acute headache

It is common associated symptom of many of the self-limiting viral infections seen in general practice. Other causes of acute headache include local problems e.g. sinusitis, dental disease and ear infections. Severe unilateral headache with vomiting and visual disturbance may indicate migraine, although history of recurrent episodes is more usual.

Serious causes of acute headache are rare, but important to identify. Severe headache with photophobia and neck stiffness suggests meningism, implying viral or bacterial meningitis. Parents are often very anxious about children complaining of headache and careful assessment is required. Temporal arteritis is an important although uncommon cause of headache in the elderly. Early treatment with high dose steroids is recommended to avoid risk of blindness. Sudden severe headache is diagnostic of intracranial bleeding and therefore needs urgent referral.

Text 2.

THE STANDARD ULCER TREATMENT

Traditional treatment of ulcer typically consists of a four-week to eight-week regimen of a drug that helps heal ulcers by reducing the body's production of stomach acid. One group of drugs - called histamine H-2-receptor antagonists and another group of drugs work to cut acid production and they are known as proton-pump inhibitors. The most commonly prescribed of these drugs is omeprazole(Prilosec)-

Such treatment rarely constitutes a lasting cure, however. The great majority of patients develop new ulcers within two years after they stop the standard drug treatment. Long-term use of H-2-blockers can keep ulcers from recurring. But these drugs cause side effects, the most common of which are headaches, diarrhea, and nausea. And the drugs are expensive . A year's supply of Tagament or Zantac can cost as much as \$800 to \$1,000. These drugs have,however, reduced the need for surgery to repair ulcers that fail to heal. Although surgery was quite common for ulcer patients 20 years ago. before the drugs became widely available,fewer than 2 percent require it today. ,

Other recommendations under the standard procedure might include taking an over-the- counter antacid, such as Maalox or Mylanta, to neutralize acid in the stomach. Ulcer patients were also advised to eat frequent small meals „because food in the stomach can lessen the effects of stomach acid. And, of course, they were told to avoid the standard suspects: stress, smoking, alcohol, and coffee, and any foods that supposedly brought on ulcer symptoms. Although doctors once told patients to drink milk to soothe ulcers, they know now that milk actually increases acid production in the stomach.

CARD 5

APPENDICITIS

Appendicitis is an inflammation of the appendix, a small finger-like structure attached to the large intestine in the lower right side of the abdomen. The inside of the appendix forms a sac that

usually opens into the large intestine. When the inside of the appendix is blocked - by a piece of stool, a foreign body that was swallowed, or the swelling from an infection – the appendix becomes swollen and easily infected by bacteria. If the infected appendix is not removed, an abscess may form and eventually burst or perforate. This may happen as soon as 48 to 72 hours after symptoms begin. A perforated appendix can spread its infection throughout the abdomen and become life-threatening.

Appendicitis affects 7% of the U.S. population and is the most common reason for a child to need emergency abdominal surgery. Young people between the ages of 11 and 20 are most often affected, and most cases of appendicitis occur in the winter months, between October and May. A family history of appendicitis may increase a child's risk for the illness, especially in males. Having cystic fibrosis also increases a child's risk for appendicitis.

In older children, the classic symptoms of appendicitis are abdominal pain, fever, and vomiting. Abdominal pain usually begins in the center of the abdomen, around the area of the navel ("belly button"). Later, the pain may move downward and to the right – to an area called Burney's point, roughly corresponding to the location of the appendix in the lower right portion of the abdomen. After his abdominal pain begins, a child with appendicitis usually develops a slight fever, loses his appetite, feels nauseous, and may vomit. The fact that abdominal pain begins before nausea and vomiting, rather than after, is one clue to suspect appendicitis rather than an intestinal infection.

Other symptoms that may be seen in older children with appendicitis include: diarrhea (usually small stools, with mucus); urinary tract symptoms (urinating very frequently and/ or an uncomfortably strong urge to urinate); constipation; and, sometimes, respiratory symptoms.

In children younger than age 2, the most common symptoms are vomiting and a distended abdomen. Because appendicitis is rare in infants, and their symptoms are not "classic", the diagnosis of appendicitis is often delayed in these children. Often, in children between ages 5 and 9, appendicitis is diagnosed as either gastroenteritis or a respiratory infection – much more common illnesses in this age group.

Diagnosis of appendicitis can be difficult. Even the most experienced physicians and surgeons are not able to diagnose appendicitis 100% of the time.

If appendicitis is not treated, the infected appendix may perforate and spread its infection to wider areas of the abdomen. If perforation does happen, the child's abdominal pain may spread out to involve the whole abdomen, and fever may be very high. Perforation with appendicitis is more common with younger children.

Text 2

HYPERTENTION

Hypertension or high blood pressure is a very common condition affecting more than 15 percent of the adult population of North America, although half of them don't know it. The generally accepted maximum normal reading is 140/90, although many physicians will accept somewhat higher reading in older people. One of the treatment problems of this condition is that many people who are hypertensive do not feel ill. There are no early symptoms and it is very difficult for physicians to convince patients that they have to be on medications for the rest of their lives.

In most cases it is impossible to establish a definite cause of hypertension. These cases, possibly more than two-thirds, are called primary hypertension. Other cases, or secondary hypertension, are caused by such conditions, as kidney disease, pregnancy, hyperthyroidism, or more rarely, by narrowing the aorta (the main artery from the heart). Contraceptive pills may be a factor in some women.

Other so-called risk factors are smoking, alcohol abuse, obesity, and unfortunately, family history. It is important for your physician to establish whether the condition is primary or secondary. This may include blood test, kidney and chest X-rays, electrocardiograms and possibly other tests.

Since, as stated, hypertension does not cause symptoms until complications develop, it is important for the physician to diagnose and treat effectively, and it is equally important for the

patient to seek a physician he trusts, and follow his treatment and advice. Treatment may consist of a regimen of stopping smoking, losing weight and/or medication. There are many effective anti-hypertensive medications with minimal, if any, side-effects.

CARD 6

THE THREE KINDS OF MUSCLE AND THE WORK THEY DO

To understand the benefits of exercise - and why physicians recommend exercise-it's necessary to know something about how muscles work and what effect exercise has on them. We're all aware of using our muscles to dash up the stairs or run for the bus. But lots of activities we take for granted also depend upon muscles: the beating of heart, the digestion of food, the intake of air. Exercise helps maintain these muscles.

The more than 600 muscles in the human body are grouped into three categories - skeletal, smooth, and cardiac. Skeletal muscles support the bones and, by pulling them, enable us to move. These muscles are attached to bones by tough, flexible tissue called tendons. Skeletal muscles are sometimes called voluntary muscles because we can control their movement.

Smooth muscle, found only in the heart, forms that organ's pumping chambers. Steady contractions of this involuntary muscle create the heartbeat and push blood through the bloodstream.

Exercise has noticeable effects on skeletal and cardiac muscle. Physiologists suspect it may help maintain smooth muscle as well. These benefits arise from the nature of muscle tissue itself.

HOW MUSCLES DO THE WORK THEY DO

All muscles consist of fibers that are held together by connective tissue. Blood vessels embedded in that tissue supply muscle fibers with the oxygen and nutrients they need for energy. Nerves also run through the connective tissue, carrying signals from the brain that tell the muscles to contract and relax.

Contractions of the skeletal muscles produce the many actions that the human body performs. Even when we are sitting or standing still, some of our muscles remain in a state of semi contraction to support the body and maintain its upright posture.

Like any power generator, muscles require fuel that they can convert into energy. Much of this fuel is stored in the muscles in the form of a starch like substance called glycogen. The body produces glycogen from the food we eat, especially carbohydrates (starches and sugars). Because carbohydrates are such a good source of glycogen, athletes often eat large quantities of them before an athletic event.

The simplest muscle contractions are called twitches. Each skeletal muscle is made up of a mixture of fast-twitch and slow-twitch fibers. Fast-twitch fibers contract quickly, creating the explosive power used for jumping, sprinting weightlifting, and other exercises done at high intensity for a short time.

Slow-twitch fibers contract less quickly. Slow-twitch fibers use glycogen and oxygen steadily and continuously, providing muscles with the stamina needed in long distance running, bicycling, cross-country skiing, and other endurance events.

Text 2

THE DANGER OF FALLING

Falls are the leading cause of accidental death and serious injury in the home. They kill about 6,200 people each year and account for almost 1 out of every 3 fatal home accidents. Millions of other people are injured in falls each year. Most deaths and injuries occur when people fall down stairs, out windows, out of bed, or from ladders or roofs. But about 1 out of 4 falls occurs on level surface, when people who are walking around the house or yard, slip, stumble, or trip over objects.

Stairways are the most dangerous areas in any house. The Consumer Product Safety Commission (CPSC) estimates that falls down stairways account for 1.7 million serious injuries annually, more than any other kind of home injury.

To prevent falls in other parts of the home, make sure that throw rugs have a pad or non-skid backing. Hardware and department stores sell adhesive strips, foam rubber, and special sprays that can be applied to the back of rugs. Carpets and rugs with a short, dense pile and a pad of medium thickness provide better footing than do thick, plush carpets. Avoid polishing hardwood or tile floors with furniture waxes or dusting sprays, which can make floors very slippery. Instead, use self-polishing or nonskid floor waxes, and keep people off the floor until the wax dries. Many falls occur when people stand on boxes, chairs, or other makeshift contraptions. It is safer to keep a stepstool or small ladder handy.

CARD 7

LUNG CANCER

Lung cancer is the most common cancer in the West, having increased steadily in incidence since the 1930s. Cigarette smoking became popular in the trenches during the First World War, and we now know that the epidemic of lung cancer follows the introduction of cigarette smoking by about twenty years. This terrible fact just as true for women, who started to take up smoking in large numbers in the 1950s, just as men did thirty years before. The relationship between cigarette smoking and lung cancer is absolutely clear cut, and we also know that stopping is most certainly followed by a reduction in the individual's risk of developing lung cancer. It is tragic so many young people smoke, and there is no doubt that the tobacco industry has substantially targeted this group, with considerable success. In the 1950s, the male-to-female ratio for lung cancer was over ten to one. By 1984, the figure stood at only four to one.

Recent debate has centered on the dangers of passive smoking, and it is now known that non-smoking women who are married to smokers face a risk of lung cancer which is over twice it would be if they were married to men who also did not smoke. Although a no-smoking policy now operated in many public places, on public transport and so on, the death rate from this disease is extremely high, since it is both common and, in most cases, very difficult to cure.

Children and young people can all too easily obtain cigarette and fall prey to a disgusting habit which will dent their finances, clog their heart and lungs, stain their teeth, make them and their clothes smelly and unappealing, and, in the end, quite possibly prove fatal. The cost of treating cigarette-related disease is enormous, particularly since chronic heart and lung disease may persist for years before the death of the patient.

Well over 30,000 people in Britain develop lung cancer each year, the majority of whom die from it, usually within two years of diagnosis. Many of these patients are in their fifties and sixties. Of the other risk factors for lung cancer, only asbestos and air pollution are seriously worth considering, though are far less important.

Text 2

PSYCHOLOGICAL DISTRESS

All people go through times when they feel anxious, depressed, or in other ways emotionally exhausted. Usually, these feelings come in response to a particular event or situation and disappear once the situation is resolved.

Doctors distinguish between these normal episodes of psychological distress and more disturbing or persistent illnesses that can require psychiatric care. What brings on most mental illnesses is unclear, though doctors know that these disorders tend to run in families, suggesting that at least some cases are caused by one or more genes (components of cells that transmit inherited characteristics). Someone whose parent or grandparent has suffered from depression, for instance, has at least twice the risk of developing the illness as a member of the general population.

Psychiatrists classify psychiatric illnesses according to the way they affect people's emotions, thoughts, and behaviors. One group consists of the affective disorders, also called mood disorders because they involve substantial changes in mood. The most common mood disorder is depression, sometimes called clinical depression or major depression to distinguish it from ordinary sad or depressed moods.

People suffering from depression feel persistently low, unhappy, and hopeless without knowing why. They tend to feel tired all the time and to be irritable and indecisive. Often, they become flooded with feelings of worthlessness and guilt. Along with these emotional symptoms come physical changes, including an increased vulnerability to physical illness. Patients may sleep too little or too much and may lose or gain weight. Puzzlingly, depression strikes some susceptible people only once and in others recurs throughout the person's lifetime

CARD 8

TUBERCULOSIS

There has been a gradual decline in the incidence of tuberculosis in technically advanced countries since the turn of the century. In developing countries accurate statistics are lacking, but there is no doubt that tuberculosis is a significant public health problem. *Mycobacterium tuberculosis* has also emerged as a major pathogen in patients infected with the human immunodeficiency virus (HIV). There has been a marked increase in the incidence of tuberculosis in HIV patients in the United States of America, and an even greater increase in Africa. The falling incidence of tuberculosis in more advanced societies can be attributed as much to environmental and social factors as to specific prophylactic and chemotherapeutic measures. Measures to prevent and control the spread of disease are important aspects of management, and should be used in conjunction with drug treatment for patients with active disease. A variety of methods have been adopted to prevent and control the spread of tuberculosis.

BCG vaccination is given to uninfected tuberculin negative individuals to increase resistance. It offers partial protection only, and although an active vaccination policy has been used in the United Kingdom, it has not been adopted in North America and some other European countries. The vaccination of school children between the ages of 10 and 14 has been standard practice in the United Kingdom since the early 1950s. With the decreasing incidence of tuberculosis, this policy is becoming less effective and may soon be abandoned offering vaccination to specific high-risk groups, such as health workers, tuberculin negative contacts, and immigrants from countries where tuberculosis is common. One disadvantage of routine BCG vaccination is that it diminishes the usefulness of tuberculin testing as a diagnostic tool.

The treatment of tuberculosis depends on the use of appropriate combination chemotherapy. Supervision and monitoring are necessary since successful treatment is dependent on the patient's compliance. A combination of antituberculosis drugs is required to minimize the risk of emergence of resistant organisms. A prolonged course of treatment is essential for therapeutic success. In the last 20 years there have been a number of modifications in treatment regimens with the result that an 18-month course of treatment has been replaced by short course treatment for periods of between 6 and 9 months.

Text 2

ACUTE MYOCARDIAL INFECTION

The primary symptom of myocardial infarction is pain. The pain usually builds up in the centre of the chest, and tends to spread across the chest, sometimes into the arms, particularly the upper arms, into the neck, and even into the back. It is usually described as heavy, crushing or constricting. In addition other symptoms such as breathlessness, nausea, and faintness also occur, though less constantly than pain.

If the symptoms last for more than 15 minutes, myocardial infarction is the most likely diagnosis. Similar symptoms coming on during exertion and passing quickly with rest represent angina – transient effort-related ischaemia. Unstable angina may cause symptoms at rest for 5-15 minutes without permanent damage to heart muscle, but this is also a dangerous condition. Chest pain that is oesophageal or musculoskeletal can usually be distinguished fairly readily.

There are some useful signs but they are rather subtle. The expert may pick them up, but others may not. For example, with an inferior infarction there is often elevation of the venous pressure; with an anterior infarction there is a dyskinetic impulse.

The first thing is to ensure that the patient is as comfortable as possible. A breathless patient may want to sit upright, while a hypertensive patient may prefer to lie flat. The patient knows best and should decide on the most comfortable position. This is extremely important, yet so often overlooked.

The second task is to relieve pain. The pain of myocardial infarction is a shocking thing: not only it is severe, but it can also cause shock, which may explain why the patient is hypotensive. Pain can increase the severity of the attack, both by causing arrhythmias and by interfering with cardiac perfusion. So it's of prime importance to relieve pain as effectively and as quickly as possible.

CARD 9

CONGENITAL HEART DEFECT CORRECTIVE SURGERY

Definition:

Surgery to correct or treat birth defects of the hearts (congenital heart disease) that threaten the child's well-being or life.

Description:

Heart defects come in all types, from minor to major. Defects can occur inside the heart or in the large blood vessels outside the heart. The heart defect may need immediate surgery or may be able to safely wait for months or years. The heart defect may be repaired in a single surgical procedure or may require a series of procedures. Surgery may involve opening the heart to repair defects inside the heart or repairing defects of the blood vessels outside the heart. ⁱⁱ An incision may be made through the breastbone (sternum) and between the lungs (mediastinum) while the child is deep asleep and pain-free under general anesthesia. For some heart defect repairs, the incision is made on the side of the chest, between the ribs (thoracotomy) instead of through the breastbone. Heart-lung bypass may be needed. Tubes are used to re-route the blood through a special pump that adds oxygen to the blood and keeps it warm and moving through the rest of the body while the repair is being done.

Heart surgery for children requires a specialized team of pediatric heart (cardiovascular) surgeons, pediatric anesthesiologists, pediatric heart-lung bypass (cardiopulmonary bypass pump) machine technologists, pediatric surgical nurses and technicians, and pediatric intensive care physicians and nurses. Heart surgery requires intensive and extensive monitoring, treatment, and coordination by the entire team. Heart surgery for children may take from 1 to 6 hours in the operating room.

After heart surgery, the child will be moved to the Intensive Care Unit (ICU) to be constantly and closely monitored and treated for several days.

Text 2

ALZHEIMER'S DISEASE

Jean Albrecht complained of memory loss and of having difficulty finding the right word. Other people had noticed the high school teacher's problems as well. She complimented her students on work they had not done, forgot what she had planned to say in class, and admitted that she sometimes had difficulty understanding what people were saying to her. Complaints about her behavior finally led the school principal to ask for her resignation.

Although angry at the principal's action, Albrecht realized something was wrong and repeatedly stated that she must be in the early stages of Alzheimer's disease. Her family and her physician urged her to see a specialist at local university's memory disorders clinic.

After series of diagnostic examinations, doctors determined that 64-year-old Jean Albrecht indeed had Alzheimer's disease, a disorder of unknown cause characterized by the progressive deterioration of memory, reasoning powers, and judgment. She and her family then met with a team of health care professionals to plan how to face the future.

Alzheimer's disease is primarily a disease of older people¹ and the number of Americans

afflicted with the disease will almost certainly continue to rise. Not only are people aged 65 and older living longer than ever before, but the “oldest-old”, those 85 years and older, are growing seven times faster than any other age group. This is the group at greatest risk for Alzheimer's disease.

CARD 10

BONES, JOINTS, AND MUSCLES

Bone is a constantly changing bodily tissue that has several functions. All the bones together make up the skeleton. The skeleton, muscles, tendons, ligaments, and other components of joints form the musculoskeletal system. The skeleton provides strength, stability, and a frame for muscles to work against in producing movement. Bones also serve as shields to protect delicate internal organs.

Bones have two main shapes: flat (such as the plates of the skull and the vertebrae) and long (such as the thighbones and arm bones). But their internal structure is essentially the same. The hard outer part consists largely of proteins, such as collagen, and a substance called hydroxyapatite. Composed mainly of calcium and other minerals, hydroxyapatite stores much of the body's calcium and is largely responsible for the strength of bones. The marrow in the center of each bone is softer and less dense than the rest of the bone and contains specialized cells that produce blood cells. Blood vessels run through a bone, and nerves surround it.

Bones come together to form joints. The configuration of a joint determines the degree and direction of possible motion. Some joints, such as those between the plates of the skull called sutures, don't move in adults. Others allow a range of motion. For example, the shoulder joint, which has a ball-and-socket design, allows inward and outward rotation as well as forward-backward, and sideways motion of the arm. Hinge joints in the elbows, fingers, and toes allow only bending (flexion) and straightening (extension).

Other components of joints provide stability and reduce the risk of damage from constant use. In a joint, the ends of bones are covered with cartilage – a smooth, tough, protective tissue that acts as a shock absorber and reduces friction. Joints also have a lining (synovial tissue) that encloses them to form the joint capsule. Cells in the synovial tissue produce a clear fluid (synovial fluid) that fills the capsule, further reducing friction and facilitating movement.

Muscles are bundles of fibers that can contract. Skeletal muscles, which are responsible for posture and movement, are attached to bones and arranged in opposing groups around joints.

Text 2

MOZART AND THE MIND

Listening to the music of Austrian composer Wolfgang Amadeus Mozart may briefly stimulate intelligence. This was the finding of a study published in October 1993 by researchers from the Center for the Neurobiology of Learning and Memory at the University of California in Irvine. The researchers suggested that the highly complex and no repetitive music of Mozart stimulates the nerve pathways in the brain associated with abstract thinking- the thought processes used, for example, in solving mathematics problems or playing chess.

The researchers gave 36 college students a standard test of spatial intelligence after they listened to a Mozart composition for piano for 10 minutes. The students also received the same test after listening to a relaxation tape for 10 minutes and after 10 minutes of silence.

The students scored an average of 8 or 9 points higher after listening to Mozart than after listening to the relaxation tape or remaining in a silent room. The researchers took the subjects' pulse rates before and after each listening experience and found no indication that physical stimulation had played a role in the higher scores. However, the authors of the study found that the subjects' increased intelligence faded quickly after they had completed the tests.

The researches expressed an interest in studying other forms of music in future. They predicted that less complex and more repetitive music would not enhance abstract thinking as Mozart's music did. The researchers also said it would be interesting to test musicians to compare their responses to those of non musicians.