Запорізький державний медичний університет
Кафедра іноземних мов

ПРАКТИКУМ З РЕФЕРУВАННЯ МЕДИЧНИХ ТЕКСТІВ З АНГЛІЙСЬКОЇ МОВИ

(для студентів медичного факультету ІІ курсу)

Запоріжжя
2014

Укладач: доцент кафедри іноземних мов Ю.В. Орел-Халік, доцент. – Запоріжжя, ЗДМУ, 2014.

Рекомендовано у навчальний процес:
Кафедрою іноземних мов Запорізького державного медичного університету
Протокол №_____від _____2014р.
Цикловою методичною комісією з гуманітарних дисциплін Запорізького державного медичного університету
Протокол № _____ від _____2014р.

Зміст

ПЕРЕДМОВА

Сучасний розвиток суспільства потребує подальшого вдосконалення системи професійної підготовки медичних працівників. Медична освіта покликана забезпечити формування професіонала, здатного до самоосвіти, який буде зорієнтований на особистісний та професійний саморозвиток і готовий креативно працювати в обраній сфері.

Мотиваційним підґрунтям діяльності медичного працівника є культ пізнання, що породжує його пізнавальну активність. Дослідницькі знання та вміння потрібні кожному медичному працівнику як інструмент його професійної діяльності.

У цьому контексті великого значення для здійснення наукової пізнавальної діяльності набуває оволодіння таким рівнем іншомовної комунікативної компетенції, який забезпечить доступ майбутнього науковця до іншомовної інформації: друкованої, текстової, електронної.

Однією з основних цілей навчання іноземній мові у вищій школі є навчити студента читати тексти зі спеціальності, щоб отримати повноцінну інформацію та вміння обробити її (анотування, реферування та конспект). По закінченні курсу іноземної мови, студент повинен володіти професійно-орієнтованими навичками та вміннями, всіма видами наукової обробки тексту для самостійної роботи.

Навчальний посібник призначено для студентів другого курсу медичного факультету, спеціальностей «Лікувальна справа» 7.12010001, «Педіатрія» – 7.12010002, що цікавляться механізмами функціонування сучасної наукової мови та прагнуть сформувати й вдосконалити індивідуальну програму пізнавальної діяльності через самостійну роботу з різними джерелами наукової інформації.

Матеріал посібника містить зразки автентичних англомовних статей загально медичної тематики для перекладу та реферування англійською мовою.

Головна увага приділена у посібнику організації самостійної роботи, що забезпечується запропонованими алгоритмічними приписами, які раціонально й оптимально скеровують мисленнєво-мовленнєву діяльність при опрацюванні різноманітних наукових джерел як з метою «згортання» їх змісту до рівня конспекту, анотації, реферату, так і для підготовки англійською мовою наукової доповіді, виступу в дискусії, статті. За такого підходу суттєво підвищується ефективність інтелектуальної праці та забезпечуються перспективи самоосвіти у подальшому професійному зростанні.

Зміст практикуму складають Передмова, 4 розділи, Словник, Перелік літератури. Загальний обсяг практикуму складає 114 сторінок.

Розділ І присвячено визначенню особливостей, композиції та типам рефератів. У Розділі ІІ наведено алгоритмічний припис до реферування наукового джерела. Розділ ІІІ містить мовні стандарти-кліше необхідні для реферування наукового джерела. Розділі IV тексти для самостійного опрацювання. У Переліку літератури вказано інформаційні джерела використані під час роботи над практикумом.

Методичні рекомендації. Посібник розраховано на студентів ІІ курсу, як завдання для підсумкового модуля та самостійної роботи за темами ІІІ та IV модулів.

Рівень складності текстів пропонується студенту викладачем. Порядок опрацювання текстів може бути послідовним або вільним залежно від планів та цілей викладача, що виходять з вимог навчальної програми: ввести, закріпити, актуалізувати або проконтролювати засвоєння лексики за окремою темою модуля.

РОЗДІЛ І

РЕФЕРУВАННЯ НАУКОВОГО ДЖЕРЕЛА

Реферування являє собою такий складний процес аналітико-синтетичної переробки інформації наукового джерела (або джерел), результатом якої і стає реферат (від лат. Refero –доповідаю) – короткий виклад (перед аудиторією або в письмовій формі) наукової праці, вчення, змісту джерела (або джерел) із зазначенням характеру, методики, результатів дослідження та збереженням його мовностилістичних особливостей.

Рефератом в освітянській сфері називають і доповідь на будь-яку тему, що складається з огляду різноманітних джерел.

Реферат як самостійний і поширений жанр наукової літератури, окрім загальних закономірностей наукового стилю, має особливості, характерні саме для нього (на відміну від інших жанрів цього стилю), що обумовлено функцією реферату, його інформативним призначенням. Так, на відміну від жанру наукової статті, в рефераті немає характерної для статті наукової ґрунтовності викладу, розгорнутих доведень, міркувань, порівнянь, обговорення результатів, оцінок тощо, оскільки все це – дієвий засіб переконання читача, а призначення реферату – передати інформацію, повідомити.

Сутність реферату – це короткий виклад (за умови достатності інформативної повноти) основного змісту джерела (джерел), повідомлення нової проблемної інформації, що міститься в ньому, або доповідь за певною темою, підготовлена в результаті самостійного опрацювання кількох джерел.

На відміну від анотації, яка відповідає на запитання, про що йдеться в науковому джерелі, і подає загальне об’єктивне уявлення про це джерело, його стислу характеристику(найчастіше через перелік основних проблем), реферат відповідає на запитання, що саме нове й суттєве є в першоджерелі, і

викладає основний його зміст, нову проблемну інформацію. Отже, в рефераті обов'язкового акцентується увага на новій інформації, яка є в першоджерелі.

Студентам усіх напрямів вищої освіти навички реферування допомагають опрацьовувати на якісному рівні та в зазначених обсягах науково-навчальну, науково-популярну, суто наукову літературу за спеціальністю. Реферативне читання наукових джерел за фахом є обов'язковим при підготовці до складання кандидатського екзамену з іноземної мови, а також при написанні, наприклад, курсових, дипломних, конкурсних та інших науково-дослідних робіт у навчальному закладі. Воно передбачає сформованість певного комплексу взаємопов'язаних умінь і навиків, зокрема з оглядового, пошукового й суцільного видів читання; смислового аналізу тексту та його фрагментів з метою вилучення основної інформації; «згортання» («пакування») інформації до рівня плану, тез, конспекту, анотації та обов'язково з мовного оформлення матеріалу за чинними нормами. Тому навчання реферуванню наукових джерел починається з усвідомлення відповідного алгоритмічного припису в цілому і кожного з його «кроків», яке підкріплюється тривалим тренінгом через виконання спеціальних вправ та посилюється ознайомленням зі зразковими текстами наукових рефератів.

Реферати класифікуються за різними параметрами. З урахуванням ступеня повноти викладу змісту першоджерела реферати поділяються на кілька видів:

1) Інформативні (реферати-конспекти), які містять в узагальненому вигляді всі основні положення наукового джерела, ілюстративний матеріал, важливу аргументацію, відомості про методику дослідження, використані технології, сфери застосування;
2) Індикативні (реферати-резюме), які містять лише ті основні положення, що якнайтісніше пов'язані з темою реферованого джерела.

За кількістю реферованих джерел реферати поділяються на монографічні, що складені за одним науковим джерелом, та оглядові, підготовлені за кількома науковими джерелами однієї тематики.

За читацьким призначенням реферати поділяються на загальні, що містять виклад змісту джерела в цілому та у зв'язку з цим розраховані на широке коло читачів, спеціалізовані, в яких виклад змісту орієнтований на фахівців відповідної галузі знань.

За укладачами реферати поділяються на:

- Автореферати, які готуються самим автором;
- Реферати, складені спеціалістами тієї галузі знань, до якої відноситься реферован наукове джерело;
- Реферати, що підготовлені професійними рефератами, у тому числі перекладачами-референтами.

У рефератах будь-якого виду не допускаються як суб'єктивні погляди референта на висвітлювань питання, так і оцінка реферованого наукового джерела. У разі професійної потреби, таку оцінку доречно подавати як примітку.

При підготовці курсових, дипломних, конкурсних, дисертаційних та інших науково-дослідних робіт найбільшу допомогу надають інформативні реферати. Щоб навчитись адекватно викладати зміст основних положень наукового джерела(джерел), необхідно бути озброєним не лише глибоким знанням з певної галузі, але й уміти якісно та у визначений час реферувати джерела за алгоритмічним приписом і в повній відповідності до вимог об'єктивності, інформативної повноти, логічності, єдності за стилем, чинних мовних норм та достатності за обсягом (наприклад: тисяча друкованих знаків-оптимальна норма для рефератів наукових статей).

Композиційно текст реферату переважно складається з трьох логічно пов'язаних частин: вступної, основної (описової), заключної.

До композиції більшості рефератів (у т.ч. авторефератів) за сучасними вимогами входять ключеві слова-основні наукові терміни і терміносполуки,

які відбивають основні наукові поняття реферованого джерела та логіку викладу матеріалу.

РОЗДІЛ ІІ

АЛҐОРИТМІЧНИЙ ПРИПИС ДО РЕФЕРУВАННЯ НАУКОВОГО ДЖЕРЕЛА

1. Визначте мету реферування обраного наукового джерела (реферат-конспект чи реферат-резюме).

2. З’ясуйте функції та обсяги підготовлюваного реферату відповідно до його мети і жанру наукового першоджерела.

3. Здійсніть бібліографічний опис наукового джерела (наукових джерел).

4. Опрацюйте наукове джерело і відберіть інформацію для реферату, застосовуючи такі види читання, як оглядове, пошукове та суцільне.

5. Визначте композицію реферату.

NB!

Реферат-резюме має таку модель:

1) заголовна частина (точний бібліографічний опис джерела);

2) безпосередньо реферативна частина (основна інформація);

3) довідковий апарат (кількість ілюстрацій, таблиць, схем, бібліографія тощо).

6. Запишіть логізований план реферату як перелік основних тем і проблем першоджерела (для основної частини реферату).

7. Здійсніть розподіл опрацьованої й відібраної для основної частини реферату інформації, усвідомивши:

а) мету і зміст реферованого наукового джерела;

б) методи дослідження;

в) конкретні результати (теоретичні, експериментальні, описові, насамперед нові і перевірені факти, тенденції тощо);

г) висновки і позицію автора в розв’язанні проблем, прийняті ним або спростовані гіпотези;

д) сфери застосування, шляхи практичного впровадження результатів роботи.

NB!

Якщо в науковому джерелі відсутня якась частина наведених у п.7 даних (методи, висновки, сфери застосування), то в тексті реферату вони не наводяться для збереження послідовності викладу.

До основної частини реферату-резюме добирається основна (ключова) інформація наукового джерела, при цьому малоінформативні смислові частини вилучаються, подібна і близька інформація об’єднується та узагальнюється.

8. Оформіть письмовий реферат:

• **здійсніть "згортання" змісту** та мовну компресію відібраної для реферату інформації;

• **скомпонуйте відібрану інформацію** та, використовуючи різні лексичні засоби організації зв'язного тексту і пам'ятаючи мету реферування, підготуйте письмовий реферат.

NB!

Ступінь узагальнення і "згортання" інформації в рефераті-резюме вдвічі-втричі є більшою, ніж в інформативному рефераті. Лексичні засоби зв'язку є спільними для всіх видів рефератів.

9. Здійсніть **самоконтроль** написаного реферату на смисловому, структурно-логічному і мовному рівнях та переконайтесь, чи досягли ви поставленої мети реферування.

NB!

При реферуванні, як і при конспектуванні, відбувається вилучення необхідної інформації, переформулювання її, а також аргументування. Зміст та обсяги реферату залежать від його виду: реферат-резюме – це короткий, узагальнений реферат.

10. Здійсніть (у разі потреби) редагування тексту реферату.

РОЗДІЛ ІІІ.

МОВНІ СТАНДАРТИ-КЛІШЕ ДЛЯ НАУКОВОГО РЕФЕРУВАННЯ

1	I (don't) think (so)	Я так (не) вважаю/ вважаю
2	It seems to me	Мені здається
3	In (to) my opinion	На мою думку
4	From my point of view	З моєї точки зору
5	I am (not) sure	Я (не) впевнений
6	I'm afraid I don't know (remember)	Нажаль, я не знаю (не пам'ятаю)
7	I'm afraid I can't answer your question	Боюсь,я не можу відповісти на ваше запитання
8	I (don't) think I know (remember)	Не думаю, що я знаю (пам'ятаю)
9	I am absolutely (quite) sure	Я абсолютно (достатньо) впевнений
10	I don't know (remember) exactly	Не знаю (пам'ятаю) точно
11	It's a pity = unfortunately	Нажаль
12	If I am not mistaken	Якщо я не помиляюсь
13	May be I am wrong (not right, mistaken)	Можливо я не прав (помиляюсь)
14	It's difficult for me to say exactly (to judge)	Мені важко сказати напевно (судити)
15	As far as I know remember understand can see can judge understood from this story	Наскільки я знаю пам'ятаю розумію бачу можу судити зрозумів з цієї розповіді
16	As a rule	Як правило
17	As for me = as regards myself	Щодо мене
18	As for = as regards my opinion my point of view my idea about	Згідно моєї думки моєї точки зору мого уявлення про…
19	According to this text	Відповідно до тексту
20	According to my mother, my teacher …	Як каже моя мати, мій вчитель…
21	As you (we) all know remember understand	Як ви (ми) всі знаємо пам'ятаємо розуміємо

	can see	можемо бачити
22	To my way of thinking	Як я думаю
23	It's natural	Природньо
24	I know the answer to your question. I can easily answer it.	Я знаю відповідь на ваше питання. Я можу легко відповісти на нього.
25	It's not difficult (=a problem) for me to answer it.	Мені не важко (це не проблема для мене) відповісти на нього
26	Just a moment (=minute)! Let me think! (for a while) Let me concentrate! Let me remember! Let me collect my thoughts!	Одну хвилинку! Дайте подумати (трошки) Дайте мені зосередитись! Дайте мені згадати! Дайте мені зібратися з думками!
27	I didn't know before reading this text	Я не знав доки не прочитав цей текст
28	It was (very, really, so, especially) interesting (surprising) for me to know (read)	Мені було (дуже, насправді, так, особливо) цікаво (дивно) дізнатися (прочитати)
29	It was a great surprise for me to know (read)	Для мене було великим здиву-ванням дізнатися (прочитати)
30	I have always thought that	Я завжди вважав, що
31	Oh, I'm sorry! It was my mistake!	Вибачте! Це була моя помилка!
32	I missed to say that…(very important information, fact, thing)	Я забув сказати (дуже важливу інформацію, факт, річ)
33	I wonder, who doesn't know (like, remember)…	Ось цікаво, хто не знає (не любить, не пам'ятає)
34	Candidate for a degree	Здобувач вченого ступеня
35	To consider	Вважати
36	To suppose	Думати, вважати
37	To work at the problem	Працювати над проблемою
38	To become interested in	Бути зацікавленим в
39	To continue one's studies	Продовжити навчання
40	To pay particular attention to	Віддавати особливу перевагу
41	To be concerned with	Бути зацікавленим
42	To take up smth	Обмірковувати щось
43	Laboratory findings	Лабораторні відкриття
44	To solve a difficult task	Вирішувати складне завдання
45	The main problem of my research is…. – to reveal – to put into practice – to apply in practice	Головна проблема мого дослідження…– відкрити – ввести у практику – застосувати у практиці
46	My work concerns (deals with)	Моя робота відноситься(має справу)

47	According to the theme of my thesis	Згідно з темою моєї дисертації
48	To be in the focus of my research	Бути в центрі мого дослідження досліді
49	To reach a conclusion	Прийти до висновку
50	To draw a conclusion	Зробити висновок
51	To be engaged in research work	Бути задіяним у дослідній роботі
52	To be post-graduate	Бути аспірантом
53	To attend graduate school (courses)	Відвідувати курси для вступу в аспірантуру
54	Clinical internship	Клінічна інтернатура
55	The theme of my thesis	Тема моєї дисертації
56	My scientific supervisor is …	Мій науковий керівник
57	Under the supervision of	Під курівництвом
58	Associate professor	Доцент
59	Assistant	Асистент
60	I'd like to point out right at the beginning that…	Спочатку хотілося б відмітити
61	Just at the beginning I would go as far as to say that…	Спочатку, хотілося відзначити
62	It should be pointed out right as the beginning that…	Спочатку, необхідно відзначити
63	We very clearly remember that…	Ми дуже добре пам'ятаємо, що
64	Today we'll be taking a closer look at…	Сьогодні ми більш детальніше розглянемо
65	Let's talk briefly about…	Давайте поговоримо стисло
66	But right now our attention turns to…	А зараз звернемо увагу
67	Now, let's look at the situation in…	Давайте розглянемо цю ситуацію (з іншого боку)
68	And now let's turn to…	А зараз перейдемо до...
69	I think what we can hope to do now is…	Я вважаю, що зараз ми можемо сподіватися на...
70	What is likely to happen is…	Скоріше за все станеться наступне
71	Let's move to another question.	Давайте перейдемо до наступного питання
72	Now it is going to be my pleasure to explain to you…	Я з задоволенням(з радістю) поясню вам

73	I don't profess to be an expert on the subject of…	Я не претендую на роль експерта у цьому питанні (у питанні стосовно до)
74	No one, I think, is challenging the view that…	Думаю, ні в кого не виникає сумнівів, що
75	I am tempted to think that…	Я схильний до думки що
76	I don't honestly think that…	Я, щиро кажучи, не вважаю, що
77	And now I'd prefer to talk about… rather than…	Зараз я би хотів поговорити про,…а не про…
78	It strikes me that…	Мене вражає, що
79	I know from personal experience…	Я з свого досвіду знаю, що
80	I hold the view that…	Я дотримуюсь точки зору, що
81	Well, my personal feeling is…	Моя власна думка
82	It's my firm believe that…	Я впевнений, що
83	As far as I am concerned…	Щодо мене, то
84	It's been my observation that…	За моїми спостереженнями
85	I am not so pessimistic as to suggest…	Я не настільки песимістичний, щоб припустити
86	I've got an impression that…	В мене враження, що
87	On the other hand…	З іншого боку
88	There is another side to this…	Є і інший бік
89	There are 2 ways of looking at this…	На це можна подивитися з обох сторін
90	There are different views of…	Існують різні думки щодо
91	It would be a mistake to think that…	Було б помилкою думати що
92	It is not a final word on the matter	Це не останнє слово у цій справі
93	It doesn't necessarily mean that…	Це не обов'язково означає, що
94	Well, there's been a debate about this.	З цього приводу ведуться суперечки.
95	I take a different view at…	У мене інша думка з цього приводу…
96	Opponents argue that…	Опоненти стверджуть, що…..
97	Many people oppose the viewpoint that…	Більшість людей не підтримують точку зору, що….
98	There's been mixed reaction to…	Була неоднозначна реакція на…..
99	Yes, you're quite right to say	Ви мали рацію, коли сказали…..

	that…	
100	You are certainly correct to say that…	Ви абсолютно праві, говорячи…
101	You've been very right to say that…	Ви абсолютно правильно стверджуєте, що…
102	No questions about it.	Ніяких питань з цього приводу.
103	Well, exactly. That's precisely what I was going to say.	Цілком вірно! Це саме те, що я хотів сказати.
104	I have almost no doubt that…	У мене майже немає сумнівів, що…
105	I am 100% certain that…	Я впевнений на 100%, що….
106	I have little doubt that…	Я майже не сумніваюсь, що….
107	I can disagree.	Я можу не погодитися.
108	I express strong objection to the idea that…	Я цілком не погоджуюсь з думкою, що….
109	I don't think it's fair to say that…	Не думаю, що справедливо стверджувати…
110	That's where you are wrong about it.	Саме в цьому ви не праві….
111	This does not seem to be so.	Здається, що це не так.
112	There is continuing disagreement over…	Постійно виникають суперечки з цього приводу….
113	There has been much disagreement over…	Існує багато суперечностей с цього приводу….
114	It is rather questionable if…	Досить сумнівно, якщо……
115	It looks very unlikely that…	Малоймовірно, що…
116	It's an impossible question to answer.	На це питання неможливо відповісти…
117	I have considerable doubt as far as N. is concerned.	У мене великі сумніви відносно N.
118	I doubt it very much, because…	Я в цьому дуже сумніваюсь, так як…
119	I am rather vague about it.	Я в цьому не надто впевнений.
120	Nobody would want to deny the fact that…	Ніхто не стане заперечувати, що…
121	And the thing that comes particularly strongly is…	І особливо привертає увагу така річ, що…
122	I'd like to remind you that…	Хотілось би нагадати, що….
123	We have to bear in mind that…	Необхідно пам'ятати , що….
124	One has to bear in mind…	Кожен повинен пам'ятати , що..
125	What we have to look forward to is…	На що нам лишається сподіватися так це…
126	It's from this angle that one must seriously consider this problem.	До цього питання потрібно серйозно підійти з іншого боку.

127	It must be admitted that…	Необхідно усвідомити, що…
128	It immediately brings to mind…	Це відразу нагадує……
129	But one mustn't lose sight of the fact that…	Неможливо випускати з поля зору той факт, що…
130	The other thing that we should keep in mind is…	Наступна річ, про яку необхідно пам'ятати
131	To go right to the heart of the problem I'd like to say that…	Переходячи до суті проблеми, я хотів би сказати, що…
132	Yes, the strange thing about it is that…	Так, дивним в цьому є те, що…
133	What I was greatly struck by is…	Що мене вразило, так це…
134	Let me give you a brief example…	Дозвольте навести короткий приклад…
135	Let me give you an example of what I mean…	Дозвольте навести приклад того, що я мав на увазі…
136	Let me illustrate the point with the example…	Дозвольте продемонструвати цей момент на прикладі…
137	What we have seen now is a kind of a perfect example of…	Те, що мы зараз побачили, – це чудовий приклад того, що…
138	Let me see if I can illustrate that for you.	Дозвольте поміркувати, чи зможу я це пояснити.
139	There is a great deal of discussion about…	Багато обговорень йдеться з приводу...
140	It's a problem that will only increase in time.	Це проблема, яка з часом тільки збільшиться (погіршиться).
141	Nobody doubts that…	Ніхто не сумнівається, що…
142	This means just what it says.	Це означає саме те, що було сказано
143	What's more difficult to explain is…	Що ще важче пояснити, так це…
144	There's a widely held view that…	Існує розповсюджена думка, що…
145	There's been a lot of scientific evidence that…	Існує багато наукових доказів того, що…
146	There's enough evidence that…	Існує достатньо доказів, що…
147	To draw to a close I'd like to say that…	Наостанок я хотів би сказати…
148	To have the final say in the matter…	Наостанок скажу що…
149	To crown it all I'd like to say that…	У завершенні всього хотів би сказати…
150	Let's have a final look at…	Давайте розглянемо востаннє…
151	It only remains for me to say…	Мені залишається додати лише те

		що…
152	I would like to sum up the chief points of what has just been said.	Хочу підсумувати головні моменти сказаного.
153	All things considered, the obvious conclusion to be drawn is that…	Беручи все до уваги, ми можемо зробити очевидний висновок, що…
154	All in all, it is evident…	В цілому очевидно що…
155	To sum it up I'd like to say…	Підсумовуючи, хочу сказати…
156	To draw to the conclusion I'd like to say that…	На завершення хотів би додати що…
157	Summarizing, we may say that…	Підсумовуючи ми можемо сказати що…
158	That's where I'd like to end.	На цьому хочу завершити.
159	(Maybe not) everybody knows	(Можливо не) всі знають
160	It's a fact that	Без сумніву
161	It's a well-known fact that	Добре відомий факт,що
162	I support (share) your idea (opinion, point oa view)	Я підтримую (розділяю) вашу ідею (думку)
163	At the beginning of me story	На початку моєї розповіді
164	At the end of me story	У кінці моєї розповіді
165	I want to continue his (her) story about and tell you about	Я хочу продовжити його (її) розпо-відь про…і розповісти вам про..
166	I'd like to add some important facts (information) a couple of detalis	Я б хотів додати декілька важли-вих фактів (небагато інформації) Декілька деталей
167	It's common knowledge	Загальновідомо
168	It goes without saying	Зрозуміло
169	It's clear to everybody	Всім зрозуміло
170	I think you will agree with me	Я думаю, що ви погодитеся зі мною,
171	I agree-I don't agree-I disagree	Я згоден /не згоден
172	As I have already said -mentioned - marked	Як я вже казав -згадував -помічав
173	Personally I …	Особисто я
174	Any(every) pupil can easily answer this question	Кожен учень може легко відповісти на запитання
175	Any more or less educated person	Будь-яка більш-менш освічена людина
176	I'll try to do my best	Я постараюся зробити все від мене залежне
177	It would be in place here to say -to mention -to mark	Було б доречно сказати -згадати

		-відмітити
178	I can hardly imagine person who …	Мені важко уявити людину, яка ...
179	I(don't)have a very good idea about…	Я(не)мають гарного уявлення про...
180	I'm afraid I have a very general idea about	Боюся, у мене дуже загальне уявлення про
181	I had a very general (rough) idea about …before reading this text	Я мав дуже загальне (поверхневе) уявлення про..., перш ніж прочитав цей текст
182	I don't want to boast, but	Не хочу нахвалятися, але
183	Without false modesty I can say	Без удаваної скромності я можу сказати
184	I can't boast that I know I have a perfect idea about	Я не можу похвалитися тим, що я добре знаюся на
185	I'm(not) good at this question	
186	I'm far from this problem	Я далекий від цієї проблеми
187	To my shame I have never heard about…	На мій сором я ніколи не чув про
188	It's beyond doubt that	Без сумніву
189	Without any (a shadow of) doubt	Без жодного сумніву
190	And now some (=a few) words about…	А зараз кілька слів про

РОЗДІЛ IV

ТЕКСТИ ДЛЯ СТУДЕНТІВ МЕДИЧНОГО ФАКУЛЬТЕТУ

Text 1. What are Vitamins?

Vitamins are nutrients required in very small amounts for essential metabolic reactions in the body. Vitamins are biomolecules that act both as catalysts and substrates in chemical reactions. When acting as a catalyst, vitamins are bound to enzymes and are called cofactors, for example vitamin K forms part of the proteases involved in blood clotting.

Vitamins also act as coenzymes to carry chemical groups between enzymes, for example folic acid carries various forms of carbon groups (methyl, formyl or methylene) in the cell.

Until the 1900s, vitamins were obtained solely through food intake. Many food sources contain different ratios of vitamins. Therefore, if the only source of vitamins is food, changes in diet will alter the types and amounts of vitamins ingested. However, as many vitamins can be stored by the body, short-term deficiencies do not usually cause disease.

Vitamins have been produced as commodity chemicals and made widely-available as inexpensive pills for several decades, allowing supplementation of the dietary intake.

Text 2. History of Vitamin research

The value of eating certain foods to maintain health was recognized long before vitamins were identified. The ancient Egyptians knew that feeding a patient liver would help cure night blindness, now known to be caused by a vitamin A deficiency. In 1747, the Scottish surgeon James Lind discovered that citrus foods helped prevent scurvy (цинга), a particularly deadly disease in which collagen is not properly formed, and is characterized by poor wound healing, bleeding of the gums, and severe pain. In 1753, Lind published his

Treatise on the Scurvy, which recommended using lemons and limes to avoid scurvy, which was adopted by the British Royal Navy. This led to the nickname Limey for sailors of that organization. Lind's discovery, however, was not widely accepted by individuals in the Royal Navy's Arctic expeditions in the 19th century, where it was widely believed that scurvy could be prevented by practicing good hygiene, regular exercise, and by maintaining the morale of the crew while on board, rather than by a diet of fresh food. As a result, Arctic expeditions continued to be plagued by scurvy and other deficiency diseases. In the early 20th century, when Robert Falcon Scott made his two expeditions to the Antarctic the prevailing medical theory was that scurvy was caused by "tainted" canned food.

Text 3. Vitamin Deficiencies

Deficiencies of vitamins are classified as either primary or secondary. A primary deficiency occurs when you do not get enough of the vitamin in the food you eat. A secondary deficiency may be due to an underlying disorder that prevents or limits the absorption or use of the vitamin, due to a “lifestyle factor”, such as smoking, excessive alcohol consumption, or the use of medications that interfere with the absorption or the body's use of the vitamin. Individuals who eat a varied diet are unlikely to develop a severe primary vitamin deficiency. In contrast, restrictive diets have the potential to cause prolonged vitamin deficits, which may result in often painful and potentially deadly diseases.

Because humans do not store most vitamins in their bodies, a human must consume them regularly to avoid deficiency. Human corporeal stores for different vitamins vary widely; vitamins A, D, and B12 are stored in significant amounts in the human body, mainly in the liver, and an adult human may be deficient in vitamin A and B12 for long periods of time before developing a deficiency condition. Vitamin B3 is not stored in the human body in significant amounts, so stores may only last a couple of weeks.

Text 4. Classification of Vitamins

Vitamins are classified as water soluble, meaning that they dissolve easily in water, or fat soluble, and are absorbed through the intestinal tract with the help of lipids. Each vitamin is typically used in multiple reactions and therefore, most have multiple functions.

In humans there are thirteen vitamins, divided into two groups; four fat-soluble vitamins (A, D, E and K), and nine water-soluble vitamins (eight B vitamins and vitamin C).

Vitamins are essential for the normal growth and development of a multicellular organism. Using the genetic blueprint inherited from its parents, a fetus begins to develop, at the moment of conception, from the nutrients it absorbs. The developing fetus requires certain vitamins and minerals to be present at certain times. These nutrients facilitate the chemical reactions that produce, among other things, skin, bone, and muscle. If there is serious deficiency in one or more of these nutrients, a child may develop a deficiency disease. Even minor deficiencies have the potential to cause permanent damage.

For the most part, vitamins are obtained through food sources. However, a few vitamins are obtained by other means: for example, microorganisms in the intestine - commonly known as "gut flora" - produce vitamin K and biotin, while one form of vitamin D is synthesized in the skin with the help of natural ultraviolet in sunlight. Humans can produce some vitamins from precursors they consume. Examples include vitamin A, which can be produced from beta carotene; and niacin, from the amino acid tryptophan.

Once growth and development are completed, vitamins remain essential nutrients for the healthy maintenance of the cells, tissues, and organs that make up a multicellular organism; they also enable a multicellular life form to efficiently use chemical energy provided by food eaten, and to help process the proteins, carbohydrates, and fats required for respiration.

Text 5. Risk Factors for Vitamin D Deficiency

Exclusively breast fed infants: Infants who are exclusively breast fed and do not receive vitamin D supplementation are at high risk of vitamin D deficiency, particularly if they have dark skin and/or receive little sun exposure. Human milk generally provides 25 IU of vitamin D per liter, which is not enough for an infant if it is the sole source of vitamin D. Older infants and toddlers (малюки) exclusively fed with milk substitutes and weaning foods that are not vitamin D fortified are also at risk of vitamin D deficiency. The American Academy of Pediatrics recommends that all infants that are not consuming at least 500 ml (16 ounces) of vitamin D fortified formula or milk be given a vitamin D supplement of 200 IU/day.

Dark skin: People with dark skin synthesize less vitamin D on exposure to sunlight than those with light skin. The risk of vitamin D deficiency is particularly high in dark-skinned people who live far from the equator. In the U.S., 42% of African American women between 15 and 49 years of age were vitamin D deficient compared to 4% of white women.

Aging: The elderly have reduced capacity to synthesize vitamin D in the skin when exposed to UVB radiation, and are more likely to stay indoors or use sunscreen. Institutionalized adults are at extremely high risk of vitamin D deficiency without supplementation.

Covering all exposed skin or using sunscreen whenever outside: Osteomalacia has been documented in women who cover all of their skin whenever they are outside for religious or cultural reasons. The application of sunscreen with an SPF factor of 8 reduces production of vitamin D by 95%.

Fat malabsorption syndromes: Cystic fibrosis and cholestatic liver disease impair the absorption of dietary vitamin D.

Inflammatory bowel disease: People with inflammatory bowel disease like Crohn's disease appear to be at increased risk of vitamin D deficiency, especially those who have had small bowel resections.

Text 6. Vitamin C

Vitamin C is a water-soluble vitamin used to treat and prevent a wide variety of conditions. Often, people use it to prevent or treat the common cold. However, there are other claimed uses of vitamin C as well, such as for reducing the risk of heart disease. Some of these uses are more valid than others.

The vitamin has several different effects in the human body, such as:

- *Antioxidant*. Many of the effects of vitamin C can be attributed to its antioxidant effects. As an antioxidant, it helps prevent the formation of free radicals, damaging molecules or atoms that can start a chain reaction of cellular damage. Free radicals play a role in various age-related conditions, such as cancer and heart disease.

- *Immune function*. There are numerous different proposed mechanisms by which vitamin C may improve immune function. At this time, it is not entirely clear how the vitamin stimulates the immune system.

- *Iron absorption*. Vitamin C aids in the absorption of iron from the digestive tract into the body.

- *Various metabolic pathways and synthesis processes.* It is important for many different crucial processes in the body, including forming cartilage and proteins and building or breaking down numerous other compounds or tissues in the body.

Vitamin C may be effective for several different uses. However, there is much controversy about some uses, such as for the common cold.

Most people do not experience side effects with vitamin C (at normal doses). However, some people may experience side effects (especially with high doses), including, but not limit to nausea, vomiting, heartburn or indigestion, insomnia,

kidney stones. Normal doses are probably safe for most people, but high doses can cause problems. Some people may be more likely to experience problems due to vitamin C.

Text 7. Allergy

An allergy can refer to several kinds of immune reactions including Type I hypersensitivity in which the person's body is hypersensitised and develops immunoglobulin E (IgE), a certain class of antibodies to typical proteins. When a person is hypersensitised, these substances are known as allergens. The word allergy derives from the Greek words *allos* meaning "other" and *ergon* meaning "work". Type I hypersensitivity is characterized by excessive activation of mast cells and basophils by immunoglobulin E, resulting in a systemic inflammatory response that can result in symptoms as benign as a runny nose, to life-threatening anaphylactic shock and death.

Allergy is a very common disorder and more than 50 million Americans suffer from allergic diseases. Allergies are the sixth leading cause of chronic disease in the United States, costing the health care system $18 billion annually.

The term and concept of "allergy" was coined by a Viennese pediatrician named Clemens von Pirquet in 1906. He observed that the symptoms of some of his patients might have been a response to outside allergens such as dust, pollen, or certain foods. For a long time all hypersensitivities were thought to stem from the improper action of inflammatory immunoglobulin class IgE, however it soon became clear that several different mechanisms utilizing different effector molecules were responsible for the myriad of disorders previously classified as "allergies". A new four-class (now five) classification scheme was designed by H. Gell and A. Coombs. Allergy has since been kept as the name for Type I Hypersensitivity, characterized by classical IgE mediation of effects.

Text 8. Signs and symptoms of Allergy

Allergy is characterized by a local or systemic inflammatory response to allergens. Local symptoms are:

Nose: swelling of the nasal mucosa (allergic rhinitis);

Eyes: redness and itching of the conjunctiva (allergic conjunctivitis);

Airways: bronchoconstriction, wheezing and dyspnoea, sometimes attacks of asthma;

Ears: feeling of fullness, possibly pain, and impaired hearing due to the lack of eustachian tube drainage;

Skin: various rashes, such as eczema, hives (urticaria) and contact dermatitis;

Head: while not as common, headaches are seen in some with environmental or chemical allergies.

Systemic allergic response is also called anaphylaxis. Depending on the rate of severity, it can cause cutaneous reactions, bronchoconstriction, edema, hypotension, coma and even death.

Hay fever is one example of an exceedingly common minor allergy - large percentages of the population suffer from hay fever symptoms in response to airborne pollen. Asthmatics are often allergic to dust mites. Apart from ambient allergens, allergic reactions can be caused by medications.

Text 9. Diagnosis of Allergy

There are several methods for the diagnosis and assessment of allergies.

Skin test

The typical and most simple method of diagnosis and monitoring of Type I Hypersensitivity is by skin testing, also known as prick testing due to the series of pricks made into the patient's skin. Small amounts of suspected allergens and/or their extracts (pollen, grass, mite proteins, peanut extract, etc.) are introduced to sites on the skin marked with pen or dye (the ink/dye should be carefully selected, lest it cause an allergic response itself). The allergens are either injected intradermally or into small scratchings made into the patient's skin, often with a lancet. Common areas for testing include the inside forearm and back. If the patient is allergic to the substance, then a visible inflammatory reaction will

usually occur within 30 minutes. This response will range from slight reddening of the skin to full-blown hives in extremely sensitive patients.

After performing the skin test and receiving results, the doctor may apply a steroid cream to the test area to reduce discomfort (such as itching and inflammation).

Text 10. Problems with skin test

While the skin test is probably the most preferred means of testing because of its simplicity and economics, it is not without complications. Some people may display a delayed-type hypersensitivity (DTH) reaction which can occur as far as 6 hours after application of the allergen and last up to 24 hours. This can also cause serious long-lasting tissue damage to the affected area. These types of serious reactions are quite rare.

Additionally, the application of previously unencountered allergens can actually sensitize certain individuals to the allergen, causing the inception of a new allergy in susceptible individuals.

Skins tests also are not always able to pinpoint a patient's specific allergies if the patient has an allergy but does not react to the skin test allergen.

Total IgE (immunoglobulin E) count: Another method used to qualify type I hypersensitivity is measuring the amount of serum IgE contained within the patient's serum. This can be determined through the use of radiometric and color metric immunoassays. Even the levels the amount of IgE specific to certain allergens can be measured by using of the radioallergosorbent test (RAST).

Text 11. Relationship with parasites

Some recent research has also begun to show that some kinds of common parasites, such as intestinal worms (e.g. hookworms), secrete immunosuppressant chemicals into the gut wall and hence the bloodstream which prevent the body

from attacking the parasite. This gives rise to a new slant on the "hygiene hypothesis" — that co-evolution of man and parasites has in the past led to an immune system that only functions correctly in the presence of the parasites. Without them, the immune system becomes unbalanced and oversensitive. Gut worms and similar parasites are present in untreated drinking water in undeveloped countries, and in developed countries until the routine chlorination and purification of drinking water supplies. This also coincides with the time period in which a significant rise in allergies has been observed. So far, there is only sporadic evidence to support this hypothesis — one scientist who suffered from seasonal allergic rhinitis (hay fever) infected himself with gut worms and was immediately 'cured' of his allergy with no other ill effects. Full clinical trials have yet to be performed however. It may be that the term 'parasite' could turn out to be inappropriate, and in fact a hitherto unsuspected symbiosis is at work.

Text 12. Allergens

Medical scientists are becoming more and more interested in allergies. An allergy is a condition caused by an excessive reaction in some people to a substance or substances which would not normally cause a disease. In fact, some researchers do not classify allergies as diseases, although they can be just as troublesome. Severe reactions can even result in death.

Substances that cause allergies are called allergens. The most common natural allergens are dust and pollen. Some plants and flowers give out pollen to the atmosphere during spring and early summer. Many people develop symptoms like those of the common cold such as watery eyes and nose, sneezing and a slight rise in temperature. This is commonly called the hay fever. Allergic reactions can also be caused by food. Milk and eggs are known to be allergenic for some people. However, almost anything eaten, drunk, inhaled or touched can cause a reaction.

Drugs, even the common ones like aspirin, can result in distressing symptoms. Some are dangerous. When penicillin was first manufactured on a large scale, it proved to be effective against many pathogens. But it had a tendency to cause reactions so strong that patients sometimes died. The sulpha drugs were also quite dangerous, although they did not kill as many people as penicillin did. We now have better antibiotics, but they must be taken with great care.

There is no sure remedy for allergies. Sometimes the body cures itself. Treatment might consist of giving drugs either to reduce the symptoms or to suppress the reaction. Drugs of the second type are called antihistamines. They are not always effective, and they tend to make the patient sleepy. Some doctors think it is better to identify and avoid the allergen, but this is not always possible.

Text 13. Tobacco smoking

Tobacco smoke contains many harmful chemicals including nicotine which is a poisonous, addictive drug. It also damages the heart, blood vessels and nerves Smokers become addicted to nicotine and so find it hard to give up smoking. Tar causes lung cancer and other types of cancers. This has been proved by comparing the numbers of smokers and non-smokers who develop cancer. Carbon monoxide is a poisonous gas. It reduces the amount of oxygen that can be carried in the blood by irreversibly combining with the hemoglobin in red blood cells. In pregnant women, this can deprive the developing foetus of oxygen resulting in a low birth mass or a premature birth.

Tiny particles in the smoke get trapped in the lining of the trachea and bronchial tubes and extra mucus is produced. Chemicals in the smoke paralyze the tiny cilia which normally clear the mucus out of the air passages. The only way to clear this is by coughing. Because the lungs cannot be kept clean, smokers often develop bronchitis and chest infections. Repeated coughing causes the delicate walls of the alveoli to be damaged, which reduces the surface area for gas

exchange. This is one of the reasons why smokers are often short of breath. The lungs can develop large holes which blow up like balloons. This condition is called emphysema.

Text 14. Chronic diseases

Chronic, non-communicable diseases (NCDs), mental health disorders, and injuries and violence are major problems, accounting for over 40 per cent of the disease burden in high mortality developing countries, and over 75 per cent in lower mortality developing countries. NCDs, such as cardiovascular disease, diabetes, chronic respiratory disease and major cancers, are often considered to be "diseases of affluence". However, the majority of their disease burden occurs in developing countries, and at rates, particularly in urban areas, that are often higher than in developed countries. As the populations of developing countries age, and with rapid urbanisation and globalisation driving increases in the risk factors for chronic NCDs, their burden is increasing rapidly.

Of the estimated 400 million persons affected by mental disorders, most live in developing countries which command only a fraction of global mental health resources. Mental disorders account for 5-10 per cent of the burden of disease in these countries. Vulnerable populations, such as the poor and those affected by disasters, are at greater risk. Mental disorders can be effectively and affordably treated at the local level. However, most of those in need do not receive any treatment. Injuries, including those caused by violence, are also a major public health concern, leading to over five million deaths worldwide each year. They include motor vehicle crashes, homicide, suicide, falls, poisoning, drowning, fires and burns. On the whole, injuries do not occur at random: they are largely predictable and, therefore, preventable.

Text 15. Common non-communicable Diseases

Cancers: Cancer is amongst the three leading causes of death in the UK. The most common killers are lung, breast, colorectal and prostate cancer which together account for about 62,000 deaths each year.

Lung cancer: About one fifth of all cancer cases and one quarter of cancer deaths in men are due to lung cancer. This represents about 23,000 cases and 18,000 deaths in men each year (12,000 and 10,000 respectively in women). In both men and women only about six patients in every hundred will still be alive five years after diagnosis. More than £130 million is spent by the NHS on lung cancer care each year.

Breast cancer: Nearly one third of cancer cases and one fifth of cancer deaths in women result from breast cancer. This represents about 30,000 cases and 11,000 deaths each year. About two thirds of women with breast cancer survive for at least five years after diagnosis. More than £150 million is allotted by the NHS to breast cancer care each year.

Prostate cancer: In men approximately one cancer case out of seven are associated with prostate cancer. This represents about 15,000 cases and 8,000 deaths each year. About two fifths of men with prostate cancer can expect to live for at least five years after diagnosis. Nearly £100 million is spent by the NHS every year to cope with prostate cancer each year.

Text 16. Coronary heart disease and strokes

Coronary heart disease and stroke, along with other diseases of the circulatory system, account for over 200,000 of the half a million deaths which occur in this country each year. While death rates are improving substantially for the best off in society, the worst off have not benefited to anything like the same extent, thus widening the health gap.

Several of the major risk factors which increase the chances of people developing coronary heart disease or having a stroke are now well established. The

key lifestyle risk factors, shared by coronary heart disease and stroke, are smoking, poor nutrition, obesity, physical inactivity and high blood pressure. Excess alcohol intake is an important additional risk factor for stroke. Many of these risk factors are unevenly spread across society, with poorer people often exposed to the highest risks.

In England the Department of Health has set a target to reduce the death rate from cancer in people under 75 years by at least a fifth by 2010 - saving up to 100,000 lives in total. It supports all efforts to reduce the toll cancer take on our society. There are many supported actions including improved screening programs, the promotion of healthy diets and occupational health protection. However, the biggest gains will be made through further controls and campaigns to reduce smoking. The target includes: major changes in diet, particularly among the worst off, with increased consumption of such foods as fruit, vegetables, and oily fish; large reductions in tobacco smoking particularly among young people, women and people in disadvantaged communities; people keeping much more physically active - by walking or cycling, for example - on a regular basis; people controlling their body weight so as to keep to the right level for their physique; avoiding drinking alcohol to excess.

Text 17. Non-communicable Diseases are not disease of Affluence

Non-industrialized regions often have lower life expectancies, even for non-communicable causes of death. Although these diseases, including heart disease and stroke, are the largest proportional killers of people in the industrialized world, they often kill a large population in non-industrialized world, and at a younger age. For example in 1990, of the 6.3 million people that died of heart disease, 57% were in the non-industrialized regions; among the 4.4 million people that died of stroke, 68% were in non-industrialized countries. When one looks at the probability of

dying between the ages of 15 and 60, the industrialized and non-industrialized worlds have similar rates for non-communicable diseases.

For people between the ages of 60 and 70, some non-industrialized regions have a higher rate of death from non-communicable diseases than the industrialized regions. This shows that unequal access to treatment and other factors causes premature mortality rates in non-industrialized countries.

This refutes the myth that non-communicable diseases, such as stroke and heart disease, mainly impact the affluent. Instead, it highlights that communicable diseases kill children in non-industrialized countries most often, and these deaths have a significant impact on overall world mortality rates. Controlling these diseases, through immunization and other means, can be one large step toward achieving health equality.

Text 18. Cancer

It would be much easier to detect and treat cancer if it were a single disease, as many people think. There are actually some 200 different diseases that can be called cancers. They all have different causes; originate in various tissues; develop for various reasons and in different ways; and demand very different types of treatment.

Cancers can be categorized into three major groups: those arising in epithelial (covering) tissue are called carcinomas; those originating in connective tissue, such as bones and muscle, are sarcomas; and the third group called leukemias and lymphomas are cancerous diseases of blood tissue and lymphatic system respectively. The last group is very different from the previous two in that it does not produce solid tumors.

Carcinomas are the most common type of cancer that people suffer from. They develop on the surface of an organ such as the skin, the lining of the uterus, mouth, nose, throat, air tubes in the lungs, inside a duct in the breast or any other

site. Most of these cancers can be treated successfully as long as the cancerous (malignant) cells remain as a separate mass — without invading the nearby tissues.

Sarcomas include tumors of the kidney, pancreas, liver and brain, and bone tissue like the spine, pelvis, ribs and femur. Cancers of muscle, tendons and ligaments are very rare. The bone cancers, named separately as myelomas, usually cause the bone to break easily or collapse under pressure. Again, as in many forms of cancer, early detection can lead to treatment by excision or destruction (using radiation) of the affected part or area of an organ.

The third category is that of cancers of blood tissue and the lymphatic system known as leukemias and lymphomas. Leukemias (usually referred to in the plural) are different forms of cancer affecting various white blood cells. Children under 12 outnumber adults of all ages in developing leukemias. Lymphosarcomas and lymphomas are cancers of lymph nodes and reticular cells respectively. Cancer of the thyroid glands is the most common example in this group.

Whatever the type, cancer remains one of the fatal diseases of modern times. It is the second biggest killer in the developed world and may soon become the number one killer. After detection, only one out of five survives — only for a period of five years.

Text 19. Diabetes mellitus

Diabetes mellitus is a metabolic disorder characterized by hyperglycemia (high glucose blood sugar), among other signs. The World Health Organization recognizes three main forms of diabetes: *type 1*, *type 2* and *gestational diabetes* (or *type 3*, occurring during pregnancy). Although these share signs and symptoms, they have different causes and population distributions. They are not a single disease or condition. Type 1 is generally due to autoimmune destruction of the insulin-producing cells — pancreatic beta cells — while type 2 is characterized by tissue wide insulin resistance and varies widely. Gestational diabetes is due to a

poorly understood interaction between fetal needs and maternal metabolic controls. Type 2 sometimes progresses to loss of beta cell function as well.

Since the first use of insulin (1921) Types 1 and 2 have been incurable, but treatable chronic conditions; gestational diabetes typically resolves with delivery. Aside from acute glucose levels abnormalities, the main risks to health are the characteristic long-term complications. These include cardiovascular disease, chronic renal failure (the main cause of dialysis in developed world adults), retinal damage (which can lead to blindness and is the most significant cause of adult blindness in the non-elderly in the developed world), nerve damage, microvascular damage, the leading cause of non-traumatic amputation in developed world adults.

Text 20. Diabetes mellitus - Terminology

The term *diabetes* was coined by Aretaeus of Cappadocia. It is derived from the Greek word *diabaínein* that literally means "passing through," a reference to one of diabetes' major symptoms - excessive urine production. In 1675 Thomas Willis added *mellitus* from the Latin word meaning a sweet taste. This had been noticed long before in ancient times by the Greeks, Chinese, Egyptians, and Indians. In 1776 Matthew Dobson confirmed the sweet taste was because of an excess of a kind of sugar in the urine and blood of people with diabetes.

The ancient Indians tested for diabetes by observing whether ants were attracted to a person's urine, and called the ailment "sweet urine disease". The Korean, Chinese and Japanese words for diabetes all mean "sweet urine disease". Medieval European doctors tested for it by tasting the urine themselves.

While the term, *diabetes*, usually refers to diabetes mellitus, there are several other, rarer, conditions also named diabetes. The most common of these is diabetes insipidus, in which the urine is not sweet; it can be caused by either kidney or pituitary gland damage.

The term "type 1diabetes" has universally replaced several former terms, including childhood onset diabetes, juvenile diabetes and insulin dependent

diabetes. "Type 2 diabetes" has also replaced several older terms, including adult-onset diabetes, obesity related diabetes, and non-insulin dependent diabetes. Beyond these numbers, there is no standard, so a type 2 who has become insulin dependent has sometimes been called type 3, while the same term is also used for gestational diabetes in some cases.

Text 21. Diabetes - Prevention

As little is known on the exact mechanism by which type 1 diabetes develops, there are no preventive measures available for that form of diabetes. Some studies have attributed a protective effect of breastfeeding on the development of type 1 diabetes.

Type 2 diabetes can be prevented in many cases by making changes in diet and increasing physical activity. Some studies have shown delayed progression to diabetes through the use of metformin or valsartan. Breastfeeding might also be correlated with the prevention of type 2 of the disease in mothers.

As of late 2006, although there are many claims of nutritional cures, there is no reliable proof of their effectiveness. In addition, despite claims by some that vaccinations may cause diabetes, there are no studies proving any such connection.

Individuals with elevated levels of persistent organic pollutants in their body are 38 times more likely to have diabetes than individuals with low levels of these pollutants, according to a Korean study. Among study participants, obesity was associated with diabetes only in people who was tested high for these pollutants. These pollutants are accumulated in animal fats, so minimizing consumption of animal fats may reduce the risk of diabetes.

Text 22. Types of Diabetes

Diabetes mellitus is a disorder that is marked by elevated blood glucose (commonly referred to as blood sugar). A large portion of the food that we eat is

converted by the body into glucose. The blood delivers glucose throughout the body, but the hormone insulin is needed in order for it to be transported into most cells. Insulin comes from the pancreas. If the pancreas does not make sufficient insulin or cells are resistant to its activity of promoting glucose uptake, the blood glucose level becomes elevated.

Type I diabetes represents approximately 5-10% of diabetic patients. It usually has a rapid onset and most frequently manifest in children and adolescents. Because the body cannot use dietary glucose, the level in the blood is elevated and excess glucose is lost in the urine, causing weakness, thirst and hunger. The treatment for type I diabetes is insulin replacement.

Type II diabetes is found in some 120 million adults, who are able to produce insulin but the liver and body cells are resistant to its actions. Some type II diabetics can be effectively treated with diet alone, but many require oral medications. Historically, this has been thought of as maturity onset diabetes because it tends to occur after age 50, but there has been a dramatic increase in the number of adolescents with the disease. This is thought to be due to increased obesity and decreased physical activity in this age group.

The major complication of diabetes is damage to the heart and blood vessels, which can cause heart attacks, strokes, and poor circulation. The effects on blood vessels also increase the risk of developing high blood pressure (hypertension).

Diabetics have an increased risk of eye disease. Damage to the retina associated with diabetes is the leading cause of blindness in adults under age 65 in the US.

When blood glucose is high, nerve cells swell and scar. The disease associated with damage to the nerves outside of the brain and spinal cord is referred to as peripheral neuropathy. The most common type of neuropathy in diabetics involves impairment of sensory nerves. Impaired nerve signals to the brain about sensations such as the detection of heat or pain may lead to burns or undetected cuts that can become infected. If untreated, infected foot and leg ulcers

can spread to the bone and may require amputation. Burning, pain or tingling sensations in the hands, legs and feet are also common.

Text 23. Type 2 diabetes

Type 2 diabetes is the most common of the two forms of diabetes, affecting 90% or greater of the people with diabetes. In type 2 diabetes the pancreas produces insulin but the cells of the body become resistant or the amount of insulin produced is not enough. Glucose builds up in the blood stream (hyperglycemia) and the cells of the body are unable to function properly.

Type 2 diabetes can affect anyone at any age but is more common in overweight populations, people with a family history of type 2 diabetes, the elderly, and people with metabolic syndrome (problems with hypertension and cholesterol issues.)

Some life-threatening problems that can occur with uncontrolled blood glucose levels. Retinopathy is caused by damage to the small blood vessels of the retina. These blood vessels begin to leak fluid into the retina, which leads to blurred vision. Kidney damage is caused by destruction of the small vessels in the nephrons allowing protein to flow into the urine. As this neuropathy continues, the function of the kidney declines and leads to kidney failure and end-stage kidney disease. Circulatory problems and nerve damage are cause by a hardening of the arteries. This causes loss of sensation, risk of ulcers, infection and can lead to amputation.

Text 24. Diabetes - What Is It?

To have energy you need sugar, so there's a little bit of sugar in your blood at all times. Your body uses a chemical called "insulin" to let this sugar into your cells. Insulin is produced in the pancreas, which is an organ that sits behind your stomach.

Most cells in your body have insulin receptors on their outer surface. Insulin fits into these receptors like a key opening a lock. When this connection is made, it signals special transporter proteins to move up to the cell membrane, where they

allow more sugar molecules to enter the cell. This sugar fuels your body's cells, giving them the energy they need to work properly and repair themselves.

Normally, your body is able to maintain proper levels of sugar in your blood and inside your cells. But in people with diabetes, the body's cells stay locked and sugar can't get in to provide energy. This causes too much sugar to build up in the blood. Over time, high levels of sugar in the blood can lead to serious health problems in the eyes, feet and hands, kidneys, and heart.

There are two main types of diabetes - type 1 and type 2.

Type 1 diabetes usually begins in young children and teenagers. People with this type of diabetes have a pancreas that doesn't produce enough insulin - or stops producing it altogether. This means they need to have insulin shots on a regular basis to help keep their blood sugar at the right level.

Type 2 diabetes happens in people whose pancreas DOES make insulin. But in a person with this type of diabetes, the insulin receptors on the cells' surface become less sensitive. Since the receptors don't respond to the insulin anymore, sugar stays locked out of the cells and remains in the blood. Type 2 diabetes is usually seen in older people. Also, things like being overweight and smoking can make a person more likely to get type 2 diabetes. This is especially true for those who are African American or Hispanic.

Text 25. What Is Mental Retardation?

To understand mental retardation, it helps to know what intelligence is. Intelligence is a way of describing someone's ability to think, learn, and solve problems. Mental retardation means that someone has lower than average intelligence.

The person may have difficulty learning and might need longer to learn social skills, such as how to be friends or how to communicate with others. People with mental retardation also might be less able to care for themselves or unable to live on their own as adults.

During school, a kid with mental retardation will probably need help. Some kids have aides that stay with them during the school day. Special education and other services are available to help with learning and behavior.

They can also receive help in learning "life skills” to take care of themselves as they get older, such as how to ride a public bus to get to work. More and more people with mental retardation are able to have jobs and to live independently.

Mental retardation is not a disease itself. It occurs when something injures the brain or a problem prevents the brain from developing normally. These problems can happen while the baby is growing inside his or her mother, during the baby's birth, or after the baby is born.

Some medicines can cause serious problems if a woman takes them when she is going to have a baby. A woman also can put her baby at risk of mental retardation if she drinks alcohol or takes certain drugs during her pregnancy.

Text 26. Causes of mental retardation

Genetic conditions: Sometimes disability is caused by abnormal genes inherited from parents, errors when genes combine, or other reasons. Examples of genetic conditions include Down syndrome, Fragile X syndrome, and phenylketonuria (PKU).

Problems during pregnancy: Mental disability can result when the fetus does not develop inside the mother properly. For example, there may be a problem with the way the fetus's cells divide as it grows. A woman who drinks alcohol (fetal alcohol syndrome) or gets an infection like rubella during pregnancy may also have a baby with mental disability.

Problems at birth: If a baby has problems during labor and birth, such as not getting enough oxygen, he or she may have developmental disability due to brain damage. The use of forceps during birth can lead to mental retardation in an otherwise normal child. They can fracture the skull and cause brain damage.

Health problems: Diseases like whooping cough, measles, or meningitis can cause mental disability. It can also be caused by extreme malnutrition, not getting enough medical care, or by being exposed to poisons like lead or mercury.

Iodine deficiency, affecting approximately 2 billion people worldwide, is the leading preventable cause of mental disability in areas of the developing world where iodine deficiency is endemic. Iodine deficiency also causes goiter, an enlargement of the thyroid gland. Among the nations affected by iodine deficiency, China and Vietnam have begun taking action.

Institutionalisation at a young age can cause mental retardation in normal children. So can sensory deprivation in the form of severe environmental restrictions (such as being locked in a basement), prolonged isolation, or severe atypical parent-child interactions.

Psycho-social disadvantage: Contributing factors are lacks of reading material, use of language not common in that community, poor diet, poor health practices, and poor housing.

Text 27. Dementia

Dementia is a medical term for mental deterioration (worsening), especially in thought and memory processes. Such worsening of mental condition can be caused by infection, injury, toxins from alcoholism and tumors, and cerebral arteriosclerosis (clogging of small arteries in the brain).

The presenile dementias (Alzheimer's disease) represent a group of degenerative diseases of the brain in which the mental deterioration becomes obvious in the middle age (around 45). Commonly, the first symptom is the patient becomes unusually unreasonable in his actions and judgments. He can no longer fully understand a situation at hand; and therefore, reacts inappropriately. Memory gradually fades and recent events are no longer remembered. However, events that occurred early in life can easily be recalled. The patient may move around aimlessly and get lost in his own house. There is a progressive

deterioration of personal care and cleanliness. Eventually, the patient loses his command over language and is unable to express himself clearly. This process, unfortunately, continues weakening the patient's muscular system to the extent that he is finally confined to bed, completely helpless and dependent on others until he dies.

The mental deterioration in aged patients (above 60) is known as senile dementia. Whether it is caused by the degenerative processes of the brain or cerebral arteriosclerosis is not clear yet. However, it does appear that senile dementia is probably secondary to a degenerative process similar to that of Alzheimer's disease but occurring late in life.

Whether or not dementia can be halted depends very much on its cause. If, for example, the dementia is the result of some brain infection or exposure to toxins from alcohol or any other drug, killing the infectious agent or removing the toxins may be very useful in arresting it. There is no specific cure for any of the degenerative diseases of the brain.

Text 28. Lead poisoning

Lead poisoning in children is a major health concern. Both low and high doses of paint can have serious effects. Children exposed to high doses of lead often suffer permanent nerve damage, mental retardation, blindness, and even death. Low doses of lead can lead to mild mental retardation, short attention spans, distractibility, poor academic performance, and behavioural problems.

This is not a new concern. As early as 1904, lead poisoning in children was linked to lead-based paint. Microscopic lead particles from paint are absorbed into the bloodstream when children ingest flakes of chipped paint, plaster, or paint dust from sanding. Lead can also enter the body through household dust, nail biting, thumb sucking, or chewing on toys and other objects painted with lead-based paint. Although American paint companies today must comply with strict regulations regarding the amount of lead used in their paint, this source of lead poisoning is

still the most common and most dangerous. Children living in older, dilapidated houses are particularly at risk.

Text 29. Body Scan

Sometimes it takes many years for diseases to be found. Now there is a way to look for them before someone is feeling sick. Some illnesses can be found and treated very early by having a body scan.

Body scans allow doctors to look into a person's body. They can see bones, tissue, and blood vessels. By looking into a person's body like this doctors can sometimes see how healthy a person is.

People that have a family history of illness might want to have a body scan. Others that are young and healthy would probably not need one. Some people have body scans because it makes them feel more secure.

Many doctors do not think everyone should have body scans. Body scans are expensive. They are often not necessary. Sometimes body scans can be wrong. When this happens it can cause a lot of unnecessary worry.

Body scans can be very useful to doctors and patients. They can help find diseases at early stages. If diseases are found early they can be treated more easily. It would be a good idea to talk to a doctor before spending money on one.

Text 30. Heart disease

Heart disease is an umbrella term for a number of different diseases which affect the heart. The most common heart diseases are:

Coronary heart disease, a disease of the heart itself caused by the accumulation of atheromatous plaques within the walls of the arteries that supply the myocardium

Ischaemic heart disease, another disease of the heart itself, characterized by reduced blood supply to the organ.

Cardiovascular disease, a sub-umbrella term for a number of diseases that affect the heart itself and/or the blood vessel system, especially the veins and arteries leading to and from the heart. Research on disease dimorphism suggests that women who suffer with cardiovascular disease usually suffer from forms that affect the blood vessels while men usually suffer from forms that affect the heart muscle itself. Well-known causes of cardiovascular disease include diabetes mellitus, hypertension and hypercholesterolemia.

- Pulmonary heart disease, a failure of the right side of the heart.

- Hereditary heart disease, heart disease caused by unavoidable genetic factors.

- Hypertensive heart disease, heart disease caused by high blood pressure, especially localised high blood pressure.

- Inflammatory heart disease, heart disease that involves inflammation of the heart muscle and/or the tissue surrounding it.

- Valvular heart disease, heart disease that affects the valves of the heart.

Text 31. Coronary heart disease and atherosclerotic heart disease

Coronary heart disease (CHD), also called coronary artery disease (CAD) and atherosclerotic heart disease, is the end result of the accumulation of atheromatous plaques within the walls of the arteries that supply the myocardium (the muscle of the heart). While the symptoms and signs of coronary heart disease are noted in the advanced state of disease, most individuals with coronary heart disease show no evidence of disease for decades as the disease progresses before the first onset of symptoms, often a "sudden" heart attack, finally arise. After decades of progression, some of these atheromatous plaques may rupture and (along with the activation of the blood clotting system) start limiting blood flow to the heart muscle. The disease is the most common cause

of sudden death, and is also the most common reason for death of men and women over 65 years of age.

Atherosclerotic heart disease can be thought of as a wide spectrum of disease of the heart. At one end of the spectrum is the asymptomatic individual with atheromatous streaks within the walls of the coronary arteries (the arteries of the heart). These streaks represent the early stage of atherosclerotic heart disease and do not obstruct the flow of blood. A coronary angiogram performed during this stage of disease may not show any evidence of coronary artery disease, because the lumen of the coronary artery has not decreased in calibre.

Over a period of many years, these streaks increase in thickness. While the atheromatous plaques initially expand into the walls of the arteries, eventually they will expand into the lumen of the vessel, affecting the flow of blood through the arteries. While it was originally believed that the growth of atheromatous plaques was a slow, gradual process, some recent evidence suggests that the gradual buildup of plaque may be complemented by small plaque ruptures which cause the sudden increase in the plaque burden due to accumulation of thrombus material.

Text 32. Angina

The pain associated with very advanced CHD is known as angina, and usually presents as a sensation of pressure in the chest, arm pain, jaw pain, and other forms of discomfort. The word *discomfort* is preferred over the word *pain* for describing the sensation of angina, because it varies considerably among individuals in character and intensity and most people do not perceive angina as painful, unless it is severe. There is evidence that angina and CHD present differently in women and men.

Angina that occurs regularly with activity, upon awakening, or at other predictable times is termed stable angina and is associated with high grade narrowings of the heart arteries. The symptoms of angina are often treated

with nitrate preparations such as nitroglycerin, which come in short-acting and long-acting forms, and may be administered transdermally, sublingually or orally. Many other more effective treatments, especially of the underlying atheromatous disease, have been developed.

Angina that changes in intensity, character or frequency is termed unstable. Unstable angina may precede myocardial infarction, and requires urgent medical attention. It is treated with morphine, oxygen, intravenous nitroglycerin, and aspirin. Interventional procedures such as angioplasty may be done.

Text 33. Heart disease and life style

As heart disease continues to be the number-one killer in the United States, researchers have become increasingly interested in identifying the potential risk factors that trigger heart attacks. High-fat diets and "life in the fast lane" have long been known to contribute to the high incidence of heart failure. But according to new studies, the list of risk factors may be significantly longer and quite surprising.

Heart failure, for example, appears to have seasonal and temporal patterns. A higher percentage of heart attacks occur in cold weather, and more people experience heart failure on Monday than on any other day of the week. In addition, people are more susceptible to heart attacks in the first few hours after waking. Cardiologists first observed this morning phenomenon in the mid-1980, and have since discovered a number of possible causes. An early-morning rise in blood pressure, heart rate, and concentration of heart stimulating hormones, plus a reduction of blood flow to the heart, may all contribute to the higher incidence of heart attacks between the hours of 8:00 a.m. and 10:00 a.m.

In other studies, both birthdays and bachelorhood have been implicated as risk factors. Statistics reveal that heart attack rates increase significantly for both females and males in the few days immediately preceding and following their birthdays. And unmarried men are more at risk for heart attacks than their married counterparts. Though stress is thought to be linked in some way to all of the

aforementioned risk factors, intense research continues in the hope of further comprehending why and how heart failure is triggered.

Text 34. Arthritis

Arthritis is a general term that refers to over a hundred different types of joint inflammation. This joint inflammation causes swelling, pain and stiffness. The typical signs of arthritis are swelling of the joint that is warm to the touch, pain, tenderness, stiffness, redness and loss of function. Arthritis is not always limited to the joints of the body and can affect soft tissues and internal organs.

In the joint, inflammation causes damage to the cartilage and synovial lining. When the cartilage is worn down, the bones may rub together. Damage to the synovial lining cause synovial fluid to leak and produce fluid in the joint lining. This adds to the swelling. If the joint lining continues to grow, it can permanently damage the bone. All of this causes pain, swelling and distress for the patient.

The most common types of arthritis are:

Osteoarthritis. This is the most prevalent. In osteoarthritis, the cartilage covering the bone slowly wears away with age and the bones rub together.

Rheumatoid arthritis (RA.) In rheumatoid arthritis the body's immune system begins to attack the joints of the body causing the joint lining to swell.

Gout. Gout is a condition where the body cannot effectively remove uric acid and the uric acid crystallizes in the joints like needles, causing swelling and severe pain.

Text 35. Coronary heart disease

Coronary heart disease is the leading cause of death in the United States. Coronary heart disease is when the arteries that carry blood to the heart become blocked with cells, cholesterol, and fatty deposits, called plaque. The purpose of the blood inside these vessels is to bring oxygen and nutrients to the heart muscle. If an artery becomes narrowed or blocked, oxygen and nutrients cannot be delivered to areas of the heart tissue. This can cause temporary changes to these

areas. If heart tissue goes too long without oxygen or nutrients, heart tissue can die. This is called a heart attack.

There are many tests available to look for coronary heart disease. The choice of which and how many tests to perform depends on your history of heart problems and current symptoms.

If coronary heart disease is diagnosed there are many ways to treat it.

These can include lifestyle changes such as daily exercise, changes in diet, and quitting smoking. Or you may need medication. However, medication can only help treat the symptoms of blocked coronary arteries, it cannot fix them.

In more severe cases of heart disease, surgery is needed to make a new path for blood, going around a narrowed or blocked vessel. This surgery is called coronary artery bypass graft.

During coronary artery bypass graft surgery a blood vessel is taken from somewhere else in the body and is used to bypass a damaged or blocked vessel in the heart. This improves the blood supply to the heart and in turn, improves the delivery of oxygen and nutrients to the heart muscle.

Text 36. Infectious disease and contagious disease

An infectious disease is a clinically evident disease of humans or animals that damages or injures the host so as to impair host function, and results from the presence and activity of one or more pathogenic microbial agents, including viruses, bacteria, fungi, protozoa, multicellular parasites, and aberrant proteins known as prions. Transmission of an infectious disease may occur through several pathways; including through contact with infected individuals, by water, food, airborne inhalation, or through vector-borne spread.

A **contagious disease** (also called a communicable disease) is an infectious disease that is capable of being transmitted from one person or species to another. Contagious diseases are often spread through direct contact with an individual,

contact with the bodily fluids of infected individuals, or with objects that the infected individual has contaminated.

The term infectivity describes the ability of an organism to enter, survive and multiply in the host, while the infectiousness of a disease indicates the comparative ease with which the disease is transmitted to other hosts. An infection however, is not synonymous with an infectious disease; as an infection may not cause clinical symptoms or impair host function.

Text 37. Bacterial pathogens

Among the almost infinite varieties of microorganisms, relatively few cause disease in healthy individuals. Infectious disease results from the interplay between those few pathogens and the defenses of the hosts they infect. The appearance and severity of disease resulting from any pathogen depends upon the ability of that pathogen to damage the host as well as the ability of the host to resist the pathogen. Infectious microorganisms, or microbes, are therefore classified as either *primary pathogens* or as *opportunistic pathogens* according to the status of host defenses.

Primary pathogens cause disease as a result of their presence or activity within the normal, healthy host, and their intrinsic virulence (the severity of the disease they cause) is, in part, a necessary consequence of their need to reproduce and spread. Many of the most common primary pathogens of humans only infect humans, however many serious diseases are caused by organisms acquired from the environment or which infect non-human hosts.

Organisms which cause an infectious disease in a host with depressed resistance are classified as *opportunistic pathogens*. Opportunistic disease may be caused by microbes that are ordinarily in contact with the host, such as bacteria or fungi in the gastrointestinal or the upper respiratory tract, and they may also result from microbes acquired from other hosts or from the environment as a result of traumatic introduction (as in surgical wound infections). An opportunistic disease requires impairment of host defenses, which may occur as a result

of genetic defects, exposure to antimicrobial drugs or immunosuppressive chemicals (as might occur following poisoning or cancer chemotherapy), exposure to ionizing radiation, or as a result of an infectious disease with immunosuppressive activity (such as with measles, malaria or HIV disease). Primary pathogens may also cause more severe disease in a host with depressed resistance than would normally occur in an immunosufficient host.

Text 38. Agents and vectors

Infectious disease requires an *agent* and a *mode of transmission* (or *vector*). A good example is malaria, which is caused by Plasmodial parasites, chiefly *Plasmodium falciparum* but does not affect humans unless the vector, the Anopheles mosquito, is around to introduce the parasite into the human bloodstream.

The vector does not have to be biological. Many infectious diseases are transmitted by droplets which enter the airway (e.g. common cold and tuberculosis).

Infection with most pathogens does not result in death of the host and the offending organism is ultimately cleared after the symptoms of the disease have waned. This process requires immune mechanisms to kill or inactivate the inoculum of the pathogen. Specific acquired immunity against infectious diseases may be mediated by antibodies and/or T lymphocytes. Immunity mediated by these two factors may be manifested by:

- a direct effect upon a pathogen, such as antibody-initiated complement-dependent bacteriolysis, phagocytosis and killing, as occurs for some bacteria,
- neutralization of viruses so that these organisms cannot enter cells,
- or by T lymphocytes which will kill a cell parasitized by a microorganism.

The immune response to a microorganism often causes symptoms such as a high fever and inflammation, and has the potential to be more devastating than direct damage caused by a microbe.

Resistance to infection (immunity) may be acquired following a disease, by asymptomatic carriage of the pathogen, by harboring an organism with a similar structure (crossreacting), or by vacciation. Knowledge of the protective antigens and specific acquired host immune factors is more complete for primary pathogens than for opportunistic pathogens.

Immune resistance to an infectious disease requires a critical level of either antigen-specific antibodies and/or T cells when the host encounters the pathogen. Some individuals develop natural serum antibodies to the surface polysaccharides of some agents although they have had little or no contact with the agent, these natural antibodies confer specific protection to adults and are passively transmitted to newborns.

Text 39. The classification of infectious disease

One way of proving that a given disease is "infectious", is to satisfy Koch's postulates (Robert Koch), which demand that the infectious agent is identified in patients and not in controls, and that patients who contract the agent also develop the disease. These postulates were tried and tested in the discovery of Mycobacteria as the cause for tuberculosis. Often, it is not possible to meet some of the criteria, even in diseases that are quite clearly infectious. For example, *Treponema pallidum*, the causative spirochete of syphilis, cannot be cultured in vitro - however the organism can be cultured in rabbit testes.

Epidemiology is another important tool used to study disease in a population. For infectious diseases it helps to determine if a disease outbreak is sporadic (occasional occurrence), endemic (regular cases often occurring in a region), epidemic (an unusually high number of cases in a region), or pandemic (a global epidemic).

Text 40. Treating Infectious diseases

When a culture has proven to be positive, the sensitivity (or, conversely, the antibiotic resistance) of an agent can be determined by exposing it to test doses of antibiotic. This way, the microbiologist determines how sensitive the target bacterium is to a certain antibiotic. This is usually reported as being: Sensitive, Intermediate or Resistant. The *antibiogram* can then be used to determine optimal therapy for the patient. This can reduce the use of broad-spectrum antibiotics and lead to a decrease in antibiotic resistance.

Doctors who specialise in the medical treatment of infectious disease are called *infectiologists* or *infectious disease specialists*. Generally, infections are initially diagnosed by primary care physicians or internal medicine specialists. For example, an "uncomplicated" pneumonia will generally be treated by the internist or the pulmonologist (lung physician).

The services of the infectious disease team are called for when:

- The disease has not been definitively diagnosed after an initial workup;
- The patient is immunocompromised (for example, in AIDS or after chemotherapy);
- The infectious agent is of an uncommon nature (e.g. tropical diseases);
- The disease has not responded to first line antibiotics;
- The disease might be dangerous to other patients, and the patient might have to be isolated.

The work of the infectiologist therefore entails working with patients and doctors on one hand and laboratory scientists and immunologists on the other hand.

Text 41. Cholera

Cholera has been observed for centuries among human populations and has been responsible for many **epidemics**, resulting in millions of deaths. It is an

infectious disease, caused by the bacterium *Vibrio cholerae* , first isolated by Robert Koch in 1884.

The organism enters the body through the digestive tract during the ingestion of contaminated food and water. A common source in many countries is eating raw or poorly cooked seafood taken from contaminated water. The disease is especially prevalent after a natural disaster or other destruction that results in a lack of fresh water. When sewer systems fail so that waste travels into the rivers or streams and piped water is not available so that people must take their drinking and cooking water from the rivers or streams, the disease will frequently strike. Since many populations establish along waterways, the disease can be spread along waterways from one community to the next community downstream.

Text 42. Wound handling

Even minor cuts can become infected if they are left untreated. Any break in the skin can let bacteria enter the body. An increasing number of bacterial skin infections are resistant to antibiotic medicines. These infections can spread throughout the body. But taking good care of any injury that breaks the skin can help prevent an infection.

Medical experts say the first step in treating a wound is to use clean water. Lake or ocean water should not be used. To clean the area around the wound, experts suggest using a clean cloth and soap. They say there is no need to use products like hydrogen peroxide or iodine.

It is important to remove all dirt and other material from the wound. After the wound is clean, use a small amount of antibiotic ointment or cream. Studies have shown that these medicated products can aid in healing. They also help to keep the surface of the wound from becoming dry. Finally, cover the cut with a clean bandage while it heals. Change the bandage daily and keep the wound clean.

Text 43. Antibiotic resistance

Antibiotic resistance is the ability of a microorganism to withstand the effects of an antibiotic. It is a specific type of drug resistance. Antibiotic resistance can develop naturally via natural selection through random mutation. Antibiotic resistance can also be introduced artificially into a microorganism through transformation protocols. This can be a useful way of implanting artificial genes into the microorganism.

Antibiotic resistance is a consequence of evolution via natural selection or programmed evolution. The antibiotic action is an environmental pressure; those bacteria which have a mutation allowing them to survive will live on to reproduce. They will then pass this trait to their offspring, which will be a fully resistant generation.

Several studies have demonstrated that patterns of antibiotic usage greatly affect the number of resistant organisms which develop. Overuse of broad-spectrum antibiotics, such as second- and third-generation cephalosporins, greatly hastens the development of methicillin resistance, even in organisms that have never been exposed to the selective pressure of methicillin *per se* (thus the resistance was already present). Other factors contributing towards resistance include incorrect diagnosis, unnecessary prescriptions, improper use of antibiotics by patients, and the use of antibiotics as livestock food additives for growth promotion.

Text 44. Development of newer antibiotics

The resistance problem demands that a renewed effort be made to seek antibacterial agents effective against pathogenic bacteria resistant to current antibiotics. One of the possible strategies towards this objective is the rational localization of bioactive phytochemicals. Plants have an almost limitless ability to synthesize aromatic substances, most of which are phenols or their oxygen-substituted derivatives such as tannins. Most are secondary metabolites, of which at least 12,000 have been isolated, a number estimated to be less than 10% of the

total. In many cases, these substances serve as plant defense mechanisms against predation by microorganisms, insects, and herbivores. Many of the herbs and spices used by humans to season food yield useful medicinal compounds including those having antibacterial activity.

Traditional healers have long used plants to prevent or cure infectious conditions. Many of these plants have been investigated scientifically for antimicrobial activity and a large number of plant products have been shown to inhibit growth of pathogenic bacteria. A number of these agents appear to have structures and modes of action that are distinct from those of the antibiotics in current use, suggesting that cross-resistance with agents already in use may be minimal.

Text 45. Alternatives to antibiotics

Washing hands properly reduces the chance of getting infected or spreading infection. Thoroughly washing or avoiding of raw foods such as fruits, vegetables, raw eggs, and undercooked meat can also reduce the chance of an infection.

Vaccines do not suffer the problem of resistance because a vaccine enhances the body's natural defenses, while an antibiotic operates separately from the body's normal defenses. Nevertheless, new strains may evolve that escape immunity induced by vaccines.

While theoretically promising, anti-staphylococcal vaccines have shown limited efficacy, because of immunological variation between *Staphylococcus* species, and the limited duration of effectiveness of the antibodies produced. Development and testing of more effective vaccines is under way.

Phage therapy is a more recent alternative that can cope with the problem of resistance.

Text 46. Tannins and Cancer

Botanists and biomedical scientists have been collecting evidence for decades that tannins, compounds of plant origin that are found in tea and red wine, can cause cancer of the esophagus, which is almost always fatal. In 1962, they

began to investigate a fivefold increase in the rate of cancer of the esophagus among the Bantu of Africa from 1943 to 1953.

Soon after, they began to search for causes of the disease among the inhabitants of Curacao and other Caribbean islands. Interviews with victims and surviving relatives led them to suspect that something in the diet was causing the cancer. Three of the dietary plants that they had collected produced tumours in 100 percent of their experimental animals. The suspect plants were all native teas with medicinal application. Though the plants were not related botanically, the one thing they had in common was condensed tannin.

Tannins, like caffeine and nicotine, serve plants as defenses against insects and other predators. Tannins were found in the sorghum that serves both the Bantu and the people of Curacao as a dietary staple. The botanists theorized that a drought had been indirectly responsible for the cancer epidemic among the Bantu, because it forced them to rely more on tannin-rich sorghum, which is extremely drought resistant, after their other staple crops died out.

While studies have shown that tannins produce liver cancer in lab animals, human studies involving tannins so far have been only field observations, under controlled conditions. Some scientists believe other factors, such as smoking and drinking ethanol (beverage alcohol) also contribute to esophageal cancer in humans.

Text 47. Measles

Measles is an extremely contagious, febrile disease of high morbidity characterized by rash and catarrhal inflammation of the eyes and respiratory tract. It is principally a benign disease of childhood, but may afflict with equal frequency persons of any age not previously attacked by the virus.

It is a disease of cosmopolitan distribution, endemic in all but isolated populations. It may occur at any time of the year, but most outbreaks are in late winter and early spring, with a peak at the end of April.

Throughout most of the world measles is a disease of children; most adults possess acquired immunity. Beyond the age of ten more than 90% of the population have specific antibody. Morbidity and mortality rates do not appear to be influenced by sex or race. Case fatality rates are highest in children less than five years of age, and are also relatively high in the aged. Congenital infection has occurred.

There is no evidence that the virus may vary in virulence in nature. The oft-cited and notorious virulence of the disease in primitive, isolated or crowded populations may be explained by

1 more prevalent infection of feeble and aged adults,

2 poor environmental conditions,

3 inadequate medical care, and

4 secondary bacterial infections.

Because measles rarely induces fatal disease, it is evident that fatalities attributable to measles may vary in incidence according to the prevalence of bacterial pathogens and the resistance of the population to their presence.

Text 48. HIV Infection

Acquired immune deficiency syndrome or acquired immunodeficiency syndrome (AIDS or Aids) is a collection of symptoms and resulting from the specific damage to the immune infections system caused by the human immunodeficiency virus (HIV). The late stage of the condition leaves individuals prone to opportunistic infections and tumors. Although treatments for AIDS and HIV exist to slow the virus's progression, there is no known cure. HIV is transmitted through direct contact of a mucous membrane or the bloodstream with a bodily fluid containing HIV, such as blood, semen, vaginal fluid, and breast milk. This transmission can come in the form of anal, vaginal or oral sex, blood transfusion, contaminated hypodermic needles, exchange between mother and baby during pregnancy, childbirth, or breastfeeding, or other exposure to one of the above bodily fluids.

Most researchers believe that HIV originated in sub-Saharan Africa during the twentieth century; it is now a pandemic, with an estimated 38.6 million people now living with the disease worldwide. As of January 2006, the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) estimate that AIDS has killed more than 25 million people since it was first recognized on June 5, 1981, making it one of the most destructive epidemics in recorded history.

In 2005 alone, AIDS claimed an estimated 2.4–3.3 million lives, of which more than 570,000 were children. A third of these deaths are occurring in sub-Saharan Africa, retarding economic growth and destroying human capital. Antiretroviral treatment reduces both the mortality and the morbidity of HIV infection, but routine access to antiretroviral medication is not available in all countries.

Text 49. Prevention and treatment for opportunistic infections

Opportunistic infections occur when HIV has weakened the body's defense against disease. Common examples are tuberculosis, pneumonia and candidiasis. Providing prevention and treatment for these infections not only helps the sufferer, but also prevents the further spread of disease.

Even in the best-resourced areas, treatment for opportunistic infections remains essential, especially for those who have yet to start, or have only recently started, antiretroviral therapy. For young children and people with weak immune systems, drugs such as cotrimoxazole may be recommended to prevent opportunistic infections.

Managing nutritional effects

As the immune system weakens, people living with HIV become more vulnerable to weight loss and malnutrition. There are likely to be three overlapping causes:

- Reductions in food intake, perhaps due to painful sores in the mouth, fatigue, psychological factors or loss of income.

- Nutrient malabsorption due to HIV itself, gut infections or diarrhoea.

- Metabolic alterations caused by HIV or other infections, leading to increased energy expenditure.

As already mentioned, weight loss and malnutrition can worsen disease progression. In addition, people are less likely to benefit from antiretroviral treatment if they are malnourished. It is therefore important that people who receive the help maintain a healthy diet.

Text 50. HIV test

Many people are unaware that they are infected with HIV. Less than 1% of the sexually active urban population in Africa has been tested, and this proportion is even lower in rural populations. Furthermore, only 0.5% of pregnant women attending urban health facilities are counseled, tested or receive their test results. Again, this proportion is even lower in rural health facilities. Therefore, donor blood and blood products used in medicine and medical research are screened for HIV. Typical HIV tests, including the HIV enzyme immunoassay, detect HIV antibodies in serum, plasma, oral fluid, dried blood spot or urine of patients. However, the window period (the time between initial infection and the development of detectable antibodies against the infection) can vary. This is why it can take 3-6 months to seroconvert and test positive. Commercially available tests to detect other HIV antigens, HIV-RNA, and HIV-DNA in order to detect HIV infection prior to the development of detectable antibodies are available. For the diagnosis of HIV infection these assays are not specifically approved, but are nonetheless routinely used in developed countries.

Text 51. Diagnoses

A hundred years ago a doctor had to recall all his experience and use his judgment to diagnose what was wrong with a patient. Quite often he would be right, but sometimes he would make mistakes. A doctor's mistake can be dangerous, even fatal, for a patient.

Nowadays, a doctor usually follows certain procedures when he diagnoses a patient. First, he looks at the patient for any visible symptoms such as skin, fingernails or eye discoloration, or to observe his posture or the way he moves. Then he asks the patient to describe his own problems. For example, if there is any pain, what kind and where is it. The doctor can usually make a good guess at this stage. However, for further confirmation he might physically examine the patient. This includes checking the pulse, examining the eyes and the tongue, the skin (to see if it is dry), checking how the patient breathes, measuring the temperature and the blood pressure etc. If the physician is still not quite sure of the patient's problem, he then sends the patient to the lab for some tests like blood or urine test or for x-ray pictures of certain parts of the body. This will confirm his prognosis. He'll then suggest suitable line of treatment and prescribe medicines.

Diagnosis is becoming better all the time because of new methods and machines. Computers have made a big difference in diagnosis. They, now, can store a lot of information about the patient, and can even suggest suitable lines of treatment. Many laboratory machines depend on them — without them machines like CAT, MRI or Ultrasound could not have developed at all. We also have new kinds of endoscopes (which enable us to look inside the body) and electronic sensors; therefore, getting rid of a lot of guesswork.

Text 52. Asthma

Asthma is a disease of the lungs that causes wheezing, coughing, chest tightness and difficulty breathing. It can be very scary for the patient. Luckily, asthma and its effects are reversible with medication.

Asthma attacks are the periods when symptoms suddenly become worse. Some common triggers for these attacks are exercise, infections, dust, tobacco smoke, allergens, cold air and nervousness. Limiting exposure to these triggers may help improve quality of life. When an asthma attack occurs, take your medication according to your asthma action plan, and wait 10 to 15 minutes if symptoms worsen or don't improve immediate medical attention may be necessary. Some danger signs are severe wheezing or coughing, trouble walking, and blue lips or fingernails. If any of these danger signs occur go to the emergency room or call 911.

Asthma is a lifelong disease. The effects of asthma attacks on the lungs can cause serious problems later in life. Proper management of asthma is very important.

Text 53. Diseases caused by sex

When people have sex together, they can share things. The fluids from the body can pass from one person to the other. These fluids can contain different things.

Some things that can be shared are germs. Some germs can cause disease and make people sick. These germs can turn into an infection. They can cause a lot of problems for men and women for a long time. A government person says that a certain kind of germ is being spread very quickly. It is an infection that can cause a person to have health problems later in their life. The government wants to warn people about it.

A lot of young people are found to have this infection. Many of these people are young women. The government wants to tell these women about the disease. The government will test people for this disease. They will do it so no one else finds out. They will tell people how to get rid of the disease. They will also tell them how to avoid getting it.

Text 54. A urinary tract infection

A urinary tract infection (UTI) is a bacterial infection that effects any part of the urinary tract. Although urine contains a variety of fluids, salts, and waste products, it usually does not have bacteria in it. When bacteria gets into the bladder or kidney and multiply in the urine, it causes a UTI. The most common type of UTI is a bladder infection which is also often called cystitis. Another kind of UTI is a kidney infection, known as pyelonephritis, and is much more serious. Although they cause discomfort, urinary track infections are usually quickly and easily treated by seeing a doctor promptly.

Symptoms and signs

Symptoms of urethritis include discomfort or pain at the urethral meatus or a burning sensation throughout the urethra with dysuria. For cystitis there may be pain in the midline suprapubic region and frequent urination and hematuria with pus or blood in urine, which may be cloudy and foul-smelling.

High temperature lasting for more than 3 days should be a trigger to get the urine culture done to ascertain whether the fever is due to UTI or not. UTI is very harmful especially in infants since it can cause permanent renal damage. Nausea and vomiting, accompanied by high fever may indicate a more complicated UTI in which the kidney is infected.

Some urinary tract infections are asymptomatic.

Text 55. Joseph Lister

Joseph Lister (1827-1912), British surgeon, whose discovery of antiseptics in 1865 greatly reduced the number of deaths due to operating-room infections. Born in Upton, Essex, and educated at the universities of London and Edinburgh, Lister began to study the coagulation of blood and the inflammation that resulted from injuries and surgical wounds. In 1861 he was appointed surgeon of the Glasgow Royal Infirmary in a new surgery unit designed to reduce gangrene and other infections, then thought to be caused by bad air. Despite his efforts to keep surgical instruments and rooms clean, the death rate remained close to 50 percent.

Believing infections to be caused by airborne dust particles, Lister sprayed the air with carbolic acid, a chemical that was then being used to treat foul-smelling sewers. In 1865 he came upon the germ theory of the French bacteriologist Louis Pasteur, whose experiments revealed that fermentation and putrefaction were caused by micro-organisms brought in contact with organic material. By applying carbolic acid to instruments and directly to wounds and dressings, Lister reduced surgical mortality to 15 percent by 1869.

Lister's discoveries in antisepsis met initial resistance, but by the 1880s they had become widely accepted. In 1897 he was made baron by Queen Victoria, who had been his patient for some time.

Text 56. Is there a vaccine to prevent recurrent UTIs?

In the future, scientists may develop a vaccine that can prevent UTIs from coming back. Researchers in different studies have found that children and women who tend to get UTIs repeatedly are likely to lack proteins called immunoglobulins, which fight infection. Children and women who do not get UTIs are more likely to have normal levels of immunoglobulins in their genital and urinary tracts.

Early tests indicate that a vaccine helps patients build up their own natural infection-fighting powers. The dead bacteria in the vaccine do not spread like an infection; instead, they prompt the body to produce antibodies that can later fight against live organisms. Researchers are testing injected and oral vaccines to see which works best. Another method being considered for women is to apply the vaccine directly as a suppository in the vagina.

Text 57. Prostatitis

Prostatitis is any form of inflammation of the prostate gland. Because women do not have a prostate gland, it is a condition only found in men.

Signs and symptoms

Men with this disease often have chills, fever, pain in the lower back and genital area, urinary frequency and urgency often at night, burning or painful urination, body aches, and an infection of the urinary tract, as evidenced by white blood cells and bacteria in the urine. There may be discharge from the penis.

Diagnosis Acute prostatitis is relatively easy to diagnose due to its symptoms that suggest infection. Common bacteria are *E. Coli, Klebsiella, Proteus, Pseudomonas…* This can be a medical emergency in some patients and hospitalization with intravenous antibiotics may be required. A full blood count reveals increased white blood cells. High fever and malaise generally prompt blood cultures, which are often positive in sepsis.

Treatment Antibiotics are the first line of treatment in acute prostatitis. Antibiotics usually resolve acute prostatitis infections in a very short period of time. Appropriate antibiotics should be used, based on the microbe causing the infection. Some antibiotics have very poor penetration of the prostatic capsule, others, such as Ciprofloxacin, penetrate well. Severely ill patients may need hospitalization, while nontoxic patients can be treated at home with bed rest, analgesics, stool softeners, and hydration.

Text 58. AIDS

AIDS is a disease that kills people. It is caused by a germ. It is spread by sharing drug needles or having sex. All people are at risk . A person with AIDS can get sick in different ways. Half of the people who have gotten AIDS have died. There is no cure, but you can protect yourself from getting the disease. You can avoid AIDS by knowing your sex partner well. Talk to them about it and ask them personal questions about themselves. Do not have sex with a person who has had the virus or used needles for drugs. Sex is safest if you and your partner are AIDS-free and only have sex with each other. Always use proper protection during sex.

Another way to avoid AIDS is to never share needles. If you must share, always clean the needle and the syringe to kill the AIDS virus. Doing without drugs will lower your risk of getting AIDS.

AIDS is not spread by everyday contact. You do not get AIDS from food, sneezing, telephones, social kissing, toilets, hugging, swimming pools or giving blood.

Text 59. Meningitis

Meningitis is a very serious infection of the brain which is more common in children than in adults. It may begin as a complication of another illness such as measles, mumps, whooping cough or an ear infection. Children of mothers who have tuberculosis sometimes get tubercular meningitis in the first few months of life. Fever, severe headaches and stiff neck are signs of meningitis. The child is very sick and lies with his head upward back. Usually, the back is bent stiff to put the head between the knees. In babies under one year old, the fontanel, the soft spot on the head, bulges too. The child is very sleepy and his condition gets worse and worse until he loses consciousness.

If you suspect that a child has meningitis, get medical help fast. If it is possible, take the person to hospital.

Text 60. People with disabilities

People with disabilities comprise a large part of the population. It is estimated that over 35 million Americans have physical, mental, or other disabilities. About half of these disabilities are "developmental", i.e., they occur prior to the individual's twenty-second birthday, often from genetic conditions, and are severe enough to affect three or more areas of development, such as mobility, communication, employment, etc. Most other disabilities are considered "adventitious", i.e., accidental or caused by outside forces.

Prior to the 20th century, only a small percentage of people with disabilities survived for long. Medical treatment for these disabilities was unavailable.

Advancements in medicine and social services have created a climate in which people with disabilities can expect to have such basic needs as food, shelter, and medical treatment. Unfortunately, these basics are often not available. Civil liberties such as the right to vote, marry, get an education, and gain employment have been denied on the basis of disability.

In recent decades, the disability rights movement has been organized to fight against these infringements of civil rights. Congress responded by passing laws recognizing people with disabilities as a protected class under civil rights statutes. Still today, people with disabilities must fight to live their lives independently. It is estimated that more than half of Americans with disabilities are unemployed, and a majority of those who do work are underemployed. About two-thirds live at or below the official poverty level.

Significant barriers, especially in transportation and public awareness, prevent disabled people from taking part in society. For example, while no longer prohibited by law from marrying, a person with no access to transportation is excluded from community and social activities which might lead to the development of long-term relationships.

It will only be when public attitudes advance as far as laws have that disabled people will be fully able to take their rightful place in society.

СЛОВНИК

A	
a wide variety of (det)	широкий асортимент
aberrant protein	абератні білки
abnormal (adj)	ненормальні
abnormality	ненормальність
abruptly (adv)	різко
abundance (n)	достаток
abundant (adj)	багатий
academic performance	академічна вистава
access (vt), (n)	доступ
accessory	аксесуар
accompanied by	в супроводі
accompany (vt)	супроводжувати
account for	враховувати
accumulate (vt)	накопичувати
accumulation	накопичення
achieve (vt)	досягати
acquire	придбати
acquired immune eficiency syndrome (AIDS)	синдром набутого імунодифіциту людини
activation (n)	активація
active tb (n)	активний туберкульоз
activity (n)	діяльність
acute (adj)	гострий
additional (adj)	додатковий
address (vt)	адреса
adolescent	підліток
adopt (vt)	усиновити
adult (n)	дорослий
advanced (adj)	просунутий
adversely (adv)	несприятливо
affect (vt)	впливати
affluence (n)	достаток
affordable	доступний
age (vi)	вік
agent (n)	агент
age-specific (adj)	повіковий
aggressive (adj)	агресивний
aid (vi), (n)	допомога
ailment (n)	хвороба
aim to do st (v)	мета - зробити щось

airborne (adj)	аеробний
alcohol (n)	алкоголь
allergen (n)	алерген
allergic (adj)	алергічний
allergist (n)	алерголог (n)
allergy (n)	алергія
allot (vt)	виділяти
allow (vt)	дозволяти
alter (vi), (vt)	змінювати
ambient	навколишній
amount (n)	кількість
amputation	ампутація
anaemic (adj)	анемія
anaphylactic shock	анафілактичний шок
ancient times	давні часи
anesthesia (n)	анестезія
angina	стенокардія
angioplasty	ангіопластика
annually	щорічно
antibacterial (n), (adj)	антибактеріальний
antibiotic-resistant (adj)	стійкі до дії антибіотиків
antibody (n)	антитіла
antibody-initiated	ініціативні антитіла
antidiuretic (adj), (n)	антидіуретичийі
antifungal (n), (adj)	протигрибковий
antigen-specific	антиген-специфічні
antihistamine (n)	антигістамінний
antimicrobial (n), (adj)	антимікробний
antineoplastic (adj)	протипухлинні препарати
antiparasitic (n), (adj)	протипаразитарне
antiretroviral drugs	антиретровірусні препарати
antiseptic (n), (adj)	антисептичний
antiserum (n)	антисироватка
antivirals (n), (adj)	противовірусні препарати
anxiety (n)	тривога
apart from prep	окрім
appear (v)	з‘являтися
appetite (n)	апетит
application (n)	додатки, заява
apply (v)	застосовувати
approach to (n)	підхід до
appropriate(adj)	відповідний
approve (v)	затвердити

approximately (adv)	приблизно
aquarium (n)	акваріум
array (n)	масив (n)
arthritis (n)	артрит
artificially (adv)	штучно
as a result of (prep)	в результаті
as long as (conj)	поки
ascertain (vt)	встановлювати (vt)
aside from (prep)	окрім
aspect (n)	аспект
assess = value (vt)	оцінювати = значення
assessment (n)	оцінка
assist (vt)	допомога
associated with (adj)	пов'язаний з
assure (vt)	гарантувати
asthma (n)	астма
asymptomatic (adj)	безсимптомний
at birth	при народженні
at present	в теперішній час
at random	навмання
atheromatous plaque	атеросклеротична бляшка
atheromatous streak	атеросклеротична смужка
atherosclerosis (n)	атеросклероз
atherosclerotic	атеросклеротичний
attack (n), (vt)	напад
attention to (n)	увага
attract (vt)	залучати
attribute (vt)	атрибут
atypical (adj)	атипічні
autoimmune (adj)	автоімунний
available (adj)	можливий
average (n), (adj)	в середньому
avoid (vt)	уникати
avoidance (n)	уникнення
awaken (v)	пробудити
award (n)	нагороди
aware of (adj)	бути в курсі
awareness (n)	обізнаності громадськості
B	
bacteriolysis	бактеріоліз
balance (n)	рівновага
barrier (n)	бар'єр
basis (n)	основа

basophils	базофіли
bear a child (vt)	народити дитину
behavior (n)	поведінка
benefit (n), (v)	вигода, сприяти
benign (adj)	доброякісний
best off (adj)	краще від
beverage	напій
biliary tract (n)	жовчні шляхи
bioactivity (n)	біологічна активність
bioavailable (adj)	біодоступний
biomedical (adj)	біомедичний
biomolecule (n)	біомолекулярний
blindness	сліпота
block (vt)	блок
blockage (n)	блокування
blood clotting system	система згортання крові
blood serum analysis	аналіз сироватки крові
blood work (n)	аналіз крові
boil (n)	фурункул, нарив, болячка
boost (vt)	поштовх, стимул
botanist (n)	ботанік
bowel (n)	кишечник
break sth down (vt)	зламати щось
breast (n)	груди
breathlessness (n)	задишка
broader array of	ширший масив
broad-spectrum	широко спектру дії
bronchoconstriction	бронхоспазм
bubble bath(n)	ванна з бульбошками
bulge (vi)	опуклість (vi)
burden	тягар
burning on urination	печіння при сечовипускання
burst of (n)	вибух
C	
calcitonin (n)	кальцитонін
campaign	кампанія
canal (n)	канал
cancel (vt)	відміняти
cancer (n)	рак
capacity (n)	місткість, ємність
carbuncle (n)	карбункул
cardiologist (n)	кардіолог

cardiovascular (adj)	серцево-судинний
carrot (n)	морква
carry out (vt)	здійснювати
catalyst (n)	каталіз
catch (vt)	ловити
catheter (n)	катетер
catheterization (n)	катетеризація
caution (n)	обережність, попередження
cautious (adj)	обережний
cervix (n)	шийка матки
challenge (n)	виклик, іспит
character	характер
characterize	характеризувати
characterized by	характеризувати
chronical heart disease	хронічна хвороба серця
chemotherapy	хіміотерапія
chickenpox(n)	вітряна віспа
chief (n)	головний
chill (n)	застуда
chlorination	хлорування
cholera (n)	холера
cholestatic	холестатична
chromosome (n)	хромосома
chronic (adj)	хронічний
chronic immune activation	хронічно-імунна активація
citrus (n)	цитрусові
claim (n), (v)	претензії, звинувачувати
clean water supplies (n)	чисті джерела води
cleanliness (n)	чепурність, охайність
climacteric (n), (adj)	клімактеричний
clinically	клінічно
clotting (n)	згортання
co-evolution	коеволюція
coexisting	співіснування
cofactor (n)	кофактор
coin	монета
coincide with	збігаються з
co-infected with	со-інфікований
colleague (n)	колега
colon (n)	товста кишка
colorectal	колоректальний
colormetric	показник кольору
coma	кома, коматозний стан

combat (n), (vt)	битва, боротьба
combination (n)	сполучення
commercially available	комерційно доступний
commission (n)	комісія
communicable (adj)	комунікабельний
community	громада, община
companionship (n)	спілкування
comparatively (adv)	відносно
complaint (n)	скарга
complication (n)	ускладнення
component (n)	компонент
compound	складний
compromised (adj)	скомпрометований
concentration (n)	концентрація
conception	концепція
concern	справа, стурбованість
concerned with (adj)	стурбованість
condensed tannin	конденсований танін
condition (n)	стан, умова
confirm (v)	підтверджувати
conjunctiva (n)	кон'юктива
conjunctivitis (n)	кон'юктивіт
conscious (adj)	свідомий
consequence (n)	наслідок, результат
consistent (adj)	послідовний
constituent (n)	складова
consumption (n)	споживання
contagious = communicable (adj)	заразна інфекція
contaminate (vt)	забруднювати
context	контекст
contrast (n), (vt)	протистояння
contribute to (vt)	сприяти
contributor (n)	спонсор
convert (vt)	перетворювати
convince (vt)	переконувати, запевняти
cooperate with (vi)	співробітничати з кимось
coordinate a plan (vt)	координувати план
cope with	упоратися з
coronary heart disease	ішемічна хвороба серця
correct (vt)	виправляти
correlate with (vi)	корелюють з
counsel (vt), (vi)	консультант
counterpart (n)	колега, контрагент

couple (n)	пара
crawl	повзати
create (vt)	створювати
crew (n)	команда
critical bacterial species	критичні види бактерій
critical level	критичний рівень
cross react	перехресна реакція
culture (vt), (n)	культура, вид
cure for (n)	лікування від
current (adj)	струм
currently (adv)	в данний час
cystitis (n)	цистит
cystoscopy (n)	цистоскопія
D	
damage (n), (vt)	пошкодження
damage (v, n)	шкодити
dander (n)	лупа
data, datum (n)	данні
deal with (v)	мати справу з
death rate (n)	показник смертності
deemphasize	брати до уваги
defect (n)	дефект
defend (vt)	захищати
defense	захист
deficiency (n)	дефіцит
define (vt)	визначати
degenerative joint disease (n)	дегенаративне захворювання суглобів
delay (v), (n)	затримка
delivery (n)	доставка
demand (n), (vt)	попит
demographic (adj)	демографічний
demonstrate (vt)	демонструвати
dendritic cell	дендритні клітини
deposit (n, v)	депозит, накопичення
depressed	пригнічений
deprive, deprivation	позбавити, позбавлення
derive from	виводити з
descriptive (adj)	описовий
desensitization (n)	десенсибілізація
design (vt), (n)	дизайн
destruction (n)	руйнування
detect (vt)	виявити
detection (n)	виявлення

determinant (adj), (n)	визначик
determine (vt)	визначати
devastate (vt)	спустошувати
devastating	руйнівний
development (n)	розвиток
diabetes (n)	діабет
diabetes insipidus (n)	нецукровий діабет
diabetes mellitus (n)	цукровий діабет
diabetic (n), (adj)	діабетичний
diagnose (vt)	діагностувати
diagnosis (n)	діагностика
diagnostic tools (n)	діагностичні засоби
dialysis (n)	діаліз
diet (n)	дієта
dietary (adj)	дієтичний
dimension (n)	вимірювання
dimorphism (n)	диморфізм
diphtheria (n)	дифтерія
disability (n)	інвалідність
disadvantaged (adj)	знедолені
discern (v)	розрізняти
discharge (n), (vt)	виписка, виписувати
discomfort (n, v)	дискомфорт
disease-fighting drugs (n)	препарати для боротьби з хворобою
disorder (n)	розлад
dispose (vt)	розташовувати
dissolve (vi), (vt)	розчинити
distention (n)	розтягнення
distinguish (vt)	розрізняти
distribution (n)	розподіл
disturbance (n)	порушення
diverse (adj)	різноманітний
do harm to st (v)	шкодити
dosage (n)	дозування
drainage	дренаж
dribble (vi)	ведення, дриблінг
drive	привід, накопичувач
droplet	капелька
drought resistant	посухостійкий
drown	тонути
due to (prep)	через
duration	тривалість
duration of therapy	тривалість терапії

dust (n)	пил
dyspnea (n)	задишка
dystonia (n)	дистонія
dysuria (n)	дизурія
E	
eczema	екзема
effectiveness (n)	ефективність
effector	ефектор
effort (n)	зусилля
egg yolk (n)	яєчний жовток
elevate	підняти
elevated (adj)	піднесений
elicit (vt)	виявляти
eliminate (vt)	ліквідувати, зменшувати
elsewhere	в іншому місці
elsewhere (adv)	кудись
embryo (n)	ембріон
emerge (vi)	з'являтися, виникати
emergence (n)	поява
emotionally powerful	емоційно потужний
enable (vt)	включати, давати можливість
encephalocele (n)	енцефалоцеле
encephalomyocarditis (n)	енцефаломіокардіт
encephalopathy(n)	енцефалопатія
encounter (v)	зіткнення
encourage (vt)	заохочувати
end up with (v)	в кінцевому підсумку
endemic	ендемічний
enhance (vt)	підвищувати
entail (v)	тягти за собою
entry (n)	вхід
environment (n)	навколишня середа
epidemic (n)	епідемія
epidemiology	епідеміологія
equator	екватор
eradication (n)	викорінення
error	помилка
escape (vt), (n)	втеча
essential (adj)	істотний
establish (vt)	встановити
estimate (vt)	оцінювати
eustachian tube	євстахієва труба
evaluate (vt)	оцінювати

evaluation (n)	оцінка
evidence (n)	докази
evident (adj)	очевидний
evolution (n)	еволюція
evolve (v)	розвиватися
examine (vt)	досліджувати, оглядати
excessive (adj)	надмірний
exclusively (adv)	виключно
excrement (n)	екскременти
exemplify (vt)	бути прикладом
exist (vi)	існувати
existence (n)	існування
existing (adj)	існуючий
expand (v)	розширяти
expectation (n)	очікування
expedition (n)	експедиція
expert assessment	експертна оцінка
extent (n)	протяжність
extract (n), (vt)	екстракт, видаляти
extraordinary (adj)	надзвичайний
extreme malnutrition	сильне недоїдання
F	
face with (v)	зустрітися з
facial expression (n)	вираз обличчя
facilitate (v)	полегшувати, сприяти
factor (n)	фактор
fail to do st (vi)	зазнати невдачі
failure (n)	невдача
fall behind (v)	відставати
familiar with (adj)	знайомий з
fatal (adj)	згубний
fatigue (n)	стомлення
fat-soluble (adj)	жиророзчинний
fault (n)	недолік
fecal (adj)	фекальний
fermentation (n)	ферментація, бродіння
fetus	плід, ембріон
field observation	галузь обстеження
finding (n)	показник, знахідка
firmly (adv)	міцно
first line antibiotics	антибіотики першої черги
fit (adj)	відповідний

flour (n)	борошно
fluid (n)	рідина
flush (vt)	червоніти, збуджувати
forceps	щипці
fortify	зміцнювати, збагачувати
fortunately (adv)	на щастя
foul-smelling (adj)	огидний на запах
foundation (n)	основа
fracture	перелом
fragile	крихкий, осколок
free from (adj)	вільний від
frequency (n)	частота
frequent (adj)	частий
frontal lobe (n)	передня частка
fuel (n)	пальне
full-blown	наповнений
function (vi), (n)	функціонувати, функція
fungi, fungus (n)	гриб
fur (n)	хутро, накип
G	
gallstones (n)	камені в жовчному міхурі
gangrene (n)	гангрена
gather (vi), (vt)	збиратися, збирати
general public (n)	широка публіка
generation (n)	покоління
genetic inheritance	генетична спадковість
genetic makeup (n)	генетичний вид
germ (n)	бактерія
gestational diabetes	гестаційний діабет
gestures (n)	жести
give sth off (vt)	позбавитися
give sth up (vt)	відмовлятись від чогось
global extent	світовий масштаб
globalisation (n)	глобалізація
goiter	зоб
gradual (adj)	послідовний
gradually (adv)	послідовно
growth (n)	зростання
growth promotion	сприяння росту
guideline (n)	керівництво
gum (n)	ясна
gut flora	флора кішкивника
gut wall	кишкова стінка

H	
habit (n)	звичка
harm (vt)	шкодити
harmful food additives	шкідливі харчові домішки
harmless (adj)	нешкідливий
hasten	прискорювати
hay fever (n)	сінна лихоманка
health facility	медичний заклад
health officials (n)	керівники (чиновники) від охорони здоров'я
health resource	ресурси здоров’я
healthcare (n)	охорона здоров’я
heart attack (n)	серцевий напад
hence	віднині, отже
hepatitis (n)	гепатит
hereditary	спадковий
hernia (n)	грижа
highlight (vt), (n)	яскраво освітлювати, яскраве світло
hinder (vt)	перешкоджати
hip (n)	стегно
history (n)	історія
hitherto	до цього часу, досі
hive, urticaria	кропив'янка
hives (n)	кропивниця, сип
hold sth back (vt)	утримувати щось
homeostasis (n)	гомеостаз
homicide	убивство
hormone replacement therapy	терапія з заміщенням гормонів
household (n)	домашнє господарство
human being (n)	людина
human immunodeficiency virus (hiv)	вірус імунодефіциту людини
humidity (n)	волога
hygiene	гігієна
hyperalimentation (n)	надмірна підтримка
hypercalcemia (n)	гіперкальцемія
hypercalciuria (n)	гіперкальциурія
hypercholesterolemia	гіперхолестеринемія
hyperlipidemia (n)	гіперлипидемія
hyperparathyroidism (n)	гіперпаратиреоз
hypersensitivity	підвищена чутливість
hypertension (n)	підвищений тиск
hypertensive	перенапруження

hypocalcemia (n)	гіпокальцемія
hypochromic (n)	гіпохромія
hypodermic	гіподермія
hypothesis	гіпотеза
I	
immune system (n)	імунна система
immunity (n)	імунітет
immunization (n)	імунізація
immunoassay	Імунна перевірка
immunocompromised	
immunological variation	Імунологічна зміна
immunologist	Імунолог
immunosufficient	Імунна достатність
immunosuppressant	Імуносупресант
immunosuppressive	Знижений імунітет
impact (n), (vt)	Зіткнення, зіткнутися
impair, impaired (vt), (adj)	Погіршуватися, погіршений
impairment(n)	Погіршення
imperative (adj)	Наполегливий
implant	Насаджувати
implementation (n)	Здійснення
imply	Означати
improper	Той, що не підходить
improve	Поліпшуватися
in a rational manner	Раціональним способом
in addition	На додаток
in proportion to	У співвідношенні
in the belief that	У переконанні, що
in the normal range	В нормальному ряду
in vitro	У пробірці
inactivity (n)	Неактивність
inadequate (adj)	Невідповідний
inception	Відкриття
incidence (n)	Інцидент
include (vt)	Включати (в себе)
income(n)	Заробіток
incomplete voiding (n)	
incontinence (n)	Нестриманість
inconvenient (adj)	Незручний
indefinitely (adv)	Невизначений
indicate (vt)	Показувати
indication (n)	Вказування
individual (n), (adj)	Особистість, індивідуальний

induce (v)	Переконувати
industrial wastes (n)	Індустріальні відходи
infant (n)	Дитина
infect (v)	Заражати
infected with	Бути зараженим
infectious (adj)	Інфекційний
infectious agent (n)	Інфекційний агент
infectivity	
inflammation (n)	Запалення
ingest (vt)	Ковтати
ingestion (n)	Ковтання
ingredient (n)	Інгредієнт
inhalation (n)	Інгаляція
inherit (v)	Наслідувати
inherit (vt)	
initial period (n)	Початковий період
initial workup (n)	
initially (adv)	На початковій стадії
inject (vt)	Впорскувати
injection(n)	Ін’єкція
inoculum (n)	
insect bite (n)	
insert (vt)	
institutionalized	
intact (adj)	
intake (n)	
intellectual (adj)	
intelligence quotient (IQ)	
intend (vt)	
intensity (n)	щільність
intensive support	
interaction (n)	
interfere with (vi)	втручатися
intermediate (adj,n)	проміжний
interplay (n)	взаємодія
interupt (vt)	прервати
intervention (n)	втручання
interviewee (n)	той, у кого беруть интерв'ю
interviewer (n)	інтерв'юер
intestinal tract (n)	травний тракт
intestine (n)	кишка
intracellular (adj)	внутрішньоклітинний
intradermally	внутрикожно

intrinsic (adj)	внутрішній
invade (vt)	вторгатися
invader (n)	загарбник
invasive medical technology	інвазивна медична технологія
investigate (vi), (vt)	досліджувати
investigator (n)	дослідник
involve (vt)	включати
irradiation (n)	випромінювання
irritant (n), (adj)	подразник,подразнюючий
ischaemia	ішемія
isolate	ізолювати
itch (n), (vi)	свербіж,свербіти
J	
jelly (n)	гель
Journal of Immunology	Журнал імунології
juvenile	неповнолітній
K	
keen to do sth (adj)	прагнути зробити щось
keep a record of	вести облік
keep pace with; keep up with (v)	йти в ногу з
key words	ключові слова
kidney transplant (n)	пересадка нирки
L	
labor (n)	праця
Laboratory of Immunoregulation	лабораторія иммунорегуляції
lack (n), (vt)	відсутність, не вистачати
lag (behind) (v)	не вистачати, відставати
lancet (n)	ланцет
latent (adj)	латентний
lead (n)	свинець
leading cause	провідною причиною
lest (conj)	щоб не
level(n)	рівень
liable to do (adj)	відповідальний
life – threatening (adj)	небеспечний для життя
likely to (adj)	швидше за все
lime, lemon (n)	лайм, лимон
limit (vt), (n)	межа
linked to (adj)	пов'язані з
literally (adv)	буквально
lobe (n)	частка
localise (v)	локалізувати
long-term (adj)	тривалий термін

look forward to (v)	з нетерпінням чекаємо
loss (n)	втрата
lumen of the vessel	просвіт судин
M	
macrophage (n)	макрофаг
maintain (vt)	підтримувати
maintenance (n)	обслуговування
major (adj)	основний
malabsorption (n)	розлад всмоктування
mal-absorption (n)	неправильне поглинання
malaria (n)	malaria
malnourished (adj)	той, хто недоїдає
manage finance	управляти фінансами
manageable(n)	керований
mandatory (adj)	обов'язковий
manifest	виявляти
manifestation (n)	прояв
manner (n)	манера
manufacture (n), (vt)	виріб, виробляти
mast cells	жирові клітини
measles (n)	кір
measure (n)	вимірювати
measurement (n)	вимір
median time	середина (медіана) часу
mediation	посередництво
medication (n)	лікування
Medieval	середньовічний
member countries	країни-члени
meningitis (n)	менінгіт
menopause (n)	менопауза
menorrhagia (n)	менорагія
menostasis (n)	меностаз
menstruation (n)	менструація
mental disability	психічна неповноцінність
mental disorder	психічний розлад
mental illness (n)	психічне захворювання
mental retardation (n)	розумова відсталість
mercury (n)	ртуть
metabolic	метаболічний
metabolism (n)	метаболізм
metabolite (n)	метаболіт
micronutrient	живильний мікроелемент
mild (adj)	м'який

minimize(vt)	мінімізувати
misconception (n)	неправильне уявлення
misuse (n) (v)	зловживання
mite (n)	кліщ
mobilize (vt)	мобілізувати
mode (n)	режим
mold (n)	цвіль
molecular biology	молекулярна біологія
monitor	контролювати
morale (n)	бойовий дух
morbidity (n)	захворюваність
mortality rate (n)	смертність
mosquito (n)	комар
multinational (adj)	багатонаціональний
multiplication (n)	множення
multiply(vi)	помножити
mumps (n)	свинка
muscle tone (n)	тонус м'язів
muscle wasting (n)	атрофія м'язів
mutate, mutation (vi), (n)	мутувати, мутація
myocardial infarction	інфаркт міокарда
myocardium (n)	міокард
myriad (n)	множина
N	
nature (n)	природа
nausea (n)	нудота
neck of the bladder (n)	шийка сечового міхура
need (n)	необхідність
nephrogenic (adj)	нефрогенний
neutralization (n)	нейтралізація
nevertheless (adv)	тим не менш
newborn (n), (adj)	новонароджений
NHS	державна служба охорони здоров'я
night blindness (n)	куряча сліпота
no longer	більше не
nocturia (n)	ніктурія
non-communicable (adj)	неінфекційних
nonetheless (adv)	тим не менш
nonverbal clues (n)	невербальні ключі
notable (adj)	примітно
notice (vt)	повідомлення
nourishment (n)	харчування

nutrient (n)	поживні речовини
nutrition (n)	харчування
O	
obese (adj)	гладкий
obesity (n)	ожиріння
objective (n)	мета
observe (v)	спостерігати
obstetric (adj)	акушерсько
obtain (vt)	отримуємо
obvious (adj)	очевидно
occupational	професійний
occur (vi)	відбуваютися
occurrence (n)	виникнення
offend (vt)	ображати
offending (adj)	порушник
offspring (n)	потомство
on a regular basis	на регулярній основі
onset (n)	початок
operate (v)	працювати
operation (n)	операція
opportunistic (adj)	опортуністичний
optimal (adj)	оптимальний
optimistic (adj)	оптимістично
oral contraceptive	оральний контрацептив
order laboratory tests	заплановані лабораторні тести
originate (v)	походити від
osteoporosis (n)	остеопороз
otherwise (adv)	в іншому випадку
outbreak (n)	спалах
outcome (n)	результат
ovary (n)	яєчник
overall problem (n)	загальна проблема
overfeed (vt)	перегодовувати
overstretching (n)	перенапруги
overuse (n, v)	надмірне споживання
overweight (n), (adj)	надмірна вага
owner (n)	власник
P	
painful subject	болюча тема
pancreas (n)	підшлункова залоза
pandemic (n, adj)	пандемія, пандемічний
paralysis (n)	параліч
parasite (n)	паразит

parathyroid (adj)	паращитовидний
participant	учасник
particular (adj)	зокрема
pathogen (n)	патоген
pathway (n)	шлях
patient (n)	пацієнт
pattern (n)	шаблон
peanut (n)	арахіс
pellagra (n)	пелагра
pelvic region (n)	тазова область
penetrate (vt)	проникникати
per se	сам по собі
perceive (v)	сприймати
perform (vt), (vi)	виконувати
perfumed feminine hygiene products	парфумерний продукт жіночої гігієни
periodic (adj)	періодичний
peripheral neuropathy	периферична невропатія
permanent (adj)	постійний
persistent (adj)	стійкий
persistently (adv)	наполегливий
pertussis (n)	коклюш
pet (n)	домашня тварина
phage therapy	фаготерапія
phagocytosis (n)	фагоцитоз
phenylketonuria (n)	фенілкетонурія
phrase (n)	фраза
physical exam (n)	медичний огляд
physique (n)	статура
pinpoint (v)	основний, остаточний
pituitary gland (n)	гіпофіз
placenta (n)	плацента
plague (n)	чума
pneumonia (n)	пневмонія
pneumonitis (n)	пневмоніт
poison (n, vt)	отрута
policy (n)	політика
poliovirus (n)	поліовірус
pollen (n)	пилок
pollutant (n)	забруднювач
polycystic kidney disease	полікістоз нирок
poor prognosis (n)	поганий прогноз
population (n)	населення

pose (vt)	представлявляти
posterior (adj)	задній, наступний
postmenopausal (adj)	постменопаузний
postoperative (adj)	післяопераційний
postpartum (adj)	після пологовий
postulate	постулат
postulates	постулати
potent (adj)	потужний
potential ((n), (adj))	потенціал, потенціальний
powerful	потужний
practice good hygiene	дотримуватися правил гігієни
practitioner (n)	практик
precede	передувати
precursors	попередники
predator	хижак
predictable	передбачуваний
predispose smb to	привертати кого-л до
predominant (adj)	переважаючий
prefer	віддавати перевагу
pregnancy (n)	вагітність
pregnancy-related (adj)	пов'язаний з вагітністю
pregnant (adj)	вагітна
preparation (n)	підготовка
prescribe (vt)	прописати
prescription	рецепт
preserve (vt)	зберегти
prevailing (adj)	переважаючий
prevalent (adj)	поширений
prevent (vt)	запобігати
preventable (adj)	профілактичний
preventive measures	превентивні заходи
previously (adv)	раніше
prick (v)	укол
principal (adj)	основний
priority (n)	пріоритет
procedure (n)	процедура
professional (n), (adj)	професіонал, професійний
profound (adj)	глибокий, серйозний
prognosis (n)	прогноз
progress (v)	прогрес
progression (n)	прогресія
progressive (adj)	прогресивний
proliferate (vt), (vi)	розмножуютися, поширюватия

prolong (v)	продовжувати
prolonged isolation	тривала ізоляція
promote (vt)	сприяння
prone to (adj)	схильність до
properly (adv)	правильно, точно
propose (v)	запропонувати
prostate (n)	простата
prostatectomy (n)	видалення простати
protease (n)	протеази
protect (vt)	захищати
protective (adj)	захисний
proteinuria (n)	протеїнурія
provitamin (n)	провітамін
psychiatric assessment (n)	психіатричне обстеження
psychiatrict patient (n)	психіатричний пацієнт
psychosocial (adj)	психосоціальний
puberty (n)	статеве дозрівання
public health (n)	суспільноа охорона здоров'я
pulmonary heart disease	легенево-серцева недостатність
pulmonologist	пульмонолог
pure (adj)	чистий
purification (n)	очистка
pyelonephritis (n)	пієлонефрит
Q-R	
qualify (v)	кваліфікувати
rabbit testes	кролячі семенники
radiation (n)	випромінювання
radioallergosorbent	радіоаллергосорбентний
radiometric (n)	радіометричні
raise (vt)	піднімати
random mutation	випадкова мутація
range from … to (v)	діапазон від ... до
rank (n), (vi)	ранг
rapid (adj)	швидкий
rash (n)	висип
ratio (n)	ставлення, співвідношення, коефіцієнт
rational = reasonable (adj)	раціональне = розумним
raw food	сира їжа
reabsorb (vt)	поглинати
reaction (n)	реакція
realistic (adj)	реалістичний
recessive-gene (n)	рецесивний ген

recommend (vt)	рекомендувати
record (n), (vt)	запис, записувати
rectum (n)	пряма кишка
reduce (vt)	зменшити
reference (n)	посилання
reflect (vt)	відображати
reflux esophagitis	стравохідний рефлюкс
regional (adj)	регіональний
regular (adj)	регулярний
reject (v)	відхилити
related to (adj)	пов'язаний з
release (v), (n)	реліз, випуск, серія
relevant to (adj)	ставлення до
reliable (adj)	надійний
relieve (vt)	полегшити
remove (vt)	видаляти
renal angiography (n)	ниркова ангіографія
renal surgery (n)	ниркова хірургія
replace (vt)	замінити
replicate (v)	копіювати
represent (v)	представляти
reproductive phase	репродуктивний період
research	дослідження
resection (n)	резекція
resist, resistance (v,n)	чинити опір, опір
resolve (v)	вирішувати
respectively (adv)	відповідний
responsibility (n)	відповідальність
responsiveness (n)	чуйність
restriction (n)	обмеження
result (vi), (n)	рзультат
result from (vi)	в результаті
result in (vi)	привести до
resurgent (adj)	відроджуваний
retardation(n)	відсталість
retinal damage	пошкодження сітківки
reverse (vt)	тому
rickets (n)	рахіт
rid sth of (vt)	позбавити від чогось
rigorous (adj)	суворий
risk factor (n)	фактор ризику
RNA = ribonucleic acid	РНК = рибонуклеїнова кислота
rubella	краснуха

run	запустити
rupture	розрив
S	
saliva (n)	слина
sample of blood (n)	зразок крові
sanitary handling of food	санітарна обробка їжі
sanitary napkins (n)	гігієнічні серветки
sarcoid (adj)	саркоїдний
saturated (adj)	насичений
scar (n)	шрам
scheme (n)	схема
science-based (adj)	науково-обгрунтований
score (n)	оцінка
scratching (n)	подряпина
screen (v)	перевіряти
screening (n)	перевірка
scurvy (n)	цинга
security (n)	безпека
sedentary (adj)	сидячий
sediment (n)	осад
selection, selective (n, adj)	вибір, селективний
semen (n)	сперма
sensation (n)	відчуття
sense of comfort	почуття комфорту
sensitive (adj)	чутливий
sensitivity (n)	чутливість
separate ((adj), (v))	окремий
separate (v)	відокремлювати
seroconversion (n)	сероконверсія
seroconvert (v)	сероконверсувати
seropositive (adj)	серопозитивний
serum (n)	сироватка
	креатинінова сироватка
	установка
serum creatinine (n)	важкий
setting (n)	тяжкість
severe (adj)	очищення стічних вод
severity (n)	статевий контакт
sewage treatment (n)	проливати
sexual contact (n)	зсувати, зсув
shed (v)	ухилятися від
shift (v), (n)	побічний ефект
shy away from (v)	сигмовидної вигину

side effect (n)	знак
sigmoid flexure (n)	значний
sign (n)	значне
significant	схожий
significant (adj)	один
similar (adj)	лусочки шкіри
single (adj)	ваги шкіри
skin flakes (n)	череп
skin scales (n)	ухил
skull (n)	уповільнювати
slant	чхати
slow down (v)	досі
sneeze (vi)	мило
so far (adv)	товариство
soap (n)	натрій
society (n)	розчинний
sodium (n)	рішення
soluble (adj)	сорго
solution (n)	спазм
sorghum (n)	спеціалізуватися на
spasm (n)	видів
specialise in (v)	специфічними для
species (n)	спектр
specific to (adj)	сперміцидна піна
spectrum (n)	спорадичний
spermicidal foams	поширення, поширювати
sporadic (adj)	стабільним
spread (n), (vi)	етап
stable (adj)	стенд для
stage (n)	стояти на шляху
stand for (v)	стандарт
stand in the way of	стафілокок
standard (n)	основний продукт харчування
staphylococcus (n)	статус
staple food	неухильно
status (n)	стеноз
steadily (adv)	крок
stenosis (n)	стерильні
step (n)	управління
sterile (adj)	магазин
stewardship (n)	штами мікроорганізмів
store (vt)	стратегія
strains of microorganisms	зміцнення

strategy (n)	фізичні навантаження
strengthen (vt)	хід
strenuous exercise (n)	під язик
stroke (n)	речовина
sublingually	істотно
substance (n)	субстрат
substantially (adv)	успішний
substrate (n)	страждати від
succeed (vi)	достатньо
suffer from (v)	наводить на
sufficient (adj)	самогубство
suggestive of (adj)	той, що підходить
suicide (n)	сонцезахисний крем
suitable (adj)	нагляд
sunscreen (n)	добавок
supervision (n)	підтримка
supplementation (n)	групова підтримка
support (n), (vt)	хірургічна процедура
supportive group	спостереження
surgical procedure	тривалість життя
surveillance (n)	виживати
survival time	сприйнятливий
survive (vt)	підозрювати
susceptible (adj)	солодка картопля
suspect (v)	набухають
sweet potato (n)	симбіоз
swell (vi)	синтезувати, синтез
symbiosis (n)	сифіліс
synthesize, synthesis (vt), (n)	заплямований
syphilis (n)	брати в рот
T	
tainted (adj)	піклуватися про
take by mouth (vt)	взятися за
take care of (v)	мета
take hold of (vt)	ТБ (туберкульоз)
target (n)	як правило
TB (tuberculosis) (n)	тенденція
tend (v)	тема
tendency (n)	теоретична
theme (n)	теоретизувати
theoretical (adj)	терапевтичне
theorize (v)	немає необхідності робити
therapeutic (adj)	стегно

there is no need to do	спрага
thigh (n)	спраглий
thirst (n)	ретельно
thirsty (adj)	тромбоемболічний, тромбоемболізм
thoroughly (adv)	тромбогенний матеріал
thromboembolic, -lism (adj), (n)	таким чином
thrombus material	поколювання
thus (adv)	до деякої міри
tingling sensation	тютюн
to a certain extent	повзунок
tobacco (n)	дзвінок, прийняти дзвінок
toddler	тон голосу
toll, take toll on	інструмент
tones of voice (n)	токсичний
tool (n)	риса
toxic (adj)	через шкіру
trait (n)	переклад
transdermally (adv)	протокол перетворення
transfer (vt)	переливання
transformation protocol	передачі
transfusion (n)	передача
transmission (n)	транспорт
transmittal (n)	травма
transport (vt), (n)	травматичний
trauma (n)	трактат
traumatic	лікування
treatise (n)	тропічний
treatment (n)	туберкульоз
tropical (adj)	пухлина
tuberculosis (n)	черевний тиф
tumor (n)	тиф
typhoid fever (n)	типовий
typhus (n)	звичайно
typical (adj)	повсюдно
typically (adv)	виразка
U	
ubiquitous (adj)	в кінцевому рахунку
ulcer (n)	ультрафіолет
ultimately (adv)	загальний термін
ultraviolet (n)	неминуче
umbrella term	
unavoidable (adj)	ненароджена

unaware (adj)	несвідоме
unborn (adj)	незмінений
unconscious (adj)	ушкоджений
uncovere (vt)	повним ходом
undamaged (adj)	недоваріть
under way	підкреслення
undercook (v)	розуміння
underscore(vt)	небажано = небажаним
understanding of (n)	несумісний
undesirable = unwanted (adj)	форма
unencountered	унікальний
uniform (adj)	універсально
unique (adj)	нешліфований рис
universally (adv)	незаподозренний
unpolished rice (n)	поглинання
unsuspected	урбанізація
uptake	сечовід
urbanisation	уретросигмостомия
ureter (n)	уретра
ureterosigmoidostomy (n)	отвір сечівника
urethra (n)	сфінктера уретри
urethral opening (n)	уретропластика
urethral sphincter (n)	нагальна необхідність
urethroplasty (n)	інфекції сечовивідних шляхів
urgent need (n)	мочитися
urinary tract infection (n)	сечовипускання
urinate	сеча сечовий міхур
urination (n)	затримка сечі
urine bladder (n)	сеча, нетримання
urine retention (n)	матка
urine, urinary (n), (adj)	утиліта
uterus (n)	використовувати
utility (n)	вакцинація
utilize	вакцина
V	
vaccination (n)	піхва
vaccine (n)	вагінальна рідина
vagina	вагінальний, уретральний дренаж
vaginal fluid	значення, зничити
vaginal, urethral drainage	змінна
value (n), (vt)	вітряна
variable	розмаїтість
varicella (n)	варіюватися

variety (n)	вектор
vary (vi)	трансмісивне поширення
vector (n)	венеричне захворювання
vector-borne spread	через
venereal disease (n)	точка зору
via (prep)	насильство
viewpoint (n)	вірулентність
violence (n)	нутрощі
virulence (n)	життєво важливих
viscera (n)	недійсний
vital signs (n)	
void (vi)	
vulnerable to	вразливий до
vulnerable to (adj)	уразливий до
W-Y	
wane	спад
ward (n)	палата
water - soluble (adj)	водо - розчинний
wealthy (adj)	багатий
wean (v)	відучити
wheat (n)	пшениця
wheeze (vi)	хрипіти
whereas (conj)	в той час як
whooping cough	коклюш
wipe (vt)	протирати
wipe sth out (vt)	знищувати щось, видаляти
withstand	витримувати
work on (v)	працювати над
worldwide (adj), (adv)	по всьому світу
worst off	найгірше становище
wound (n)	рана
yellow fever (n)	жовта лихоманка

ПЕРЕЛІК ДЖЕРЕЛ

1.Онуфрієнко Г. Науковий стиль Української мови / Г. Онуфрієнко. – Навчальний посібник з алґоритмічними приписами. – 2-ге вид. перероб. та доп. – К.: Центр учбової літератури, 2009. – 392 с.

2. Орел-Халік Ю.В., Сазанович Л.В. Практикум з реферування медичних текстів з англійської мови(для студентів фармацевтичного факультету і курсу) / Ю.В. Орел-Халік, Л.В. Сазанович – Практикум з реферування – Запоріжжя: ЗДМУ, 2014. – 89 с.

3. http://www.blissworld.com/spa/

4. http://www.stemcello.com/xe/?mid=cosmetics_03

5. *http://www.worldhealth.net/news/stem_cells_in_skin_care_what_does_it_rea/*

6. http://www.blissworld.com/spa/

7.http://blogcritics.org/scitech/article/the-human-side-of-cosmetic-stem/

8.http://www.cosmeticsbusiness.com/technical/article_page/Stem_cell_technology__The_next_generation/55280

9.http://thestar.com.my/lifestyle/story.asp?file=/2010/12/13/lifefocus/7229149&sec=lifefocus

10. http://www.ncbi.nlm.nih.gov/pubmed/19470001