

Semi-specialized English

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Preface

In the Name of God

Any reading comprehension textbook must have some features to achieve its purpose. First, the authors should know who the users of the book are. In other words, the authors should have the prospective users in mind when preparing a book. Second, the materials should be interesting enough to satisfy the users' taste. Third, the textbook must be of an appropriate level of difficulty to appropriately induce an interactive mode of reading behavior and make readers challenge the materials. Fourth, a successful textbook should strike a balance between the two poles of bottom-up and top-down reading approaches so that it will enable the reader to enjoy the content of the text and at the same time make them attentive to various ways the messages are encoded. Finally, a good textbook must contain a variety of exercises to provide an opportunity for the reader to consolidate what he/she has read. With all these features in mind, the faculty members of English Language Department at Shiraz University of Medical Sciences have prepared the present semi-specialized reading comprehension textbook for the students of medicine, dentistry and pharmacy.

This book is the second book of the reading comprehension series which intends to provide semi-specialized texts with more academic and technical vocabulary and scientific structures for this specific group of students. Of course, the reading comprehension skills taught and practiced in the first book, *Improving Reading Skills* authored by Dr N Shokrpour and Dr A Mahbudi, are further practiced and consolidated.

It is natural that the present book may suffer some shortcomings. The authors accept the responsibility for all drawbacks and warmly welcome any suggestions for the betterment of the book in the future editions.

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Unit 1

Pre-reading Activity

A. Discuss the following questions with your friends.

1. Define Islamic Medicine.
2. What was the effect of European Renaissance on Islamic Medicine?
3. How was medicine practiced in Jundishapour?

Islamic Medicine

Considerable confusion exists in literature regarding the definition of '*Islamic Medicine*'. This is mainly because each author that writes about '*Islamic Medicine*' is actually writing about an aspect of Islamic Medicine. Thus the definition can vary depending upon the perspective. The context can be historical, cultural, scientific, pharmacological, therapeutic, religious or even geo-political. In this monograph, we shall be examining this body of knowledge mainly from its historical, scientific, therapeutic and application viewpoints.

Definition

Islamic Medicine in its true context can thus be defined as a body of knowledge of Medicine that was inherited by the Muslims in the early phase of Islamic History (40-247 AH/661 -861 AD) from mostly Greek sources, but to which became added medical knowledge from Persia, Syria, India and Byzantine. This knowledge was not only to become translated into Arabic, the literary and scientific lingua franca of the time, but was to be expounded, assimilated, exhaustively added to and subsequently codified, and 'islamicized'. The physicians of the time, both Muslim and non-Muslim, were then to add to this their own observations and experimentation and convert it into a flourishing and practical science, thus helping not only to cure the ailments of the masses, but to increase their standards of health. The effects of its domineering influence extended not only in the vast stretches of the Islamic lands, but also in all adjoining nations including Europe, Asia, China, and the Far East. The span was measurable not only for a few centuries, but also perhaps for an entire millennium, 610 to 1610 AD, during which time, Europe and rest of the extant civilized nations of the world were in grip of the 'dark ages'. It was also to set the standards of hygiene, and preventative medicine and thus was responsible for the improvement of the general health of the masses. It was to hold sway until decadence finally set in, concomitant with the political decline of the Islamic nation. With the advent of Renaissance in Europe, at the

beginning of the 17th century AD, it was finally challenged by the new and emerging science of modern medicine, which was to finally replace it in most of the countries, including the countries of its birth!

The early era of Islamic Medicine and the School of Medicine at Jundishapur

Jundishapur or 'Gondeshapur' was a city in Khuzistan founded by a Sasanid emperor Shapur I(241-272 AD) before the advent of Islam. It was to settle Greek prisoners; hence, it was named 'Wandew Shapur' or 'acquired by Shapur.' In the present day Western Persia, the site is marked by the ruins of Shahabad near the city of Ahwaz. The town was taken by Muslims during the caliphate of Umar, by Abu Musa Al-Ashari in 17 AH/738 AD. At this time, it already had a well-established Hospital and Medical school.

Many Syrians took refuge in the city when Antioch was captured by Shapur I. In fact the latter nicknamed the city 'Vehaz-Andevi Shapur' or 'Shapur is better than Antioch.' The closing of the Nestorian School of Edessa by Emperor Zeno in 489 AD led to the Nestorians fleeing from there and seeking refuge in Jundishapur under patronage of Shapur II, which got an academic boost as a result. The Greek influence was already predominant in Jundishapur when the closing of the Athenian school in 529 AD by order of the Byzantine emperor Justinian drove many learned Greek physicians to this town. A University with a medical school and a hospital were established by Khusraw Anushirwan the wise (531-579 AD), where the Greeco-Syriac medicine blossomed. To this was added medical knowledge from India brought by the physician vizier of Anushirwan called 'Burzuyah.' On his return, the latter brought back from India the famous 'Fables of Bidpai', several Indian Physicians, details of Indian Medical Texts and a Pahlavi translation of the 'Kalila and Dimna.' Khusraw even presented a translation of Aristotlean Logic and Philosophy. Thus at the time of the Islamic invasion the school of Jundishapur was well established and had become renowned as a medical center of Greek, Syriac and Indian learning. This knowledge had intermingled to create a highly acclaimed and state-of-the-art Medical school and hospital. After the advent of Islamic rule, the University continued to thrive. In fact the first recorded Muslim Physician Harith bin Kalada, who was a contemporary of the Prophet, acquired his medical knowledge at medical school and hospital at Jundishapur.

It is likely that the medical teaching at Jundishapur was modeled after the teaching at Alexandria with some influence from Antioch but it is important to note that 'the treatment was based entirely on

scientific analysis, in true Hippocratic tradition’, rather than a mix-up with superstition and rituals as was the case in Greek ‘*asclepieia*’ and Byzantine ‘*nosocomia*’. This hospital and Medical Center was to become the model on which all later Islamic Medical Schools and Hospitals were to be built. The School nonetheless thrived during the Ummayyid caliphate and *Sergius of Rasul’ayn* translated medical and philosophical works of both Hippocrates and Galen into Syriac. These were later to be translated into Arabic casting an everlasting imprint onto all the future of Islamic Medicine.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

----- 1. There exists no single and comprehensive definition of Islamic medicine.

----- 2. Each definition of Islamic Medicine focuses on one aspect, so there is no holistic perspective as to it.

----- 3. Syrian and Indians initiated Islamic Medicine.

----- 4. In fact, the Islamic Medicine was initiated by a body of knowledge inherited from Greeks.

----- 5. Knowledge of medicine taken from Greeks was both translated into the lingua franca of the time and Islamicized.

----- 6. Developed Islamic medicine was restricted to Arab and the Muslim world.

----- 7. Renaissance in Europe was the starting point of challenges with Islamic Medicine which had developed for a millennium.

----- 8. Islamic Medicine focuses not only on curative but also preventive medicine.

----- 9. “Countries of its birth” in the last sentence of paragraph 2 refers to Europe, Asia and China.

----- 10. “It” in the last sentence of the 2nd paragraph refers to modern medicine.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. It is difficult to provide a comprehensive definition for Islamic Medicine since-----.

- a. there are different outlooks on the issue
- b. scholars have failed to reach a unanimous definition
- c. some aspects are more important than the other ones to researchers
- d. Islamic Medicine has failed to incorporate some important aspects of health

2. According to the text, Islamic Medicine was-----.

- a. mostly derived from Greek sources
- b. inherited from Syrians and Indians
- c. inherited in 1610 AD
- d. originally in the Arabic language

3. Which in line 4 (paragraph 2) refers to -----.

- a. true context
- b. sources
- c. body of knowledge
- d. early phase of Islamic history

4. The physicians contributing to early Islamic Medicine -----

- a. were mostly concerned with treatment of diseases
- b. were all Muslims who were traditional healers
- c. adhered to traditional medicine
- d. treated the patient and also considered increases in standards of health

5. Islamic Medicine ----- during 610-1610 AD.

- a. was restricted to Islamic lands
- b. had a great influence and power while Europeans were in the dark ages
- c. started to be challenged by European Renaissance
- d. was approved by European's modern medicine

6. Jundishapur medical school academically progressed mainly due to the -----.

- a. contributions of Nestorians and Greek physicians
- b. Syrian refugees
- c. Byzantine Emperor in 529 AD
- d. Antioch's contributions

7. This in line 12 paragraph 4 refers to the -----.

- a. newly founded university
- b. Greek and Syrian medicine
- c. hospital established by Khusraw
- d. Athenians' school

8. As to Islamic Jundishapur medical physicians and Greek 'asclepieia' doctors, -----.
- a. the latter practiced medicine based on scientific analysis
 - b. the former practiced using superstition and rituals
 - c. neither treated the patients based on scientific analysis
 - d. the former practiced scientifically but the latter did not

C. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. The report given by the authorities looks at the education system from the -----of the educators of deaf people; their viewpoints were clearly presented.
- a. perspective
 - b. literacy
 - c. lingua franca
 - d. assimilation
2. Since the issue was so complicated, the audience asked him to ----- his views on the subject at great length.
- a. inherit
 - b. expound
 - c. codify
 - d. observe
3. The committee will need time to ----- this report to make it fully understood by the members so that they are able to use it.
- a. experiment
 - b. adjoin
 - c. civilize
 - d. assimilate
4. The attitudes focusing on pleasure and enjoyment rather than more serious issues among the youth should be changed; this is typical of the ----- of modern society.
- a. decadence
 - b. challenge
 - c. emergence
 - d. literacy
5. Their country is in the ----- of recession; the authorities should take measures to prevent it.
- a. mass
 - b. improvement
 - c. grip
 - d. refugee
6. The ----- of technology has revolutionized the people's lives.
- a. capture
 - b. advent
 - c. fable
 - d. superstition
7. A huge number of refugees -----the civil strife headed toward European countries.
- a. interested in
 - b. blossomed in
 - c. fleeing from
 - d. presented by
8. These lab animals rarely ----- lab conditions; they should be set free to live in nature.
- a. thrive in
 - b. fight for
 - c. bring about
 - d. carry out

9. Friday prayer is a religious ----- performed all over the Muslim world on all Fridays.

- a. perspective b. fable c. imprint d. ritual

10. Herbs have many ----- properties, entering in modern medicine in treating patients.

- a. contextual b. literal
c. therapeutic d. deleterious

D. Discuss the following questions with your friends.

1. Why does confusion exist in literature as to the definition of Islamic Medicine?
2. Did physicians in the early phase of Islamic Medicine only care the patients?
3. Who was the first recorded Muslim physician?

E. Word Families: Fill in the blanks using the correct form of the words given in the list.

Verb	Noun	Adjective	Adverb
define	definition	defined	
contextualize	context contextualization	contextual	
	hygiene/hygienist	hygienic	hygienically
emerge	emergence emergency	emergent emerging	
predominate	predominance	Predominant	predominantly

context

- a. There were so many ----- clues to the meaning of words in that book.
- b. His speech can only be understood in ----- .
- c. Some Christians fail to ----- the words of Jesus.
- d. ----- of some historical events now seems difficult.

definition

- a. The term “mental illness” is difficult to -----.

- b. What is your ----- of happiness?
- c. They were actually discussing a previously ----- concept.

hygienic

- a. In the interest of -----, please wash your hands.
- b. Food must be prepared in ----- conditions.
- c. Medical supplies are disposed of -----.
- d. He is employed in a hospital as a dental -----

emergence

- a. They are considered as an ----- nation.
- b. The government has declared a state of ----- after the earthquake.
- c. No new evidence ----- during the investigation.
- d. The ----- of new technologies has provided people with more convenient life.

predominance

- a. Private interest was not allowed to ----- over the public good.
- b. She works in a ----- male environment.
- c. The ----- of female university students has shocked all education authorities.
- d. His ----- feature is his serenity.

F. Cloze Test: Fill in the blanks using the words in the list.

- | | |
|---------------------------|--------------------------|
| attended to by attendant | that occurred were |
| totally adopted by | hospital as a place |
| no more than a | hospital is credited to |
| of prayers and sacrifices | segregation of lepers |
| were attached to | hospitals were developed |

The idea of a hospital as an institutional place for the caring of the sick has not been recorded in antiquity. There were sanatoria and ‘travel lodges’ that ---1--- temples where the sick were ---2--- priests. Most of the therapy in these sanatoria consisted ---3--- to the gods of healing, especially to Aesculapius. Cures ---4--- thought to result from divine intervention. A large number of ---5--- early during the Islamic era. They were to be called ‘Bimarrestan’. The idea of a ---6--- where the sick could get attention was ---7--- the early Caliphs. The first ---8--- Caliph Al-walid I. By some it was, however, considered ---9--- leprosoia

because it allowed the ---10--- from others. It did have on staff salaried doctors to attend the sick.

G. Match the words in column I with their equivalents in column II.

I	II
1. concomitant	a. catch somebody and keep as prisoner
2. emerge	b. the act of an army entering another country
3. capture	c. respected and famous
4. patronage	d. mix people, ideas, etc. together
5. blossom	e. appear
6. invasion	f. develop well
7. intermingle	g. become more successful
8. renowned	h. happening at the same time
9. mix-up	i. a combination of different things
10. thrive	j. the support given to a person or organization by a patron

Further Reading

The great physicians of Islamic Medicine

The era of Islamic Medicine produced some very famous and notable physicians. These physicians were not only responsible to get all the existing information on Medicine of the time together but add to this knowledge by their own astute observations, experimentation and skills. Many of them were skilled in medical writing and produced encyclopedic works which became standard texts and reference works for centuries. With the coming of European Renaissance they formed the basis on which the European authors gained insight into the medicine of the ‘ancients’ or early Greek authors whose works were only preserved in Arabic. In addition many re-discoveries took place which had already been recorded by the Islamic physicians but hitherto had been unknown until recently uncovered. The classical example of the discovery of pulmonary circulation originally given to Servetus was found to have been succinctly described by Ibn Nafis, an Islamic Physician who lived centuries earlier. Ibn Nafis repudiated the earlier concepts held by Galen and described the

lesser circulation so succinctly that nothing more could be added until Malphigi could describe the alveoli and the pulmonary capillaries with the advent of the microscope discovered by Anthony Von Luwenheek in the mid 19th century. Some of them form the basis of instruction of students of Tibb and Hikma, the traditional Islamic Medicine, practiced in the subcontinent of India and Pakistan, even today under the banner of Tibb or Unani Medicine.! For the sake of classification, the historic periods of the Islamic Physicians can be divided into three parts: 1. The period of Islamic Renaissance: From the beginning of Islam to the end of the Abbasid dynasty. 2. The period of Islamic Epoch: When all sciences including Medicine reached the pinnacle of development under the Islamic patronage. 3. The period of decline: during which the knowledge of Islamic Medicine was translated into European languages and became the basis of further development and discoveries and ultimately led to basis for the development of Modern Medicine.

The Period of Islamic Renaissance

The notable physicians during this period were as follows:

Bukhtishu family of Physicians. The oldest amongst these was Jibrail Bukhtishu who was the Chief Physician at the Hospital in Jundishapur. He came from a Christian family and was summoned to the court of Caliph Mamun (148AH/765 AD) when the latter fell ill. After having treated him successfully, he was invited to stay in Baghdad and head a hospital there but he declined and returned to his native Jundishapur. (152 AH/769 AD) It was his son Jurjis Bukhtishu who was later invited by Caliph Harun-ul- Rashid to come to Baghdad to treat him (171AH/787 AD) and then offered to be the Chief Physician and head a hospital in Baghdad which he did till he died in 185 AH/801 AD).

Masawayh is another family of physicians associated with early Islamic History. During the reign of Caliph Harun-ul-Rashid, the elder of the family migrated from Jundishapur to Baghdad and became a celebrated Ophthalmologist. He wrote the first Arabic treatise on ophthalmology. His son known to the west as Mesue Senior with real name of Yuhanna ibn Masawayh wrote several medical works in Arabic while translating other works from Greek. He is known for somewhat of a sarcastic temperament nonetheless commanded great respect because of his medical expertise.

Hunayn ibn Ishaq who was a student of Ibn Masawayh became the greatest translator of Greek and Syriac medical texts during the 3rd century AH/9th century AD. He was responsible for masterly

translations of Galen, Hippocrates, and Aristotle into Arabic. He also improved the Arabic Medical lexicon, giving it a rich technical medical language to express medical terminology and thus laid the foundations of the rich medical expression in Arabic language far superseding the later translations from Arabic to Latin. He was himself an astute physician and wrote two original works on ophthalmology.

The credit of the first systematic work on medicine during this era goes to a Muslim physician Ali ibn Rabban al-Tabbari hailing from Persia but settling in Baghdad in the first half of the 3rd century AH/9th century AD. His work called '*Firdaws a-Hikma*' or '*Paradise of Wisdom*' contained extensive information from all extant sources including Greek, Syriac, Persian and Indian and contained an extensive treatment of anatomy.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

- 1. Medical writing of Islamic physicians provided the European physicians with insight into medicine.
- 2. Pulmonary circulation was first described by Europeans.
- 3. Ibn Nafis added so many concepts as to pulmonary circulation so that even after the advent of microscope, nothing more could be added.
- 4. During the period of Islamic Renaissance, science of medicine reached the pinnacle of development.
- 5. Which in line 8 paragraph 1 refers to European Renaissance.
- 6. Europeans discovered the medicine of Islamic physicians through the encyclopedias they had written.
- 7. The ideas of Galan were rejected by Ibn Nafis centuries later.
- 8. Anthony von Luwenheek described the alveoli and the pulmonary capillaries.
- 9. Tibb and Hikama is the traditional Islamic medicine which is today practiced in India and Pakistan.
- 10. The Islamic Medicine physicians' writings were translated into

European languages during the period of Islamic epoch.

B. Look in the text and find the following words and expressions.

The paragraph number are given to help you.

1. Very clever and quick at seeing what to do in a particular situation;
shrewd (adj: para 1) -----
2. The ability to see and understand the truth about sth (N, para 1)

3. Expressed clearly and in a few words; concise (Adv., para 1) -----
4. reject (V, para 1) -----
5. The most important or successful part of sth (N, para 1) -----
6. A period of time in history during which important events happen;
era (N, para 1) -----
7. The physicians specialist in the eye diseases (N, para 3) -----
8. of sth very old, still in existence (Adj, last para) -----

C. Now fill in the blanks using the above words.

1. The book gives us fascinating ----- into life in that country.
2. He explained and elaborated so ----- that nobody left the meeting
unjustified.
3. The ----- remains of the ancient walls are still visited by many
tourists.
4. He usually ----- what his predecessors have acclaimed.
5. The last ten years have been the ----- of her career.
6. You need to see an ----- due to the cataract you have.
7. He is considered as an ----- politician.
8. The death of the emperor marked the end of an ----- in the country'

Unit 2

Pre-reading Activities



A. Discuss the following questions with your friends:

1. What is the meaning of addiction?
2. What things might people become addicted to?
3. Make a list. Divide the list into new or modern addictions and old or traditional addictions.

B. Key words and phrases: Use the following key words or phrases from the text in the appropriate blanks.

case study	discussion boards	self-help group	a fix
clinical disorder	public health issue	clot	wean off
negative repercussions	withdrawal symptoms		

1. ----- are the unpleasant physical and mental effects suffered by someone who stops taking a substance that they are addicted to.
2. A ----- is a medical issue that affects the general population.
3. A ----- is a medical problem or condition.
4. ----- are the bad effects that something has, usually lasting for a long time.
5. A ----- is a piece of research that records details of how a situation develops over a period of time.

6. When liquids such as milk or blood become thick and almost solid, they have formed a -----
7. When you make someone gradually stop depending on something that they like and have become used to, especially a drug or a bad habit, you ----- them ----- it.
8. ----- is an amount of a drug that someone feels they need to take regularly to satisfy their addiction.
9. ----- is another term for *online forums*.
10. A ----- consists of people who discuss their problems and find ways to deal with them.

Reading

Addiction to Internet 'is an illness'

New evidence shows that heavy users suffer isolation, fatigue and withdrawal symptoms

1. Tense? Angry? Can't get online? Internet addiction is now a serious public health issue that should be officially recognised as a clinical disorder, according to a leading psychiatrist.



2. Excessive gaming, viewing online movies, emailing and text messaging have been identified as causes of the disorder¹ by Dr. Jerald Block, in the respected *American Journal of Psychiatry*. Block argues that the disorder is now so common that it should be included in the Diagnostic and Statistical Manual of Mental Disorders. He says Internet addiction has four main components:

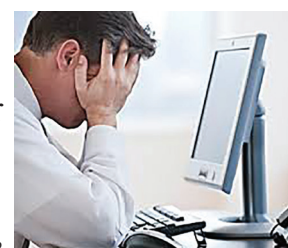
1. Which disorder?

- Excessive use, often associated with a loss of sense of time or a neglect of basic drives;



- Withdrawal, including feelings of anger, tension and/or depression when the computer is inaccessible;

- The need for better computers, more software, or more hours of use;



- Negative repercussions, including arguments,

lying, poor achievement, social isolation and fatigue.

3. A case study² is South Korea, which has the greatest use of broadband in the world. Block points out that 10 people died from blood clots from remaining seated for long periods in Internet cafes and another was murdered because of an online game. Their country now considers Internet addiction as one of its³ most serious public health issues. The government estimates that around 210,000 South Korean children are affected and in need of treatment. Eighty per cent of them might need drugs targeting the brain and nearly a quarter⁴ could need to go to hospital. Since the average high school pupil there spends about 23 hours per week gaming, another 1.2 million are believed to be at risk of addiction and require basic counselling. There has been alarm over a rising number of addicts dropping out of school or quitting their jobs to spend more time on computers. In China, it has been reported that 13.7 per cent of adolescent Internet users, about 10 million, could be considered addicts⁵.

2. Remember the meaning of this type of study?

3. What does 'its' refer to?

4. About how many?

5. About how many adolescent Internet addicts are there in China?

4. Block, a psychiatrist at the Oregon Health and Science University in Portland, writes that it is more difficult to estimate the extent of the disorder in America because people tend to surf at home instead of in Internet cafes. But he believes there are similar cases and says: "Unfortunately, Internet addiction is resistant to treatment and has high relapse⁶ rates." He told *The Observer* that he did not believe specific websites were responsible. "The relationship is with the computer," he said. "First, it becomes a significant other to them⁷. Second, they exhaust emotions that they could experience in the real world on the computer, through any number of mechanisms: emailing, gaming, text-messaging. Third, computer use occupies a tremendous amount of time in their life. Then if you simply try to remove the computer, they've lost their best friend. That⁸ can take the form of depression or rage."

6. What happens in the case of a relapse?

7. What does 'them' refer to?

8. What does 'that' refer to?

5. Harry Husted, a single 51-year-old⁹ from New York, spends 16 hours a day on the Internet. He insists that he is not addicted, but admits that he used to be. "I used to work with computers for eight hours, then get home and go online for seven hours. I would stay up until two or three in the morning or until I got so sleepy I had to go to bed. I wouldn't go out to get the groceries and I couldn't have cared less about friends, TV, anything¹⁰. After a while I realised what was happening and did something about it¹¹. Now if I use *MySpace*, it's only to advertise my business."

9. What part of speech is this combined word?

10. Did he care a little or a lot about them?

11. About what?

6. Internet addiction clinics have sprung up around the world in an attempt to wean people off their need for a fix. Many people have turned,

12. Why should there be the talk of irony?

apparently without irony¹², to web discussion boards with names such as *Internet Addicts Anonymous*. The Centre for Internet Addiction Recovery in Bradford, Pennsylvania,¹³ says Internet addiction has become a growing legal issue in criminal, divorce and employment cases.

13. Is Bradford larger or smaller than Pennsylvania?

7. Robert Freedman, editor of the *American Journal of Psychiatry*, said Internet addiction can be diverse. “In Korea, it seems to be primarily gaming sites. In America, it¹⁴ seems to be *Facebook*. Additionally, it’s movies, it’s games, it’s chatting with friends. All these things existed before, but now they’re a lot easier.”

14. What does ‘it’ refer to?

8. To beat the addiction, he advised: “A self-help group might be a place to start. Maybe replace an online group with a real one¹⁵.”



15. Do you see the irony?

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

-----1. The first three questions at the opening of the first paragraph imply that getting online can turn into an addictive behaviour.

-----2. The second paragraph suggests that ‘addiction to the Internet’ can be an item on the officially-produced lists of diseases.

-----3. By ‘a leading psychiatrist’ (paragraph 1), the author means a psychiatrist that directs the community of professionals in that field.

-----4. More than one cause has been identified for the clinical disorder mentioned in the second paragraph.

-----5. The “Diagnostic and Statistical Manual of Mental Disorders” is a handbook devised for listing and describing the main components of the ‘Internet addiction’ disorder.

-----6. Excessive gaming and e-mailing are examples of man’s ‘basic drives’.

-----7. An excessive Internet user who, among other things, is not aware of his/her need for food or sleep can represent a potential case of the disorder discussed in this text.

-----8. It is implied in the text that an ‘Internet addict’ might constantly feel the need to have a more advanced computer although the one he/she

has works reasonably well.

-----9. We can understand from the text that the more time one spends text-messaging, the more sociable he will become.

-----10. According to Dr. Block, it is quite natural to feel depressed when one cannot access a computer for some time.

-----11. South Korea has been the subject of a case study as it has the highest number of excessive Internet users in the world.

-----12. Dr. Block believes that too much use of the Internet can affect achievement negatively.

-----13. People playing online games excessively might come to take the games too seriously.

-----14. It is suggested that excessive use of the Internet will inevitably lead to formation of blood clots in the body.

-----15. One can understand from the text that rather than being only a subjective phenomenon, addiction has something to do with certain changes within the brain.

-----16. Those children in Korea that are considered addicted to the Internet are not all affected to the same degree of severity.

-----17. There are more than a million children in South Korea that need to take drugs to overcome their addiction to the Internet.

-----18. There have been more and more dropouts in South Korea because there are strict regulations in schools about the number of hours of Internet use.

-----19. One can understand from the text that, at the time when this article was written, China had a teenage population of well over 130 million.

-----20. Chinese Internet addicts seem to outnumber those in South Korea suffering from the same problem.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. Which of the following statements is correct about Internet addiction in the US?

- a. The extent of the problem is wider there than it is in South Korea or China.
- b. Compared to other countries, it is more difficult to control the problem there.
- c. American Internet addicts are more resistant to treatment than those of other nationalities.
- d. We have a clearer idea of the number of Internet addicts in South Korea than we do there.

2. Which statement is **false** concerning the problem in the US?

- a. It might be as serious a problem as it is in other countries though we might not be able to directly locate the addicts.
- b. Many Internet addicts who undergo treatment are likely to resume their bad habit.
- c. The root of the problem lies in the nature and content of websites addicts visit.
- d. The computer plays a crucial role in creating the addicts' dependence on the Internet.

3. Considering what Block told *the Observer*, which statement is **false**?

- a. Internet addiction seems to go through a specific set of orderly stages for it to be formed.
- b. Internet lovers seem to devote the same type of attention and love to the computer as they would to a loved one
- c. Rather than the nature of the online activity, it is the excessive time spent that plays a crucial role in creating dependence.
- d. The most straightforward solution to the depression and rage associated with Internet addiction is depriving addicts of the computer.

4. Which sentence is correct concerning the case of Mr. Husted?

- a. He is mentioned here as an example of a wise, moderate user of the Internet.
- b. He believes he has never been able to free himself from addictive use of the Internet.
- c. The author seems to take sides with him in the claim that he is no more an Internet addict.
- d. He believes that excessive use of the Internet is alright as long as we use it for work-related purposes.

5. Which statement best captures the help Internet addicts can presently receive?

- a. It comes exclusively in the form of services given in clinics.
- b. Most of this help can be found in South Korea and the US.
- c. It can be in the form of a site where addicts can talk about their

dependence.

d. It can be found online, provided that the user agrees to disclose his personal information.

6. Mr. Freedman believes that ----- .

a. the Internet is responsible for the generation of activities such as chatting with friends, gambling, etc.

b. the addict should start helping himself get rid of the dependence by joining an online self-help group

c. the online activity done in an excessive, addictive way might differ from country to country

d. the less accessible an online activity is, the higher chances are for it to become addictive

C. Negative Emotions. In the article, there are many words that are used to describe negative emotions and states of mind. Find words that mean the following.

1. tiredness -----

2. despondency -----

3. loneliness -----

4. anxiety -----

***How many other similar words can you find? Explain their meaning.**

• -----	• -----
• -----	• -----
• -----	• -----
• -----	• -----

D. Find words from the text that can fit the blanks in following sentences. The paragraph where the word can be found is identified with a number at the end of every sentence. Make any necessary changes to the words.

1. The other members of the team will not be able to accept your ----
----- from the project as you are announcing it too late; you have to cooperate until the project is completed. [para. 2]

2. One of the dangers of smoking is that its ----- will appear so

gradually that the smoker might feel that it is almost safe to smoke 'another' cigarette. [para. 2]

3. Security-enhancing devices have recently become so technologically-advanced that they use personal biological traits (e.g. fingerprints or shape of the cornea) to ----- a person. [para. 2]

4. Man is a social creature; therefore, a tendency to spend one's time in ----- should be considered against man's nature. [para. 2]

5. The test the teacher gave the students at the beginning of the semester was only used for ----- purposes and would therefore not count towards the final grade. [para. 2]

6. He is a highly ----- manager, with almost everyone in the company following his requests wholeheartedly. [para. 2]

7. Since our medical supplies in this hospital are limited, we have to first ----- those who need urgent medical help. [para. 3]

8. The teacher ----- the text by explaining to the class every single point that students had problem understanding. [para. 4]

9. The new medication is so effective that it reduces to almost zero any chance of the ----- of the disease. [para. 4]

10. Although insisting at first that he had followed all the physician's instructions, he finally had to ----- that he had taken his medication quite irregularly. [para. 5]

11. As the kid found it impossible to solve the problem all alone, he ---- ----- his parents for help. [para. 6]

12. When that restaurant opened in a far-off part of the town, no one imagined that other branches would ----- so fast; it has actually turned into a chain. [para. 6]

13. While child abortion is ----- in certain countries, it is not at all allowed in others, requiring criminal prosecution. [para. 6]

14. It was quite ----- that the cardiologist who has saved the lives of innumerable patients finally died of a cardiovascular disease. [para. 6]

E. Word Families: Fill in the blanks using the correct form of the words given in the list.

Verb	Noun	Adjective
	correspondent	
		excessive
		diagnostic
neglect		
	withdrawal	
	Addiction	
		resistant
Exhaust		
occupy		
admit		

1. The features of addiction to the Internet ----- to those of other types of addiction.
2. If you take in calories in ----- of what is needed for your normal body functioning and growth, you will normally gain weight.
3. The ----- of this disease is often a challenge for doctors as there is a lot of overlap between its symptoms and those of some other disorders.
4. The doctor was sued by the patient for having ----- to order some necessary tests.
5. He initially accepted the post offered to him with a lot of excitement, but when he learned about the full range of responsibilities involved, he ----- from the position.
6. Many people are ----- to drinking tea right after their meal, despite the frequently-heard suggestion that this will prevent the iron from being absorbed into the bloodstream.
7. Internet addicts often find it pretty hard to ----- the temptation of buying newer models of computers as soon as they are available on the market.

8. Many of the once-----, traditional forms of revising a text have been replaced by fast and efficient digital methods done by a computer.

9. His ----- is selling merchandise online--from the comfort of his home.

10. Due to a fierce competition from around the globe, it is not very easy to obtain ----- into that university.

Discussion: Are you a net addict?

F. Answer these questions for yourself or for someone you know and discuss the results. Do you think these test questions are a good indicator of Internet addiction?

1. Do you feel preoccupied with the Internet?
2. Do you need increasing amounts of time on the net in order to achieve satisfaction?
3. Have you repeatedly made unsuccessful efforts to control, cut back or stop Internet use?
4. Do you feel restless, moody, depressed or tense when you try to cut down or stop Internet use?
5. Do you often stay online longer than you originally intended?
6. Have you jeopardized or risked losing a friend, job, educational or career opportunity because of the Internet?
7. Have you lied to family members, a therapist or others to conceal the extent of your involvement with the Internet?
8. Do you use it to escape from problems (e.g. feelings of helplessness, guilt, anxiety, depression)?

If you answer 'yes' to five or more of these questions, you may have an Internet addiction!



Further Reading

Life through a lens: How Britain's children eat, sleep and breathe TV

1. A generation of 'multitasking' children are living their daily lives – including eating and falling asleep – to the accompaniment of television, according to a survey of youngsters' media habits. The flickering of the screen accompanies most of them before they go to school, when they return home, as they consume their evening meal and then – for 63%, far more than read a book each day – in bed at night. The study of 5 to 16-year-olds shows that four out of five children now have a TV set in their bedroom.



2. So ubiquitous has television become that many children now combine it with other activities, including social networking online, flicking their eyes from laptop to TV screen and back again. Even if they are focusing on the television, young people are now reluctant to commit to one programme, with boys in particular often flipping between channels to keep up with two simultaneous shows at once. The findings, from the market research agency Childwise, will fuel concerns that childhood is increasingly about private space and sedentary activities and less about play, social interaction or the child's own imagination.

3. The government's recent Children's Plan, while attempting to calm panic over claims of 'toxic' childhood, focused on improving play facilities as a means of ensuring a more balanced life for screen-bound youngsters. Today's survey findings indicate a revival in television-watching among children after three years of decline, driven mainly by more girls watching soaps such as *Hollyoaks* and *EastEnders*.

4. Internet use – now that the social networking bug is biting younger than ever – is also continuing to grow at a far greater rate than the brief fall-off in TV viewing. That means British children spend an average of five hours and 20 minutes in front of a screen a day, up from four hours and 40 minutes five years ago. The rise may have come at the expense of reading books for pleasure, which, in a development that will alarm many parents, continues to decline as a regular pastime. While four out of five children read books in their own time, only a quarter do so daily and 53% at least once a week.

5. The report, based on interviews with 1,147 children in 60 schools around England, Scotland and Wales, found television viewing now

averages 2.6 hours a day across the age group, though one in ten say they watch more than four hours daily. The survey, which has been conducted annually for 14 years, asked for the first time whether children watched television while eating dinner or in bed before going to sleep. It found that 58% watch during their evening meal, while 63% lie in bed watching the screen (rising to almost three-quarters of 13 to 16-year-olds). Two-thirds – particularly the youngest children – watch before school, and 83% turn on the television after returning home.

6. Rosemary Duff, Childwise research director, said television was now “almost woven into children’s lives”, but added that the quality of viewing had changed. “A lot of television viewing has lost the ‘pay it attention’ feel it used to have. It used to be less ubiquitous but much higher in its importance whereas now it is widespread but just part of the background, not just at home but wherever you go.”

7. Anecdotal evidence indicated that children are now multitask, keeping one eye on the television as they flick through magazines or use the computer, Duff added. Boys asked by the company to choose between programmes on different channels frequently refused, saying they would ‘watch both’. “They flick from one to another and cannot conceive that they should have to make a decision. They are puzzled that you should put them in a situation of having to make one or another choice.”

8. Computers are also now a key part of children’s private worlds. “The Internet is now an essential part of most young people’s lives,” says the study, with 85% of five to 16-year-olds accessing the Net, and over a third (including a quarter of five to six-year-olds) owning a computer or laptop of their own. On average, they go online just over four times a week, spending two hours each time.



9. The survey shows a rise in Internet use, particularly among younger children, driven primarily by a boom in the use of social networking sites, primarily Bebo. Communication, says the report, “has overtaken fun (e.g. online games) as the main reason to use the Internet and study is now far behind”. Almost three quarters (72%) of children have visited a social networking site, and over half have set up their own profile – sometimes lying about their age to sidestep minimum age safeguards. Children as young as eight are now signing up.

10. Kathy Evans, policy director of the Children's Society, which is conducting its own inquiry into modern childhood, said there was now "mounting public and professional concern about the potential impact of children's TV and Internet viewing habits". The inquiry will report next month on children and technology as part of its two-year investigation.

A. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. The title of the passage talks of 'eating, sleeping and breathing TV'. By using such an expression, the writer most probably intends to suggest that -----

- a. technology has been improving very rapidly
- b. children are watching TV in an unusually excessive way
- c. we should prevent children from watching TV altogether
- d. children are learning how to satisfy their basic needs through TV

2. The expression 'multi-tasking children' (para. 1) implies that -----

- a. it is both while eating and before sleeping that children watch TV
- b. children today have too many responsibilities to do at the same time
- c. there are many tasks that children need to do during the day
- d. children today tend to do several things at the same time

3. The findings of the market research agency Childwise shows that children -----

- a. constantly change TV channels as they often dislike the programmes
- b. are increasingly adopting a lifestyle with negative health implications
- c. are becoming increasingly sociable, thanks to social networking
- d. will have a poor imaginative power if they stop watching TV

4. The government's 'Children's Plan' -----

- a. cannot be credited for a 3-year decline in TV watching among children
- b. has been responsible for a very recent increase in TV watching among children
- c. caused a lot of fear among people about children becoming 'intoxicated' with TV
- d. intended to provide conditions that would encourage children to do more physical activities

5. Which statement is correct about the time spent by British children in front of a screen?

- a. They watch TV more than 5 hours a day now.
- b. It is likely to more than offset the recent short drop in watching TV.

- c. It has increased by 4 hours and 40 minutes as compared to 5 years ago.
- d. It has increased for an average of about 1 hour per year over that last 5 years.

6. Which statement is **NOT** correct about the report referred to in paragraph 5?

- a. It can be considered a sectional report for a larger, longitudinal study.
- b. The average it reports for hours of TV viewing does not capture extreme cases.
- c. It reports its findings about the number of hours children watch TV through indirect reports rather than first-hand observation of child behaviour.
- d. It had as one of its objectives to find how the time spent in front of TV while eating or before going to bed has changed over the last 16 years.

7. When children are asked to concentrate on one task instead of several, their reaction is-----

- a. lack of understanding and surprise
- b. aggression and rejection
- c. welcoming acceptance
- d. logical reasoning

Unit 3

Pre-reading Activity

A. Skim through the text and answer the following questions.

1. How do conventional medical schools train doctors?
2. What is functional medicine?
3. How does functional medicine train practitioners?
4. Is functional medicine grounded in science? Explain it.
5. Which method (conventional or functional medicine) is more expensive? Why?
6. Which approach to medicine is safer and has fewer side effects?



Reading

Functional Medicine: A Science whose Time Has Come

A few years ago, Louis Messina was in pain. Despite being on a variety of big-gun drugs to control his psoriatic arthritis, an autoimmune disease that attacks the joints, he still suffered from constant pain and swelling throughout his body. He walked with a limp because his left knee had arthritis induced tissue damage; the big-toe joint on his right foot was similarly destroyed; and in the mornings, he would awake to find his hands **balled up into** fists. (They would unclench only after he submerged them in warm water for several minutes.)

form sth or be
formed in to the
shape of a ball

“Morning stiffness may sound like a minor problem, but it’s a big thing,” Messina says. “If you can’t open your hands up in the morning, you really can’t do much. You can’t brush your teeth, or wash your face, or shave.” Nor can you perform surgery. At the time, Messina was in

his early 50s, putting in 60 to 80 hours weekly as chief of vascular surgery at the renowned University of California, San Francisco school of Medicine.

“I was quite **incapacitated**,” he recalls. “It was at the point where I too ill or weak couldn’t really make rounds with the residents in the mornings because I wasn’t able to easily walk up and down the stairs.” Frustrated and thinking about early retirement, Messina made an appointment with Mark Hyman, MD, the medical director and founder of the UltraWellness Center in Lenox, Mass, and a leading expert in functional medicine. “I had never even heard of functional medicine,” Messina says. “I went on the recommendation of a friend of mine and, frankly, because my wife wanted me to go.”

Hyman took a detailed medical history, asking Messina very specific questions about his diet, lifestyle, early childhood illnesses, stresses, and recent health challenges, which included reflux, migraines, and more. Then he ordered **a battery of** tests to deepen his understanding of Messina’s overall health. The results showed a variety of underlying gut problems, such as yeast overgrowth, a leaky gut, and allergies or sensitivities to many foods, including gluten. Tests also revealed low levels of vitamin D and magnesium, hypothyroidism, and prediabetes. a number of

“He had all kinds of problems,” says Hyman. “But once we treated his poor, inflammatory diet and his underlying gut issues, which generated significant inflammation throughout his body, all of those problems went away.” For Messina, who up until this point had been offered only surgery or drugs (which cost more than \$30,000 annually and had serious side effects), it was an **unprecedented** medical experience. never happening before “The rheumatologist that I had been seeing before Dr. Hyman still can’t believe it. **She’s** never seen anything like **it**,” he says. “She” refers to “My arthritis, my pain and swelling, it’s all gone. I now go faster on the stairs than my residents.”

Messina’s experience, while notably rare in conventional medicine, is actually quite characteristic of functional medicine, an increasingly popular healthcare model. **Its** claim to fame: seeing the big picture, treating the whole patient, and recognizing and treating the root of disease, as opposed to just the visible symptoms. Some **folks** have the mistaken idea that functional medicine is simply lifestyle-based medicine, but it is a systems-oriented, science-based approach that involves taking a patient’s biochemistry, physiology, genetics, and environmental exposures into account when looking for the cause of a specific medical issue or set of symptoms. ordinary people

Practitioners in the hyperspecialized, overbooked world of conventional medicine, says Hyman, sometimes don't have the time or **inclination** to adopt this wider perspective. In Messina's case, doctors had focused only on suppressing the inflammation – which was just a symptom – as opposed to digging deep and investigating what was causing that inflammation. “Most doctors aren't trained to think about the underlying causes of disease, such as toxins, allergens, microbes, nutrition, and stress,” says Hyman, who is chairman of the Institute for Functional Medicine (IFM). “Conventional medicine is the medicine of *what* – what disease do you have, what drug should I give you. Functional medicine considers the diagnosis, of course, but it also seeks to answer the question *why*.”

willingness;
tendency

Matching a drug to a disease is a big part of the typical physician's job. It works like this: You get sick. You go to the doctor. The doctor runs tests or recognizes your symptoms. You're given a prescription to take to the drugstores. Sometimes the drug works wonders. Often, **it** doesn't – particularly in long-term use, and particularly if what you are dealing with is a chronic disease or condition. And often the drug has side effects. Over the past 70 years, **this medication-centered mindset and the industry behind it** have saved millions of lives, especially when it comes to infectious diseases, such as malaria and polio.

“it” refers to

good at doing sth
that is very

good at doing
sth that is very
difficult

Conventional medicine is also **adept at** handling acute trauma. “If you go to the emergency room with a heart attack or a broken leg, the doctors who treat you will know exactly what to do,” says Victor Sierpina, MD, a family physician at the University of Texas Medical Branch whose practice is informed by functional-medicine principles. Where conventional medicine can fall short, though, is in the early identification and long-term management of chronic illness, including the kinds of digestive, metabolic, hormonal, and cardiovascular disorders in which many functional-medicine doctors specialize.

influenced

Conditions like obesity, type 2 diabetes, and cancer are characterized by a series of complex, multilayered symptoms that take years to develop and can affect every biological system, including circulation, immunity, and hormonal and neurological health. By the time most people are diagnosed with a persistent condition, they need a **full-scale** intervention, not a 15-minute appointment and a symptom-suppressing prescription.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

- 1. Messina suffered from pain just in his joints.
- 2. Louis Messina is a surgery resident.
- 3. Since Messina was frustrated, he was retired at the age of 50.
- 4. Dr. Hyman recommended Messina to go to the UltraWellness Center in Lenox, Mass.
- 5. Dr. Hyman is a functional – medicine practitioner.
- 6. Its (para.6, line3) refers to conventional medicine.
- 7. Unlike conventional medicine, functional medicine focuses on treating the main cause of disease.
- 8. Some ordinary people believe that functional medicine is just based on lifestyle.
- 9. Some conventional practitioners don't have the time to practice functional medicine.
- 10. Conventional medicine is a wider perspective than functional medicine.
- 11. In conventional medicine, inflammation is considered as an underlying cause of disease.
- 12. Nutrition and stress are considered as symptoms of diseases in functional medicine.
- 13. Persistent conditions like obesity should be dealt with functional approach.
- 14. It is understood that functional doctors look at the interactions among genetic, environmental and lifestyle factors.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item

1. The first paragraph -----.

- a. is a complete medical description of psoriatic arthritis
 - b. gives a brief medical history of Messina's problem
 - c. mainly explains Messina's condition in the mornings
 - d. is about morning stiffness of joints
2. Before visiting a functional-medicine practitioner, Louis ----- .
- a. was quite active in his daily activities
 - b. had no idea of functional medicine
 - c. had not referred to any conventional-medicine doctor
 - d. could make rounds with his residents
3. Having taken a detailed medical history, Hyman -----.
- a. prescribed some drugs for Messina
 - b. referred Messina to a rheumatologist
 - c. recommended Messina to exercise in UltraWellness Center
 - d. sent Messina to a laboratory to do a number of tests
4. Louis Messina suffered from all of the following problems, EXCEPT:
- a. gut disorder
 - b. food sensitivity
 - c. hypocalcaemia
 - d. hypomagnesaemia
5. Regarding functional medicine and conventional medicine, it is implied that ----- .
- a. the latter is more expensive but without side effects
 - b. the former is both cheaper and safer
 - c. both are impersonal and symptom-centric approaches
 - d. neither is a medical new model for treating chronic diseases
6. The underlined it (paragraph 5, line 8) refers to ----- .
- a. Messina's exacerbated condition
 - b. significant inflammation throughout Messina's body
 - c. mere improvement in Messina's arthritis
 - d. Messina's improved health condition
7. One thing that makes functional medicine important and different from other approaches to medicine is that it -----.
- a. treats chronic disease with pills and surgeries
 - b. just pays attention to the most visible symptoms
 - c. considers the patient as a whole
 - d. claims the big picture back

8. Conventional medicine can easily treat all of the following cases, EXCEPT:

- a. heart attacks
- b. acute trauma
- c. cardiovascular disorders
- d. infectious diseases

9. In paragraph 8, "this medication-centered mindset and the industry behind it" refers to ----- respectively.

- a. the functional medicine and the drug industry
- b. the conventional medicine and the drug industry
- c. pharmacology and medicine
- d. medicine and pharmacy

10. If you suffer from migraines, for example, and refer to a -----, you should fill out a long questionnaire about ----- of the migraines such as your sleep and stress levels.

- a. conventional doctor / underlying causes
- b. functional doctor / possible triggers
- c. pharmacologist / the medications
- d. pharmacy / probable drugs

C. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. It is ----- as one of the region's best restaurants; different high-quality foods are served here.

- a. notorious
- b. visible
- c. renowned
- d. perspective

2. There was continuous rain for one week; it was a/an ----- rainfall.

- a. generated
- b. unprecedented
- c. unrecognized
- d. circulated

3. They are very religious; every aspect of their lives is ----- by religion.

- a. informed
- b. conditioned
- c. investigated
- d. diagnosed

4. She has a conservative ----- and prefers traditional styles and values.

- a. issue
- b. frustration
- c. recognition
- d. mindset

- D. Word Families: Fill in the blanks using the correct form of the words given in the list.**

a. Every job has its difficulties and -----.

b. What ----- the hospital manager is that there's too little money to

spend on expanding the wards and the progress was ----- slow.
c. It was ----- for patients to wait so long to be visited by the doctor,
so they got ----- and impatient.

incline, inclination, inclined

- a. She did not show the slightest ----- to study medicine; she preferred to major in biotechnology.
- b. They'll be more ----- to listen if you don't shout.
- c. I ----- to the view that we should take no action at this stage.

underlie, underlying

- a. The ideas of the pioneer doctor have ----- all of the hospital's policies.
- b. It was a principle that ----- much of his work in the past.
- c. The ----- assumption is that the amount of money available is limited.

suppress, suppressant, suppression, suppressor

- a. A drug used to prevent one of the body's organs from working normally is called a ----- .
- b. Since she is overweight and wants to lose weight, the doctor prescribed some drugs to ----- her appetite.
- c. The ----- of emotions sometimes leads to harmful results.
- d. Nowadays the high incidence of severe acute and chronic pain has spanned a rich industry of chemical pain -----.

E. Cloze Test: Fill in the blanks using the words in the list.

unless	giant	contain
extensive	clues	offering
foundations	brainstorm	ground
catching	as well as	enroll

Bland started the functional-medicine movement about 30 years ago after he grew frustrated with what he calls "organ-based specialty care." Think of disease as a ----1---- weed growing in the body's soil, Bland says. " what's above ----2---- is easier to see and, in many ways, easier to treat. But ----3---- you dig down and uproot the weed, you'll never ----4---- it; you'll only prevent its growth."

In 1990, Bland asked a group of medical experts to ----5---- a better way. Ultimately, the group laid down the ----6---- of functional medicine.

The experts felt that ----7---- the early warning signs of chronic illness would best for patients ----8---- the healthcare system. They decided that employing ----9---- intake questionnaires and listening to patients' stories could provide important ----10----.

Soon after, Bland and his wife, Susan, founded the IFM and began ----11---- introductory courses in functional medicine. To ----12----, an applicant had to be a graduate of an accredited healthcare program: Doctors, nurses, naturopaths, osteopaths, chiropractors, and nutritionists could all participate.

E. Prefix/Suffix Exercise

Prefixes

In the chart below, you will find some words which appeared in this unit. The meanings of their prefixes are given. Guess the meanings of the words and provide more examples.

Word	Prefix	Meaning of the prefix	Meaning of the word	Other examples
autoimmune	auto	self; working by it-self		
hypothyroidism	hypo	less than usual		
prediabetes	pre	before		
hyperspecialized	hyper	more than usual		
overgrowth	over	too much; more than normal		
cardiovascular	card/ cardio	heart		

Suffixes

In the next chart, you see some words from the unit having suffixes. Guess their meanings and provide more examples.

Word	Suffix	Meaning of the suffix	Meaning of the word	Other examples
arthritis	itis	the inflammation of		
rheumatologist	ist	specialist in a field		
physiology	logy	the study of		
genetics	ics	the science of		
practitioner	er	someone who ...		
hypothyroidism	ism	the condition of; tendency toward		

Further Reading

Two Paths to Medicine: Meet our hypothetical patient.

In his 50s, **he** is struggling with high blood pressure, high cholesterol, heartburn, joint pain, and type 2 diabetes. So, how would he fare at a typical conventional doctor's office versus a functional- medicine doctor's office? Here are some key differences. "he" refers to ...

Conventional Medicine Approach

When it comes to acute trauma, like a broken leg, or infectious diseases, such as malaria, conventional medicine is incomparable. Not so when it comes to the epidemic of chronic disease. "The structure of medical-school curriculum hasn't changed in more than half a century," says the American Medical Association's James Madara, MD, "Caring for **this new population** requires an entirely different mindset," Confronted with our hypothetical patient's set of symptoms, many conventional docs would certainly consider lifestyle-based solutions. But their primary treatment would most likely be a drug-centered approach, breaking the larger problem into individual components and treating each issue with a separate medication. This strategy is accepted and supported by health-insurance and pharmaceutical companies. "this new population" refers to

				
Blood – pressure medication. Routinely prescribed for even mild problems, blood-pressure meds have been linked to an increased risk of cancer, back pain, and headaches.	Cholesterol medication. Research shows that statin medications decrease heart-attack risk by less than 2 percent and can have serious side effects, including increased risk of type 2 diabetes and joint pain.	Diabetes medication. Insulin can worsen type 2 diabetes in the long run. One drug, Avandia, has been linked to heart disease.	Non-steroidal anti-inflammatories (NSAIDs) for joint pain. NSAIDs, such as ibuprofen, can damage the all-important gut lining and lead to bleeding ulcers, heart attacks, and strokes.	Acid blockers. These drugs, often prescribed for heartburn, work by impeding the stomach's ability to make acid. But the body needs stomach acid to digest food and keep harmful bacteria at bay. Long-term use of acid blockers is linked to osteoporosis and nutritional deficiencies. Taken together, this potent cocktail of drug can cause adverse interactions, and toxicities are possible. One common side effect is confusion, which in an older patient is often misdiagnosed as Alzheimer's.

Functional Medicine Approach

The typical functional- medicine practitioner would probably recognize that the combination of high blood pressure, high cholesterol, weight gain, type 2 diabetes, and heartburn all share a single root cause: metabolic syndrome, one of the most common causes of heart attack today. After taking an extensive health history, the functional-medicine practitioner would **likely** order laboratory analysis to create a personalized framework for diagnosis and treatment. Clearly, the course

probably

Indicate ; show

				
Eliminate sugar. The major cause of metabolic syndrome is excess sugar and refined carbohydrates in the diet. The average American consumes about 150 pounds of sugar a year. Simply eliminating the excess sugar, starting with sodas and fruit juices, will often fix half of these problems.	Run thyroid tests. A low thyroid level in men and women is a sign of hormonal disturbance that contributes to metabolic syndrome. Functional medicine docs use a series of tests (not just the one or two ordered by conventional docs) and note even minor abnormalities.	Prescribe blood pressure medication (short-term). Functional-medicine doctor may use conventional pharmaceuticals as a first step, but not an end game. The long-term solution is a nutrition-rich whole-foods diet high in magnesium and potassium, which lowers blood pressure naturally. Once blood pressure is under control, it's time to taper off the meds.	Incorporate more light and movement. Sunshine, for vitamin D, and exercise are both instrumental in bone strength, weight loss, and cardiovascular health. As the weight comes off, the arthritis pain disappears and much of what has been blamed on arthritis, which is often muscle pain, also improves with hormonal and nutritional support.	Monitor and maintain improvements. Heartburn often clears up when excess weight comes off, but if it continues, the functional-medicine practitioner might recommend a plant-based digestive enzyme with meals. Type 2 diabetes, too, usually clears up as hormones stabilize, diet improves, and weight normalizes. Same with high cholesterol. By getting out of the chronic-disease loop early, the patient avoids the long-term effects these problems eventually cause, including nerve pain and cardiovascular disease. As our hypothetical patient ages, he maintains his healthy lifestyle and continues to feel like he is in his 40s or 50s, with a clear mind, a healthy cardiovascular system, and a low risk of cancer and osteoporosis.

of action depends on what testing **turns up**, but here are a few ways a functional-medicine doc might treat our patient.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

----- 1. The passage deals with some important differences between two approaches to medicine.

----- 2. Conventional medicine is extremely good at encountering epidemics of chronic diseases.

----- 3. It is implied that conventional doctors do not consider the body as a whole.

----- 4. According to functional medicine, many disorders have just one main cause.

----- 5. An extensive health history is taken by a functional practitioner.

----- 6. Acid blockers are mostly prescribed by functional doctors.

B. Discuss and answer the following questions.

1. What problems does our hypothetical patient have?

2. How would our hypothetical patient fare at a conventional doctor's office?

3. What does a functional doctor do for our patient?

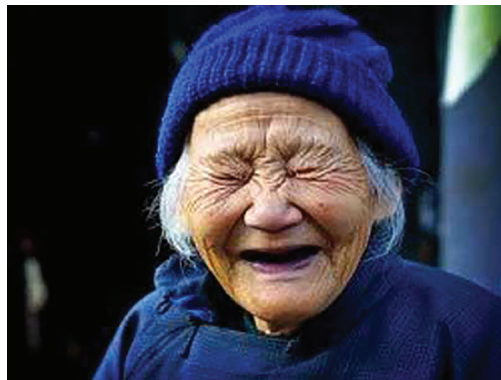
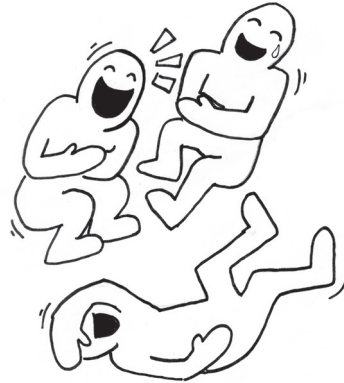
4. What is the main difference between conventional and functional medicine?

Unit 4

Pre-reading Activity

A. Discuss the following questions with your friends.

1. Do you think laughing has any effects on your health?
2. Is it possible to cure the diseases without using drugs?



Laughter is the Best Medicine

And it's a great adjunct in the treatment of patients with cancer

The mere mention of cancer can **inspire** dread. The grief, anger, fear, anxiety, and depression that commonly displease cancer patients and their families can further **erode** health and well-being. However, there is a favorable aspect to cancer. A person who has been diagnosed with it, defined as a survivor, will often lead a fuller, more meaningful life. Survivors may have a greater appreciation of being alive, a diminished fear of death, a more optimistic outlook, and a deeper faith in God. They have described the experience as life changing “from black and white to full color” and one expressed his spiritual renewal in these terms: “I enjoy and **cherish** every moment. I smell the grass when I cut it, relax in the feel of the sun on my face, and watch ants and clouds go by.”

cause
hurt, damage

praise, enjoy

Harold Benjamin, PhD, and founder of the Wellness Community, a support program for those fighting for recovery from cancer, once said, “The more laughter there is, the higher the quality of life, and the higher

the quality of life, the greater the will to live.” This article explores the effects of therapeutic humor and an optimistic perspective on the quality of the lives of cancer survivors.

Treating the Spirit

Socrates said, “As it is not proper to cure the eyes without the head, nor the head without the body, so neither is it proper to cure the body without the soul.” Cancer affects the mind, body, and spirit. In the way a tumor invades the body, the psychological **toll** of cancer can be likened to an evil that spreads to destroy the mind and spirit. No matter what the prognosis, the mind, body, and spirit must all be healthy for a survivor to live and not just survive.

the amount of
damage

Quality of life has become a recognized health care goal. In 1990, The National Cancer Institute recommended that it be an outcome variable in all the clinical trials it sponsors and was identified by the Oncology Nursing Society as its highest research priority in 1991. Quality of life is perceived according to individual conception and is best evaluated by the patient rather than by others. It is the condition of one’s being, reflected in the ability to perform everyday activities, as assessed according to physical, psychological, spiritual, and social dimensions. Among oncology patients, the quality of life is reflected in satisfaction with levels of functioning and control of the symptoms of both disease and treatment.

Oncology nurses understand the value of the quality as well as the quantity of life; the former **transcends** physical health, clinical symptoms, and functional ability. Betty R. Ferrell, PhD, has devised a model that incorporates the four dimensions of the quality of life: physical, psychological, social, and spiritual. Much attention has been given to the body in terms of symptom management, functional ability, and the use of technology in treatment. But spiritual and social well-being are equally important and deserving of attention. Consideration of the psychological aspect of the quality of life brings us to the subject of humor and how it can enhance well-being.

goes above

Humor Helps the Medicine Go Down

Humor used therapeutically can enhance a patient’s well-being. Norman Cousins, a patient diagnosed with ankylosing spondylitis in 1964, was the first to formally study how it affects the quality of life. Aware that adverse thoughts can worsen one’s health, Cousins wondered whether the opposite is true, whether laughter can heal. He developed his own therapy program including humor to treat himself when suffering pain. He discovered a **cumulative** decrease in his

sedimentation rate, indicating a reversal of inflammation. Further, he found he could enjoy two hours of pain-free sleep after ten minutes of sustained laughter. After his recovery, Cousins joined the staff at UCLA Medical School to establish a Humor Research Task Force to pursue clinical research on humor.

Increasing/
blood test
used to detect
and monitor
inflammation in
the body

Like pain, humor is subjective and perceived variously. What one person finds humorous, another may find dull, unaffecting, or even offensive. Steve Sultanoff, PhD, president of AATH, identifies three components of humor; wit (the cognitive experience of it), mirth (the emotional), and laughter (the physiologic). Thus, humor involves the mind, body, and spirit- the total person.

It is a challenge to quantify humor's effect on recovery, because humor is difficult to define, not a strictly physical response, and has a different meaning for each person. Furthermore, research is relatively **scant**, as there seems to be a widespread opinion that the **pursuit** of joy is not a respectable subject for academic study.'

minimal, limited
looking for

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

- 1. The writer believes that being a cancer patient is not all disappointing; it can in a way be favorable.
- 2. Socrates gives the highest preference to the treatment of soul.
- 3. Quality of life is ideally evaluated against specified social norms.
- 4. The control of the symptoms of diseases as well as treatment leads to satisfaction of oncology patients and thus the improvement of their quality of life.
- 5. To oncology nurses, quality of life is preferable to its quantity.
- 6. The cancer treatment mode proposed by Betty, R. Terrell encompasses four aspects of quality of life.
- 7. Humor is as personal as pain is.
- 8. Humor is a mere physical response having effect (s) on recovery.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. According to the passage, “a survivor of cancer” is the individual who has -----.

- a. been cured of cancer
- b. not yet defeated the cancer
- c. not been afflicted with cancer
- d. been protected against cancer

2. The first paragraph mainly deals with the -----.

- a. gloomy aspect of cancer patients’ life
- b. seriousness of cancer treatments
- c. positive side of cancer patients’ life
- d. different sufferings the cancer patients are faced with

3. Harold Benjamin has stated that -----.

- a. the therapeutic effects of humor should be explored
- b. optimistic thoughts of the cancer patients should be enhanced
- c. humor fosters cancer patients’ desire to live
- d. happiness helps cancer disease to be eliminated

4. The mentioned quotation by Socrates “As it is not proper to cure the eyes without the head, nor the head without the body, so neither is it proper to cure the body without the soul.” -----.

- a. signifies the importance of sound soul in the sound body
- b. emphasizes the significance of the eyes as compared to the head
- c. depreciates the influence of the head on the body
- d. underestimates the impact of soul on the body

5. By mentioning the phrase “a survivor to live and not just survive” the writer intends to -----.

- a. give more weight to one’s survival value
- b. highlight the state of remaining physically alive after health threats
- c. assess the prognosis of cancer in mentally- healthy people
- d. warn against those who care more about spiritual treatment

6. It is stated in the passage that quality of life is -----.

- a. systematically determined by definite measures
- b. maximized by observing established guidelines
- c. to be decided upon the individual basis
- d. to be strengthened through known indices

7. In the eyes of oncology nurses, physical health, clinical symptoms, and functional ability ----- life .
- overshadow the quality of
 - are boosted by quantity of
 - originate from the quality of
 - are set before having a valuable
8. Humor and the fact that it raises one's state of happiness and health -----.
- promote one's recovery
 - enhance the absurdities
 - bring about joyful learning
 - stimulate the patient's facial expression
9. Which statement is FALSE about Norman Cousins?
- He was a patient with arthritis affecting his spine.
 - He was given a strict therapy program to follow.
 - He could have relief of spinal- joint inflammation following humor therapy.
 - He was able to sleep soundly after ten minute continuous deep laughing.
10. All of the following statements are mentioned or implied in the passage EXCEPT:
- The humorous stuff is effective more or less for every individual.
 - People's reactions towards funny stuff may differ sharply from one person to another.
 - Humor and pain feelings are felt on an individual basis.
 - Some happy materials can be quite bothering to some people.

C. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. The anxiety ----- by increasing everyday pressures should be taken into consideration to bring peace and tranquility to the people's life.
- avored
 - inspired
 - functioned
 - perceived
2. A sense of ----- filled her as she was approaching the site of the deadly accident.
- satisfaction
 - perception
 - dread
 - trust

3. Jealousy ----- the peaceful relationship existing among their family members.
a. eroded b. raised c. held d. feared
4. One has to ----- all pleasing moments of his/her entire life to stay happy.
a. invade b. assess c. liken d. cherish
5. Poverty and inadequate health care take their ----- on the life of vulnerable people.
a. will b. toll c. adjunct d. priority
6. The late Mohammad Namazi, to whom people living in Shiraz owe a lot, ----- the building and operation of many institutions including the therapeutic and educational ones.
a. complemented b. sponsored c. appreciated d. inherited
7. Conscious mental activities such as thinking, understanding, learning and remembering are involved in ----- processes.
a. cognitive b. invasive c. communicative d. comparative
8. You must take control of your life if you want the true fruits you -----.
a. diminish b. transcend c. perceive d. deserve
9. People worry about ----- attention paid to the production of healthy fruits and vegetables.
a. abundant b. scant c. excess d. adverse
10. If anger persists in a community, it is absolutely essential to ----- -- it to avoid social conflicts.
a. sustain b. pursue c. abate d. distract
13. A/An ----- into laughter by some participants was really contagious; others also laughed loudly.
a. burst b. outlet c. aspect d. favor
14. Humor, if employed for ----- purposes, proves to be surprisingly influential.
a. offensive b. indicative c. prolific d. didactic

D. Match the words in column I with their equivalents in column II.

I	II
1. appreciation	a. to rise above
2. cherish	b. to bring about, to cause
3. perspective	c. to continue to exist for longer than expected
4. transcend	d. viewpoint, a way of thinking about sth
5. adverse	e. laughter, amusement, happiness
6. pursue	f. to follow up or proceed with
7. conserve	g. harmful
8. engender	h. recognition and enjoyment of the good quality of someone or sth
9. linger	i. replication
10. mirth	j. to keep in a safe or sound state
	k. pursuit
	l. to love something or someone very much

E. Word Families: Fill in the blanks using the correct form of the words given in the list.

respond, response, responsive, responsiveness

- Patients expect to receive encouraging ----- to their emotional inquiry.
- Fortunately, Mary's immune system ----- very well to the new treatment modality.
- Lack of ----- to clients' needs can lead to their dissatisfaction and so to the disreputation of doctors.
- The nurse didn't ----- angrily when the seriously ill patient mistreated her.
- Our health care system has to be ----- to people's urgent health demands.

induce, inducement, induction

- a. Nothing would ----- his terribly sick father to undergo such an invasive operation.
- b. Since that pregnant woman is unable to start giving birth, some artificial means such as a special drug should be prescribed as an -----.
- c. Nurses working here argue that they have little ----- to work wholeheartedly.

legitimize, legitimate, legitimacy, legitimately

- a. The hospital manager has been criticized for apparently ----- all her unjustified decisions.
- b. The ----- of the patient's claim was later challenged by some hospital staff.
- c. I suppose the reform in the surgery department proposed by the senior resident was a perfectly ----- one.
- d. The health minister believes that he can ----- assert to be successful in achieving the ministry's goals.

frustrate, frustrating, frustrated, frustration, frustratingly

- a. Some physicians get easily ----- at the lack of satisfactory equipment while working in our general hospitals.
- b. It is ----- to wait so long to visit some doctors.
- c. Joseph's recovery from his chronic disease was ----- slow; he almost lost his hope.
- d. The accident victims were in a critical condition; I could not stand the ----- of not being able to help them.

F. Vocabulary exercise

Here are some interesting phrases using the word “funny” (adjective) meaning amusing, humorous, comic, comical and laughable along with example sentences for you to learn.

- 1. Funny bone n. [c] informal= the middle part of the arm where it bends, which hurts a lot if it is knocked

Mary banged her **funny bone** on the door to ask her husband to open it for her.

- 2. Funny business n. [U] = dishonest actions intended to trick someone

If you try any **funny business**, you'll be sorry and probably punished for that.

3. Funny farm n. [c] informal = an expression meaning a psychiatric hospital that some people consider offensive. It is used humorously.

If things get much worse, they'll be carrying me off to the **funny farm**.

4. Funny money n. [U] informal = money that has been printed illegally

The very real difference is that it's easier to make **funny money** than to find new gold in the ground.

G. Cloze Test: Fill in the blanks using the words in the list.

sniffle	diminish	shared
lightens	balance	dependably
immune	roaring	changes
increases	priceless	antidote

Humor is infectious. The sound of ---1--- laughter is far more contagious than any cough, ---2---, or sneeze. When laughter is ---3---, it binds people together and ---4---, happiness and intimacy. Laughter also triggers healthy physical ---5--- in the body. Humor and laughter strengthen your ---6--- system, boost your energy, ---7--- pain, and protect you from the damaging effects of stress. Best of all, this ---8--- medicine is fun, free, and easy to use. Laughter is a powerful ---9--- to stress, pain, and conflict. Nothing works faster or more ---10--- to bring your mind and body back into ---11--- than a good laugh. Humor ---12--- your burdens, inspires hopes, connects you to others and keep you focused and alert.

Further Reading

Laughter, the Internal Pharmacy

Most research on humor focuses on the physical effects of laughter, noting physiologic changes such as increases in heart rate and blood pressure, followed by relaxation and a decrease in blood pressure. Stimulation of the circulation enhances metabolic and immune responses, and laughter is believed to improve digestion and reduce muscle tension. Laughter effects have been described as an "internal jogging," as it also helps clear the



lungs and airways with a deep exhalation and inhalation, and acting as a stimulation of cough.

Laughter has been shown to increase the tolerance of pain, and although **unsubstantiated**, it is commonly held that laughter releases endorphins, the body's natural **analgesic**. Psychologically, at least, laughter serves as a distraction from pain, and one survey of the nonpharmaceutical management of pain rated laughter as the most effective means of coping with it. Moreover, laughter has a lasting effect. After it has subsided, the good feeling that **lingers** is one not ordinarily felt after other distractions from pain have abated.

not proven
painkiller

continue to exist

Adverse emotions tend to depress the immune response, while favorable ones strengthen immunity. After bursting into laughter, there is a decrease in the level of stress hormones cortisol and epinephrine, which are immunosuppressive and become elevated in the response to stress. Thus, the decrease in these hormone levels in response to humor can enhance the immune system.

And simply, laughter is a pleasure. At least momentarily, it eases fear and anger, **inducing** both a sense of control and hope. A study of adolescent oncology patients revealed that in a case in which a nurse initiated humor, the reality of the illness was not minimized, but, rather, her belief in the patient's ability to cope with it was emphasized. Life's circumstances often are beyond our control, but we can control our responses to them. Laughter is a socially acceptable outlet for inexpressible emotions, and is almost always beneficial. (It can, of course, cause harm when used inappropriately.) Relieving stress **conserves** the body's energy, which also promotes healing.

causing

maintains

Humor is an effective educational tool in general, and is especially recommended in patient education. Shared laughter helps establish therapeutic relationships by reducing fears and anxiety that can inhibit the learning process, and by engendering trust. For example, when administering an injection, light joking can help the patient to relax rather than stiffen with uncertainty and fear.

Bringing Joy to the Patient

Among all health care providers, nurses spend the most time with the patients. They are in an ideal position to assess the patient's quality of life and intervene effectively. For humor to be most effective in healing, it must be valued and **cultivated** by the nurse herself. A nurse who is happy brings joy to the patient.

developed

First, ask yourself if you want to heighten the joy in your own life. Consider whom you laugh with, what you find funny and where and when you feel happiest. Then expose yourself to the things you find humorous. These may include books, movies, cartoons, and friends. Share jokes and heartwarming stories with an Internet community. Share your humor with others. Interact; humor thrives on reciprocal relationships.

The patient will be more comfortable with humor once the nurse has established her competence and sincere commitment to his care. Establish a friendly relationship with the patient before introducing humor into the relationship, which, in any event, should not be present during times of medical, emotional, or spiritual crisis, such as moderate to severe pain, acute vomiting, or immediately after receiving upsetting information.

There are many ways of judging the patient's sense of humor. Some nurses do a formal humor assessment to establish the "who, what, when, and where" in the incidence of the patient's laughter. Others question the family about the patient's values. The type of greeting cards, flowers, and gifts that a patient receives, what he reads or watches on television, and how he responds to visitors may indicate what he finds funny.

The smile has been described as "a light on your face to let someone know that you are at home." The gentlest form of humor and one of the earliest forms of communication is the smile. Start with gentle intervention and evaluate how it is received. A smile can convey warmth, joy, sympathy, and compassion as well as humor.

Humor should not be directed at a particular sex, race, ethnic group, or culture. It's also important to avoid humorous reference to conditions having to do with bodily functions and to physical loss (hair, breast, etc.), unless initiated by the patient. It is permissible to laugh at oneself, but not at someone else; it is lovely to laugh with someone, but never at someone. The patient must always be included in the laughter response if humor is to be therapeutic. Do not try to force humor, as some patients are simply not **receptive** to it. It must be the patient's choice to participate. But do encourage patients to live each moment and each day to the fullest. open

While humor and laughter cannot cure cancer, they are a sure means of **alleviating** fear, distress, and anxiety, and they enhance the patient's quality of life. Introducing humor into a patient's life is a **legitimate facet** of caring. To do this, however, nurses must find joy and humor in their own lives. Sometimes it's a challenge to find these things, but when lessening
reasonable
aspect

they are cultivated—whether by simply watching a funny movie, or by pursuing a more spiritual life—daily frustrations come into perspective.

A. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item

1. It is mentioned in the reading passage that ----- .
 - a. nurses can evaluate the patients' quality of life better
 - b. doctors diagnosing the patients' illness effectively determine their quality of life
 - c. all health care providers should value humor and include it in their professions
 - d. nurses themselves can efficiently heal the patients with humor more than with anything else
2. All of the following should be considered by nurses if they intend to use humor effectively for the healing purpose EXCEPT:
 - a. They should be happy in order to bring happiness to their patients.
 - b. They have to be aware of the patients' personality.
 - c. They must think about what is funny and what is not creating happy moments.
 - d. They are better to ask their patients to first initiate comic interaction.
3. The introduction of humor into patient- nurse relationship ----- .
 - a. should be prioritized to establish a friendly atmosphere on the side of nurses
 - b. must aim at developing moral issues
 - c. helps to prevent medical and emotional crises
 - d. acts adversely in critical treatment phases
4. The focus of the second part of the text (Bringing joy to the patients) is on ----- .
 - a. medical personnel who should be kind and joyful
 - b. the patients who should elevate their quality of life by being joyous
 - c. the important role of nurses in providing joy to the patients
 - d. patients and nurses to share their happy experiences to have mutual happiness
5. It is stated that the optimistic expressions on the side of patients have to be also encouraged by ----- .
 - a. the patients themselves
 - b. doctors and patients together
 - c. nurses taking care of patients
 - d. the related healthcare providers

6. Humor is permitted ----- .
 - a. when it is directed at someone
 - b. if it refers to people's cultural backgrounds
 - c. provided it mocks social norms
 - d. in case it is employed to laugh with someone

7. Educationally speaking, the use of humor can have all of following merits except that it may ----- .
 - a. negate the moral effects of learning
 - b. bring about more creativity
 - c. felicitate the recall of past experiences
 - d. boost one's better understanding of things

8. Most studies on humor mostly deal with its ----- impacts.
 - a. behavioral
 - b. psychological
 - c. physical
 - d. theoretical

9. The idea that laughter causes the release of endorphins is ----- .
 - a. quite established
 - b. empirically reached at
 - c. lacking scientific evidence
 - d. theoretically explainable

B. The following are some do's and don'ts taken from the text. Write "yes" for the do's and "no" for the don'ts.

1. Try to force humor if you think it helps. ()

2. Include the patient in the laughter response. ()

3. You can address the patient's physical appearance humorously only if the patient himself welcomes it. ()

4. Motivate the patients to enjoy the intolerable moments of treatment. ()

5. Welcome the ideas of joy favored by the patients. ()

6. Let the patients themselves choose to participate in exchanging humorous points. ()

7. Consider the use of humor as an acceptable aspect of health care. ()

8. Employ and cultivate joy and humor in your life to subsequently share them with recipients of medical treatment. ()

UNIT 5

Pre-reading Activity

A. Discuss the following questions with your friends.

1. What is surrogacy?
2. Is surrogacy allowed in Islam?

Surrogacy



Nature has **bestowed** the beautiful capacity to procreate a life within given women and every woman cherishes the experience of motherhood. Unfortunately, some women due to certain physiological conditions

cannot give birth to their own **offspring**. The desire for motherhood leads them to search for **alternative solutions**, and surrogacy presents itself as the most viable alternative.

child/children

other options

Advances in assisted reproductive techniques such as donor insemination and embryo transfer methods have revolutionized the reproductive environment, resulting in ‘surrogacy’ as the most desirable option. The system of surrogacy has given hope to many infertile couples, who **long** to have a child of their own. Taking advantage of the advanced medical facilities, they seek alternative solutions like Artificial Reproductive Technology (ART), **In Vitro** Fertilization (IVF) and Intra-Uterine Injections (IUI) in the hope of having a child of their own.

To want something very much

taking place outside the body

The very word ‘surrogate’ means ‘substitute’. **That** means a surrogate mother is the substitute for the genetic-biological mother. In common language, a surrogate mother is the person who is hired to bear a child, which she hands over to her employer at birth.

“That” refers to ...

In the past, surrogacy arrangements were generally confined to **kith and kin** of close relatives, family, or friends, usually as an altruistic deed. But, with the introduction of financial arrangements in the process, surrogacy has extended its network beyond family, community, state, and even across the country. The concept of surrogacy has turned a normal biological function of a woman’s body into a commercial contract. Surrogate services are advertised. Surrogates are **recruited** and operating agencies make huge profits. The commercialization of surrogacy has raised fears of a black market and of baby selling and breeding farms, turning **impoverished** women into baby producers and its possibility of selective breeding at a price. Surrogacy degrades a pregnancy to a service and a baby to a product. Experience shows that as with any other commercial dealing, the ‘customer’ lays down his/her conditions before **purchasing** the goods.

friends and relatives

to supply with new members

very poor

buying

Today, people around the world, regardless of marital status or sexual orientation, are looking at surrogacy as an option to have a family. Although the birth of a child is typically considered a very happy time for parents, surrogacy—whether traditional or gestational—is often an **uncharted territory** that can become very stressful for all parties involved.

a complete new experience

Definitions

A number of definitions can be found in scientific literature regarding the process of surrogacy and those involved. The American Society for Reproductive Medicine (2006), American College of Obstetrics and

Gynecology (2008) and Council for Reproductive Genetics (2010) have published definitions for many of the terms associated with the process of reproductive surrogacy, to provide clarity about this increasingly visible pathway to reproduction (see the following Box).

Surrogacy Terms

Biologic mother/genetic donor

A woman who contributes her egg to reproduce the resulting child.

Biologic father/genetic donor

A man who contributes his sperm to reproduce the resulting child.

Intended parent/commissioning parent

The individuals who intend to become the legal parents of the child born of a surrogacy arrangement. They may or may not contribute DNA and be biologically linked to the expectant child.

Traditional surrogate mother

The woman who donates her DNA (egg/ova) and gestates (carrying the fetus) the pregnancy for someone else.

Gestational surrogate mother/carrier

The woman who gestates (carrying the fetus) until it is born.

Traditional surrogacy

Traditional surrogacy is an agreement by a woman to donate her egg, along with sperm of the intended father, or possible sperm donation. Most often this can be accomplished through artificial insemination, thereby avoiding the greater costs of in vitro fertilization. This woman is considered the biologic, genetic and gestational mother and will carry the pregnancy till delivery, whereby she **relinquishes** all parental rights of the child to the intended parents.

to stop having
something; to
give up

Gestational surrogacy

This surrogacy arrangement occurs when a woman undergoes in vitro fertilization to carry a fetus that has no genetic or biologic link to her; in essence, she provides “a womb to rent.” She relinquishes all parental rights as the gestational mother upon birth of the child. The fetus/child could be genetically linked to one, both or neither of the intended parents if donor DNA was utilized.

Source: Council for Reproductive Genetics & Gugucheva (2010).

Varying Rules and Regulations

The majority of surrogacy studies have occurred outside the United

States and primarily in the United Kingdom; many have evaluated psychological **implications** for surrogate mothers. The United Kingdom has regulation on surrogacy that doesn't allow for financial payment or commercial surrogacy, thereby having altruistic surrogacy as the only option (Erickson, 2010). Some **postulate** that this type of regulation leaves many individuals and couples without options with regard to their intention to become parents and have a family, causing them to look elsewhere. Situations such as this may create the foundation for women to offer and provide the surrogacy for those intended parents seeking a surrogate outside their home state or their own country borders. Research indicates that individuals will move around restrictive laws to acquire a baby through the surrogacy process, which adds to the confusion of this poorly understood and regulated process.

possible future
effects or results

suggest; posit

In addition to commercial surrogacy being banned in a number of countries, including the United Kingdom, further legal **stipulations** in the United Kingdom have **barred** anonymous egg/ova and sperm donation. The U.K. policy is considered to be moderate, with countries such as Italy and Germany banning surrogacy completely and countries such as Ukraine and India and some U.S. states having very few restrictions as well as accepting the practice of commercial surrogacy.

conditions and
arrangements
set/ banned

With regard to surrogacy and reproductive technology, legal stipulations vary within countries and around the world. While some countries and states report favorable laws toward these reproductive technologies, others are highly restrictive or even unclear.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence. .

-----1. The surrogacy option to have a child has mostly been the result of technology advancement.

-----2. The surrogate mother is the woman who donates the ovum.

-----3. Surrogacy used to be considered as an altruistic act.

-----4. Surrogacy has the potential to develop into an industry for money making.

-----5. Surrogacy operating agencies view this process as an altruistic deed.

- 6.Restrictive laws in some countries tend to make people go to other places to look for surrogacy.
- 7. Surrogacy is illegal in Italy and Germany.
- 8. It seems that the writer is an advocate of commercial surrogacy.
- 9. It is implied that surrogacy detractors approve of altruistic surrogacy.
- 10.The commissioning parent is biologically linked to the expectant child.
- 11. There have been a lot of studies on surrogacy in the USA.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. It is said that the United Kingdom laws -----.
 - a. are more liberal on surrogacy
 - b. have banned commercial surrogacy
 - c. allow commercial surrogacy under certain conditions
 - d. are unclear about surrogacy and so have caused a lot of confusion
2. Most of the studies on surrogacy have been performed in -----.
 - a. the USA
 - b. European countries
 - c. non-European countries
 - d. the United Kingdom
3. A gestational surrogate mother is the woman who -----.
 - a. intends to take care of the resulting child
 - b. donates the ovum and gestates the fetus
 - c. carries the fetus until it is born
 - d. has the right to keep the child if she wishes
4. A traditional surrogate mother -----.
 - a. is the biologic mother as well
 - b. is the commissioning mother as well
 - c. has the right to keep the child under certain conditions
 - d. can be the intended parent under certain conditions
5. The surrogacy detractors argue that this process -----.
 - a. devalues human dignity
 - b. is against the nature of motherhood
 - c. can result in out of marriage relationships
 - d. may lead to legal problems for the child

6. The author states that surrogacy can be stressful -----.
- a. more for the surrogate mother
 - b. most often for the intended parents
 - c. mostly for the resulting child
 - d. often for all parties involved

7. It is implied that surrogacy -----.
- a. is the best option for infertile couples
 - b. has raised both ethical and legal issues
 - c. is the legal right of childless parents
 - d. may result in divorce of the intended parents

8. The commercialization of surrogacy -----.
- a. is something common in most Western countries
 - b. has led to disintegration of many families
 - c. may lead to exploitation of poor women
 - d. has been stopped all over the world

C. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. William was acting as a/an ----- father for his brother's son.
 - a. impoverished
 - b. surrogate
 - c. infertile
 - d. intended
2. The hospital is having difficulty ----- enough qualified staff.
 - a. recruiting
 - b. reproducing
 - c. donating
 - d. purchasing
3. The inflation has worsened the financial status of these ----- people so that they cannot even buy the staple stuff.
 - a. uncharted
 - b. confused
 - c. intended
 - d. impoverished
4. As power offers people a lot of opportunities, no one wants to ----- power once they have it.
 - a. retain
 - b. relinquish
 - c. regulate
 - d. stipulate
5. In the contract, there was a/an ----- that she could not keep a pet in the apartment.
 - a. postulation
 - b. orientation
 - c. foundation
 - d. stipulation

6. Before taking any action, consider both the psychological and environmental ----- of implementing the project.

- a. implications
- b. substitutes
- c. alternatives
- d. regulations

7. In the absence of any other apparent cause, it is ----- that the condition has been inherited.

- a. stipulated
- b. postulated
- c. recommended
- d. regulated

8. Nowadays, parents have certain problems with their -----, particularly when they reach adolescence.

- a. kith and kin
- b. customers
- c. offspring
- d. agencies

9. The doctor assessed all possible solutions to choose the best -----.

- a. insemination
- b. territory
- c. arrangement
- d. alternative

10. Some sociologists believe that sex should only be for the purpose of -----.

- a. procreation
- b. altruism
- c. injection
- d. gestation

D. Word Families: Fill in the blanks using the correct form of the words given in the list.

gestate, gestation, gestational

- a. ----- varies with the species; in human the average duration is 266 days.
- b. A ----- time of less than 37 weeks is regarded as premature and one that continues beyond 42 weeks is considered postmature.
- c. The age of a fetus or newborn, usually expressed in weeks dating from the first day of the mother's last menstrual period, is referred to as the ----- age.
- d. It is very rare for a woman above 45 to ----- a live birth.
- e. Some women develop ----- diabetes during their pregnancy.
- f. How long is the ----- period of whales?

reproduce, reproduction, reproductive

- a. The process by which animals and plants give rise to offspring is called ----- .
- b. The ----- system is partly located in the pelvic cavity and is responsible for the procreation of new generation.

- c. Different species ----- in different ways.
- d. The terrible health problems of that era are ----- the novels of that time.

operate, operation, operating

- a. An ----- room is the room in a health care facility in which surgical procedures requiring anesthesia are performed.
- b. In a computer, the hardware and logical resources of the system are managed by the ----- system.
- c. Any surgical procedure such as an appendectomy or a hysterectomy is referred to as an -----.
- d. What skills are needed to ----- this new sensor?

alter, alternative, alternatively

- a. Treatments such as acupuncture, homeopathy and hypnotherapy are examples of ----- medicine.
- b. We are not going to rule out any other -----.
- c. I'm afraid I have no other ----- but to ask you to leave.
- d. Giving up our car has radically ----- our lifestyle.
- e. Although long distance phone calls are going up, the charge for local calls will not -----.
- f. Laurence Housman once suggested that if nature had arranged that husbands and wives should have children -----, there would never be more than three in a family.

commercialize, commercialization, commercial, commercials, commercially

- a. The ----- of football has turned it from a sport into a business.
- b. It's a pity Nowruz, the Iranian New Year, has become so ----- (= involved with buying and selling.)
- c. The drug won't be ----- available until it has been thoroughly tested.
- d. Some believe that the ----- on TV or radio misinform people.
- e. Where is the ----- heart of the world?

E. Match the words in column I with their meaning in column II.

I	II
1. bestow	a. very poor
2. altruism	b. to succeed in doing something; to achieve
3. implication	c. to give something of great value or importance to somebody
4. anonymous	d. willingness to do things which benefit other people
5. postulate	e. to stop having something; to give up
6. relinquish	f. commonly; usually
7. impoverished	g. unknown by name
8. purchase	h. to buy
9. typically	i. to assume something to be true
10. accomplish	j. possible future effect of something

F. Cloze Test: Fill in the blanks using the words in the list.

surrogate motivations

their reproductive work

whereas

on themselves

as remedies for infertility

the general population

as a contribution to

reduces or assigns women to

unlike a traditional pregnancy

Many individuals view surrogate motherhood as a positive addition to the ever-expanding range of technologies now available ---1---. Others, however, view it as symptomatic of the dissolution of the traditional/nuclear family and the sanctity of motherhood, as something that ---2--- a breeder class, or as a form of commercial baby selling.

The opinion among both scholars and ---3--- that surrogates are motivated primarily by financial gain has tended to result in oversimplified analysis of ---4---. Although surrogates do accept and appreciate, to varying degrees, monetary compensation for ---5---, the role of this compensation is a multifaceted one. The surrogate pregnancy, ----6---, is viewed by surrogate and her family as work, and surrogates rarely spend the money they earn ---7---. The majority spend the money on

their children, for example, ---8--- their college education funds, ---9--- others spend it on home improvement, gift for their husbands, a family vacation, or simply to pay off family debts.

‘As long as the child is loved, then I suppose I can’t argue against it’

‘It should be available with strict guidelines’

‘Loving parents are what any child needs’

‘As long as the child is loved, and all parties are happy, it’s ok’

‘Legalisation would offer some control and protection to surrogacy in the UK’

‘Similar checks should be made for surrogacy as are made for adoption’

‘There needs to be safeguards’

‘As long as the carers are deemed to be suitable, I see no problem’



Further Reading

Ethical Issues in Surrogacy

Many ethical issues surrounding surrogacy have been identified. The evaluation of ethics related to a situation is often influenced by the culture and societal norms of the community or population involved. **Disparity** of the ethical concerns has been documented regarding altruistic and commercial surrogacy, both in the United States and other countries. The biggest concern seems to begin with a woman’s right to reproduce for someone else. The question would be, “Is gestating a child for someone else ethical?” Then add the multiple factors or variables debated in the literature such as: Is reproduction a woman’s choice? Is financial gain versus altruism an ethical issue? Does a genetic link to the surrogate mother, surrogate father, or intended parents create **conflict**? If a child is created from donated DNA, should a donor be assured **anonymity**? Does lack of a genetic medical history create ethical issues later in life for the child born of surrogacy, such as mating with a half **sibling** unknowingly? Does a surrogate child have a right to know its genetic donor? The United Kingdom **addresses** this by providing anonymity to the DNA donor until the offspring turns 18. At that time the offspring has the right to access the DNA donor’s information.

Additional ethical issues such as the imperfect fetus or newborn, higher order multiple pregnancies that may require reduction, and medical complications such as diabetes or hypertension, are all possibilities that may occur and present great **strife** for all parties involved. These

variables more illustrate importance of psychological screening and counseling for all parties involved. The American College of Obstetricians and Gynecologists (ACOG) released a committee opinion on surrogate motherhood that focuses on ethical concerns for obstetricians and gynecologists participating in surrogacy arrangements. The European Society for Human Reproduction (ESHRE) has also published a report on ethics and laws related to surrogacy, acknowledging many risks and benefits of surrogacy to all parties involved. The principles of autonomy, beneficence, non-maleficence and justice must all be addressed with all parties involved and must remain at the forefront of decision-making with regard to surrogacy.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

-----1. It is implied that a woman has the right to reproduce for someone else.

-----2. Most of the variables mentioned are addressed in the UK.

-----3. The author thinks that the genetic link to the surrogate mother and father or intended parents leads to conflict.

-----4. According to UK laws, a surrogate child cannot have access to the DNA donor's information before he/she is 18.

-----5. It is stated that the risks of surrogacy exceed its benefits.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. The ethical issues on surrogacy -----.

- a. are more or less the same throughout the world
- b. depend on the culture and norms of the society
- c. have been settled in most countries
- d. are mostly concerned with financial gains

2. The author seems to -----.

- a. take a biased view in favor of surrogacy
- b. come to a conclusion on the ethical issues
- c. criticize those who support surrogacy
- d. be impartial regarding the ethical issues

3. Regarding the ethical issues, the author -----.
- a. puts doubt on laws set by the European Society for Human Reproduction
 - b. is more concerned with the financial problems of the issue
 - c. maintains that the offspring are more psychologically affected than the other parties
 - d. recommends psychological screening and counseling for all parties involved
4. One of the ethical issues mentioned as presenting a lot of concern for all parties involved is ----- .
- a. lack of genetic medical history
 - b. financial gains
 - c. a retarded offspring
 - d. the genetic link
5. All of the following are said to be considered with regard to surrogacy except ----- .
- a. fairness
 - b. newborn's gender
 - c. non-maleficence
 - d. independence

Unit 6

Pre-reading Activity

A. Skim and scan through the text and answer the following questions.

1. What is the role of environment in creating diet-related diseases?
2. How can food choices be changed?
3. How do food marketers and politicians influence our eating habits?
4. What is the relationship between diet and the occurrence of non-communicable diseases?
5. What interventions should be made to change eating patterns?



Preventive medicine and diet-related diseases: Food Options

Diet-related diseases have increased while basic human instincts have not changed. We are struggling more against a food environment that exploits our basic instincts than against the basic instincts as such. At the community or population level, the challenges take us upstream to environmental and social determinants of health: the structural influences that determine what foods are available, where they are

available, and how they are promoted and priced; cultural practices, what people can afford; and the social norms related to food and eating. Those of us who approach prevention through interventions to change environments and policies that affect food choices find ourselves struggling with corporate board rooms and politicians in attempts to change the behaviour of food suppliers and marketers. Few of us are well trained for this type of activity or for research that is relevant to it. Furthermore, we are clearly outclassed and outspent by lobbyists and market researchers for global food companies that spend billions of dollars to maintain the status quo without regard to public health implications. We are optimistic or unrealistic enough to think that we can use some combinations of carrots and sticks to persuade the food industry to create food choice environments that are, at least in the short term, less geared to maximizing profit and more geared to creating a demand for healthier products. Social values work against us. Efforts to impose regulations on the food industry are refuted based on free market and individual choice arguments: supply responds to demand; norms support current eating patterns; people do not necessarily want healthier food.

To talk about supply and demand is the issue but also seems to evade the issue. It is not a level playing field. People make their food choices from what is available or at least accessible with reasonable effort and based on what they are persuaded to want through the initiatives of advertisers and other marketers. Marketers have broad latitudes in determining what is available, accessible, desirable and affordable and how they cater to instincts and shape acquired food preferences (Kotler and Armstrong, 2008).

Food choices

At the individual level, challenges revolve around preventing or controlling diet-related diseases when the majority of people are either at risk or already affected. Those of us who conduct studies with individuals in clinical or community settings are struggling to find effective ways to redirect individuals toward healthier choices—individuals who are continuously confronted with food environments that entice them toward unhealthy options. Achieving mass changes in behaviours as fundamental as those related to eating without reaching individuals is unlikely, although the prospect of reaching individuals one-to-one with effective advice on how not to eat many things that are readily available and appealing, and which have no perceptible adverse effects, is both formidable and a poor use of resources. Few Americans have eating patterns that meet U.S. dietary recommendations (Krebs-Smith et al., 2010). The U.S. Preventive Services Task, Force places

limited confidence in dietary counselling for people with cardiovascular and related chronic diseases and no confidence in such counselling for people without clear excess risk. Does this mean that we will have to rely on pharmacologic or surgical approaches to prevent and control diet-related diseases? Is that desirable? tolerable? feasible? Can low and middle income countries, which have far less to spend on health care than the United States and other high income countries, afford to rely on drugs or surgical procedures?

The arena

The need to transcend disciplinary boundaries and move out of our scholarly comfort zones is painfully evident in the arena of non-communicable disease (NCD) prevention and control. World Health Organization data for 2008 indicate that NCDs caused nearly two-thirds of the world's deaths—36 million in number, with most occurring in low and middle income countries and 9 million occurring before the age of 60 (World Health Organization, 2011). The potential for diet-related lifestyle changes to have a major impact on the prevention and control of these diseases worldwide is huge. Everybody eats, and what we eat has become a source of health risk in a way that our forebears could not have imagined. It is not the odd substance that causes an acute illness so much as the now common “westernized” eating patterns for which evidence suggest cumulative harm. The harm would be preventable were we to eat differently, over the life course.

We have reached the point where national and global health and policy agendas now put interventions to change eating patterns, along with physical activity patterns and tobacco use, at the top of the list of strategies to address NCDs. Although we can never be entirely certain about the diet-related risk of a particular person at a particular time, epidemiologic observations and clinical trials provide convincing evidence that populations would be better off with lower average consumption of salt, trans fat, red meat, and sugary beverages, adequate but not excess consumption of calories, and higher consumption of fruits and vegetables and dietary fiber. In relation to societal impact, the question is whether we are up to the task of accomplishing what is called for in the global dietary change agenda. The ability to realize the potential for prevention of diet-related diseases is far from assured. Challenges relate to food options (food environments) and to food choices (individuals).

Implications for preventive medicine

The potential impact of dietary change on NCD prevention and control will be lost if we cannot get beyond the impasse caused by needing to

change both food choices and food choice environments if neither will change before the other does. The fact that individual and population level public health challenges are always interrelated adds complexity. Experts including marketing experts increasingly call for greater use of systems thinking, holistic approaches and being much more transdisciplinary and multisectoral in our research and practice. Such approaches to designing and evaluating interventions can more fully take into account the complexity of the public health nutrition and food environment situation, and they deserve serious consideration as we go forward. With systems thinking, individual and environmental change models and dynamics can be integrated. With multisectorial approaches, we can engage professionals and lay people outside of the health sector in helping us to do our job while both the process and the results may help them to do theirs. We need to expand our comfort zones. How well we do that will determine our ultimate societal impact in this critical arena of preventive medicine.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

- 1. Diet- related disorders rise parallel to basic human instincts.
- 2. It is understood that the food environment unfairly uses our basic instinct for its own profit.
- 3. The challenge against our basic instincts is greater than that against the food environment.
- 4. Corporate board rooms try to find some interventions in order to reach prevention.
- 5. According to research, the eating patterns of most Americans meet U.S. dietary recommendations.
- 6. It is implied in this passage that we don't attempt to change our basic instincts.
- 7. Marketers who pay attention to public health try to keep the status quo.
- 8. The carrot and the stick approach is an effective policy to promote healthier food production.

-----9. Marketers have a key role in shaping the food preferences of the community.

-----10. People themselves demand a food environment that exploits their basic instincts.

-----11. It is not reasonable just to say “supply responds to demand”.

-----12. Individual health is an integrated part of the public health.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. People who want to change food environment to reach disease prevention are outrun by -----.

- a. interventions which aim at prevention of NCDs
- b. policies that keep the present situation considering public health implications
- c. politicians attempting to promote healthy eating habits
- d. market experts spending lots of money to maintain the existing state

2. The food industry is ----- to create healthier products with less profit.

- a. not dependent on lobbyists and market researchers
- b. not influenced by any reward or punishment
- c. affected by combining carrots and sticks
- d. persuaded to try harder to prevent diseases

3. “This type of activity” (paragraph 1, line 10) refers to -----.

- a. preventing diseases through interventions
- b. changing the existing food environment
- c. struggling with corporate board rooms and politicians
- d. persuading food suppliers and marketers

4. According to the writer, changing the eating behaviors of people necessitates -----.

- a. struggling against redirecting them toward healthy choices
- b. reaching them individually with effective advice
- c. carrying out clinical studies
- d. controlling diet- related diseases

5. The underlined “those” (paragraph 3, line 6) refers to -----.

- a. food environments
- b. unhealthy options
- c. behaviors
- d. individuals

6. Americans may have to rely on drugs or surgical procedures to prevent or control diet-related diseases since -----.
- it is tolerable for a high income country with lots of specialists
 - there is no counseling on diet for people with no clear risk of such diseases
 - high confidence in dietary counseling is placed for people with such diseases
 - it will create a prosperous drug industry for high income countries
7. The underlined “they” (last paragraph, line 9) refers to -----.
- public nutrition and food
 - interventions
 - situations
 - such approaches
8. Regarding odd substances and westernized eating pattern, -----.
- both are equally suggested
 - neither is so unhealthy
 - the former is more undesirable
 - the latter is more harmful
9. All of the following are among strategies to prevent and control NCDs except:
- healthy eating pattern
 - enough workout
 - quitting tobacco use
 - excess consumption of calories
10. Better prevention and control of NCDs demands all of the following except:
- using systems thinking and multisectorial approaches
 - being more transdisciplinary in research and practice
 - sticking to the existing scholarly comfort zones
 - employing holistic approaches in theory and practice

C. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. Although she is not a good basketball player, she ----- all of us at tennis.
- | | |
|---------------|--------------|
| a. imposes | b. responds |
| c. outclasses | d. outspends |

2. They are opposed to changes in the tax laws; they want to maintain the-----.
- | | |
|---------------|----------------|
| a. symbol | b. status quo |
| c. persuasion | d. determinant |
3. We must ----- the amount of products we make to the level of public demand.
- | | |
|--------------|-----------|
| a. gear | b. afford |
| c. advertise | d. entice |
4. I was able to ----- his argument entirely; it was all mistaken.
- | | |
|--------------|--------------|
| a. formulate | b. recommend |
| c. intervene | d. refute |
5. If you try to ----- paying your taxes, you risk going to prison.
- | | |
|------------|---------------|
| a. evade | b. integrated |
| c. deserve | d. determine |
6. Those newspapers ----- the lowest tastes; they try to satisfy the ridiculous demands of their readers.
- | | |
|---------------|--------------|
| a. cater to | b. leave out |
| c. throw away | d. blow up |
7. The young doctor is making some fresh ----- to try to find a treatment for Ebola.
- | | |
|---------------|----------------|
| a. impasse | b. instincts |
| c. impediment | d. initiatives |
8. The world economic system ----- the developing countries in favor of the developed ones.
- | | |
|-------------|--------------|
| a. exploits | b. confronts |
| c. counsels | d. executes |
9. The new job is not a promotion -----, but it has good prospects.
- | | |
|-------------|------------------|
| a. such as | b. as such |
| c. and such | d. in such a way |
10. The hospital manager has to overcome several ----- obstacles to equip the operating rooms.
- | | |
|---------------|---------------|
| a. formidable | b. feasible |
| c. tolerable | d. accessible |
11. The negotiations on nuclear power between the two countries have reached an -----; neither side will agree.

- a. impact
- c. access

- b. impasse
- d. option

12. She entered the political ----- at the age of 28 and competed very well with experienced politicians.

- a. catering
- b. perspective
- c. arena
- d. intervention

13. "Avoid -----" is the golden rule for a healthy life.

- a. instinct
- b. excess
- c. accumulation
- d. accomplishment

D. Word Families: Fill in the blanks using the correct form of the words given in the list.

entice, enticing, enticement, enticingly

- a. The beautiful weather ----- me into the garden yesterday.
- b. The ----- of the big city lured her away from her home and family.
- c. The offer was too ----- to refuse; I wanted to know more about it.

perceptible, perceive, perception, perceptively, perceptive

- a. The doctor prescribed a drug which altered my ----- of visual stimuli.
- b. I ----- a small trickle of blood coming from the patient's ear.
- c. There is a barely ----- difference between the identical twins.
- d. We have a ----- teacher; she has an unusually good ability to notice and understand. E. She ----- pays attention to our problems.

counsel, counselor, counsel, counseling

- a. The unit was set up to ----- people with drug problems.
- b. There is a ----- service for new students which gives advice and support to them.
- c. Have you thought of seeing a ----- to overcome your problems?
- d. The judge asked ----- for the defense to explain about the report.

consumption, consume, consumer, consumerism

- a. There is a growing gap between what the country produces and what it -----.
- b. The price increases were passed on by the firm to the -----.

- c. The idea or belief that buying as many goods as possible is desirable for a person or society is referred to as -----.
- d. In a ----- society the satisfaction of human wants are seen to be very important.
- e. There's too high a ----- of red meat in Britain.

E. Cloze Test: Fill in the blanks using the words in the list.

starve	health	turn off	being
desperate	belly	groundbreaking	destiny
shortened	destined	complained	struggled

I can't do this. I can't face another diet. My friend Kimberly was making yet another series of -----1----- New Year's resolutions. "Every year, I -----2----- myself for months, I lose maybe five pounds, and by springtime it all comes back, she -----3-----." "What's the point? I'm just -----4----- to be overweight."

I understood how she felt. Obesity -----5----- my own father's life, and for most of my childhood I -----6----- with an extra 25 pounds as well. I figured it was my genetic -----7----- to be fat, too. But then I got sick and tired of -----8----- sick and tired, and I've made it my life's work to learn everything there is to know about -----9----- fat. But nothing in my 20 years of -----10----- journalism has prepared me for the -----11----- research that has emerged in just the last year – new science that shows exactly how we can -----12----- our fat genes and lose weight almost automatically.

F. Match the words in column I with their equivalents in column II.

I	II
1. agenda	a. an area of activity concerning the public
2. cumulative	b. noticeable
3. call for	c. go or be beyond the limits of
4. perceptible	d. a list of subjects to be dealt with
5. transcend	e. easy to obtain
6. forebears	f. demand; need
7. upstream	g. increasing steadily in amount or degree
8. accessible	h. colleagues
9. conduct	i. carry out; perform
10. feasible	j. declining gradually
	k. ancestors
	l. against the current
	m. possible and reasonable

Further Reading

7 Ways to Turn on Your Get-Lean Genes

The secret to Zero Belly Diet is the new science of nutritional genetics, the study of how our genes are turned on and off by the foods we eat. Simply making a handful of tweaks to your diet and lifestyle can help improve your gut health, **dampen** inflammation, turn off your fat genes and start your body shedding fat—in particular, belly fat—almost automatically.

Start with these simple day-by-day changes to your daily routine, and check out Zero Belly Diet now to start losing weight while eating the foods you love!



SECRET 1: Take a brisk walk before breakfast.

This easy a.m. ritual works on two levels. First, a recent study found that exposure to sunlight in between the hours of 8 am and noon reduces your risk of weight gain regardless of activity level, caloric intake, or age. Researchers speculate that the morning light synchronizes your metabolism and undercuts your fat genes. And burning calories before you eat means you're exercising in a fasted state. Therefore, the energy you burn comes right from your fat stores, instead of the food you ate.

SECRET 2: Start with some oatmeal.

Naturally sweet oatmeal recipes in Zero Belly Diet were the key to test panelist Isabel Fiolek's dramatic 13-pound weight loss. "I happen to have a big sugar addiction," Isabel admits, "But the recipes have been surprisingly satisfying for my sweet tooth." Isabel also made dramatic health strides: A checkup after her six weeks on Zero Belly Diet revealed she'd dropped her total cholesterol by 25 percent and her blood glucose level by 10 percent.

So cook up some oatmeal—and top it with some fruit. What's so magical about this combination? Each provides insoluble fiber that helps reduce blood cholesterol and feeds the healthy bacteria in your gut. By doing so, you trigger your gut to produce butyrate, a fatty acid that reduces fat-causing inflammation throughout your body.



ADAM.

SECRET 3: Choose red fruit over green.

That means Pink Lady over Granny Smith, watermelon over honeydew, red grapes over green ones. The higher levels of nutrients called flavonoids—particularly anthocyanins, compounds that give red fruits their color—calm the action of fat-storage genes. In fact, red-bellied stone fruits like plums boast phenolic compounds that have been shown to modulate the expression of fat genes.

SECRET 4: Make some guacamole.

For test panelist June Caron, incorporating fresh produce like avocados was a life-changing lesson from Zero Belly Diet. The 55 year-old lost 6

pounds in the first week on the program. “Learning to eat real, chemical free, fresh foods has been the best thing that ever happened to me. I am never hungry. And the weight just keeps coming off!” Glowing skin, healthy nails and better sleep were Zero Belly bonuses, June said. “Everyone says I look much younger!”

Avocados are a double-whammy to belly fat. First, they’re packed with heart-healthy monounsaturated fats that dim your hunger switches; a study in *Nutrition Journal* found that participants who ate half a fresh avocado with lunch reported a 40 percent decreased desire to eat for hours afterwards. Second, unsaturated fats like those found in avocados seem to prevent the storage of belly fat.

SECRET 5: Mix up a plant-protein smoothie

Protein drinks are great ways to get a monster dose of belly-busting nutrition into a delicious, simple snack. But most commercial drinks are filled with unpronounceable chemicals that can upset our gut health and cause inflammation and bloat. And the high doses of whey used to boost protein levels can amplify the belly-bloating effect. The Zero Belly solution: Try vegan protein, which will give you the same fat-burning, hunger-squelching, muscle-building benefits, without the bloat.

SECRET 6: Power up with eggs.

Eggs are the number-one dietary source of a nutrient called choline. Choline, which is found also in lean meats, seafood and collard greens, attacks the gene mechanism that triggers your body to store fat around your liver. One Zero Belly Diet recipe—a breakfast having sweet potatoes and fresh farm eggs—became test panelist Morgan Minor’s go-to breakfast, and after just 3 weeks on the program, the female fire-fighter lost 11 pounds and 4 inches from her waist! The more eggs you eat, the less egg-shaped you get.

SECRET 7: Mix up a magic elixir.

Start each day by making a large pitcher of “spa water”—that’s water filled with sliced whole lemons, oranges or grapefruits—and make a point of sipping your way through at least 8 glasses before bedtime. Citrus fruits are rich in the antioxidant delimonene, a powerful compound found in the peel that stimulates liver enzymes to help flush toxins from the body and gives **sluggish** bowels a kick, according to the World Health Organization. For added belly-blasting benefits, brew yourself a pot of green tea, one of The 5 Best Teas for Weight Loss.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

- 1. Special diets can activate or inactivate our get-lean genes.
- 2. “ Zero Belly Diet” is the name of a test panel.
- 3. By following the mentioned diet one can lose weight while eating the foods he/she loves.
- 4. Green grapes are more effective in losing weight than red ones.
- 5. Oatmeal helps reduce blood cholesterol by starving the healthy bacteria in the gut.
- 6. Eating real, chemical free foods can amplify the belly-bloating effect.

B. Discuss and answer the following questions.

1. How can the science of nutritional genetics help us to lose/gain weight?
2. What is “Zero Belly Diet”?
3. What are the advantages of eating oatmeal?
4. How do avocados fight with belly fat?
5. How can a magic elixir be made?

Unit 7

Pre-reading Activities

A. Discuss the following questions with your friends.

1. What do you know about the control of infectious diseases?
2. Do you believe antibiotics are as effective in controlling such diseases as they were when they were first discovered?
3. Have you ever heard or experienced unnecessary or inappropriate prescription of antibiotics? If so, what problem(s) do you think it will create?

B. Try to guess the meaning of the following words (i.e. without the use of a dictionary) by breaking them into their constituent parts and adding up the meaning of parts.

Word	Constituent parts	Meaning of every part
antibiotic		
immunocompromised		
pathogen		
microorganism		
pathophysiology		
Staphylococcus		
multi-resistant		
neutropenic		
prediction		

Reading

Resistance to Antibiotics: [A General Overview]

1. In the last 60 years, major improvements in the early recognition and treatment of infectious diseases have resulted in an extraordinary reduction in the morbidity and mortality associated with these illnesses. This has been due, in part, to our better understanding of the fine molecular biological mechanisms of these diseases and to our improved understanding of their pathophysiology and their epidemiology but, most notably, to the rapid development of safe and effective new antimicrobial treatments that have been able to attack the specific agent causing the

infection, thus helping the infected host to eliminate the infection being treated.

2. Seen initially as truly miraculous drugs, access to the first available systemic antibiotics (sulfonamides and penicillin) was not immediately available for the general public. In fact, these drugs were scarce and very expensive and were initially reserved for use by the military during World War II.

3. As more antibiotics were discovered, manufacturing processes were simplified, and newer formulations developed, access to antibiotics eased considerably and their use became widespread. Antibiotics had truly become the “panacea” of medicine and were being used to treat even the most common and trivial types of infections, many of these non-bacterial in nature.

4. Based on the work that he had done in his research laboratory, in an interview with The New York Times in 1945, Sir Alexander Fleming warned that the inappropriate use of penicillin could lead to the selection of resistant “mutant forms” of *Staphylococcus aureus* that could cause more serious infections in the host or in other people that the host was in contact with and thus could pass the resistant microbe. He was right and within 1 year of the widespread use of this drug a significant number of strains of this bacterium had become resistant to penicillin. Only a few years later over 50% were no longer susceptible to this new drug.

5. Unfortunately, things have not improved in the recent past. In fact, every day more common and uncommon bacteria, previously susceptible to common antimicrobials, are reported to have developed resistance to different antibiotics. Although these bacteria initially caused significant nosocomial infections and were the cause of major morbidity and mortality in hospitalized patients, more recently they have spread to the community, causing severe illnesses in previously healthy and otherwise non-vulnerable patients.

Antibiotic Resistance: A Long-Term, Serious Problem...Getting Worse

6. In order to be fit to survive, all living organisms strive to adapt to their environment. Part of this adaptation process includes adjusting to weather conditions, to food, water and in many cases to oxygen availability and also to the presence of potentially dangerous or even lethal external agents. It is no secret that many insects have adapted remarkably well to their environment and so have microorganisms. Thus it should not be surprising to us that bacteria have shown a remarkable ability to endure and adapt to their environment including the development of different

mechanisms of resistance to most old and new antimicrobial agents.

7. The end result of this phenomenon is that many strains of bacteria have become resistant, and in many cases multi-resistant to these therapeutic agents, thus rendering these drugs ineffective as treatments of choice for severe infections caused by these pathogens.

8. As stated earlier, the first cases of antimicrobial resistance occurred in the late 1930s and in the 1940s, soon after the introduction of the first antibiotic classes, sulfonamides and penicillin. Common bacteria such as strains of *Staphylococcus aureus* became resistant to these classes of antibiotics at record speed.

9. For the most part, during the first 25 years after the introduction of the initial antibiotics, resistance was a problem of hospitalized patients. We learned quickly that these bacteria were not only capable of developing resistance to these antibacterial drugs but that they also could remain alive and viable in the hospital environment, thus affecting mostly vulnerable patients (especially critically ill patients in the intensive care unit, those receiving steroids, the immunosuppressed, the debilitated, the chronically ill and the neutropenic) who were at a higher risk and in whom eventually they cause serious nosocomial infections. ... Recently [, however,] we have also witnessed the report of very worrisome cases of previously unthinkable resistance as well as the spread of resistant bacteria outside the hospital causing community-acquired infections.

Scope of the Problem

10. *At least* [emphasis added] 17 different classes of antibiotics have been produced to date. Unfortunately, for each one of these classes at least one mechanism of resistance (and many times more than one) has developed over the years. In fact, in some cases these bacteria have been able to develop simultaneous resistance to two or more antibiotic classes, making the treatment of infections caused by these microorganisms extremely difficult, very costly and in many instances associated with high morbidity and mortality.

11. Thus, it seems that the dream that some clinicians had and the predictions that many others made in the middle of the 20th century about the future eradication of most common infectious diseases from humanity will be unlikely to be achieved. If anything, recent experience with the emergence of totally new infectious diseases (AIDS, SARS, etc.), and the epidemiological trends of antibiotic resistance observed thus far, tend to indicate that we will continue to move in the opposite direction, towards an environment with an ever growing number of new

infectious diseases and of more common bacteria developing antibiotic resistance, more bacteria becoming resistant to several antibiotics at the same time, and some of these bacteria continuing to migrate from the hospital setting to the community. The net result could be even higher morbidity, higher mortality, higher costs, and the potential for the rapid spread of these bacteria and overall a decreasing number of useful antimicrobial agents to combat the infections they cause.

12. Gaining a good understanding of the molecular basis for the development of resistance is important because it allows us to develop new approaches to manage the infections caused by these bacteria and to create new strategies for the development of new treatments against these bacteria.

A. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

-----1. Over the last 60 years, infectious diseases have been eradicated.

-----2. A ‘morbid’ disease is one that kills people.

-----3. The word ‘this’ (paragraph 1, line 4) refers to infectious disease.

-----4. Control of the infectious disease has not been due so much to our understanding of the molecular processes of the disease as to the use of effective medication.

-----5. Soldiers engaged in the Second World War had easier access to antibiotics than the general public.

-----6. It can be understood from the text that one reason why people were not able to easily have antibiotics at first was the complicated process of production.

-----7. In paragraph 3, the writer seems to have an approval tone about the use of antibiotics for the use of mild or non-bacterial infections.

-----8. The use of antibiotics seems to have been overstretched when they had just come into use.

-----9. Fleming had the wisdom to warn against the terrible consequences of the excessive use of antibiotics.

-----10. Fleming’s predictions about the repercussion of the indiscriminate use of antibiotics soon came true.

- 11. Resistance to antibiotics was restricted to the years following their discovery; the problem gradually came under control.
- 12. Resistance to antibiotics has crossed the boundaries of hospitals.
- 13. The text suggests that microorganisms' resistance to antibiotics is just part of the larger, natural phenomenon of adapting to the immediate environment found in every living organism.
- 14. 'Therapeutic agent' is another name for 'pathogen'.
- 15. The underlined part of the last sentence in paragraph 8 means that the speed of the development of resistance was recorded.
- 16. Nosocomial infections are those acquired mostly by the public.
- 17. The tone of the writer in paragraph 9 suggests that although the spread of antibiotic resistance is a problem, it can easily come under control and that there is no reason to worry a lot.
- 18. No antibiotics have been produced up to now against which bacteria have failed to develop resistance.
- 19. Paragraph 11 provides a very gloomy picture of our present desperate condition.
- 20. The underlined word 'it' in the last paragraph refers to 'resistance'.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. According to the first paragraph, which one of the following has NOT happened over the last 60 years?
- a. development of more effective ways of combating pathogens
 - b. an increase in the intensity of infectious diseases once one gets them
 - c. a reduction in the number of people who have died of infectious diseases
 - d. an increase in the knowledge we have of how infectious diseases work in the body
2. Which of the following could be considered a feature of the first antibiotics produced?
- a. ease of access
 - b. reasonable price
 - c. strong antimicrobial power
 - d. the diversity of types produced

3. What Fleming said in his interview in 1945 -----.
- a. can come true only for 50% of antibiotics but not for all classes
 - b. was based only on speculation without any empirical backing
 - c. was a description of a situation that we are actually experiencing today
 - d. is considered now as some exaggeration without any external representation
4. The problem of resistance to antibiotics -----.
- a. was originally caused by the inefficiency of antimicrobial drugs
 - b. started in the community and gradually spread to hospitals
 - c. has decreased in scope over the recent past
 - d. has been increasingly exacerbating
5. What statement is closest to the main idea of paragraph 6?
- a. Insects have a great ability to adapt to their environment.
 - b. The adaptation process has saved many species from extinction.
 - c. Microbes' resistance to antibiotics is a natural phenomenon and it is thus to be expected.
 - d. Natural environments have been loaded with hardship as a natural strategic phenomenon to help organisms survive.
6. In which of the following sentences does the word 'have' carry the same meaning and function as the underlined one in paragraph 6?
- a. I'm having a migraine headache.
 - b. This semester, I have a very heavy course schedule.
 - c. Who would you like to have as your model in life?
 - d. This is the most severe case of the flu I have ever experienced.
7. What does the underlined word 'they' in paragraph 9 refer to?
- a. resistant bacteria
 - b. antimicrobial drugs
 - c. nosocomial infections
 - d. critically ill patients
8. Bacteria that develop resistance to antibiotics -----.
- a. do so mostly through a single mechanism
 - b. often become exclusively resistant to a specific class of antibiotics
 - c. seem to be equipped with a complex system enabling them to do so
 - d. can be conveniently destroyed by a stronger antibiotic than the one they are resistant to

9. Which statement is correct about the present status of microbial infections?

- a. They are being controlled just as predicted in the middle of the 20th century.
- b. The situation is presently so gruesome and the future is uncertain and almost gloomy.
- c. If it were not for the appearance of unexpected diseases such as AIDS or SARS, we could easily bring them under control.
- d. As newer classes of antibiotics are being developed, we should not be so pessimistic about eradicating them in close future.

10. The last paragraph can best be described as -----.

- a. an expression of what expertise and knowledge we need to gain towards a remedy
- b. a pessimistic view of how large the scope of the problem currently is
- c. a call for the creation of stronger antibiotics
- d. a harsh criticism of our present knowledge

C. Find words in the text that have meanings similar to the definitions below. The word's part of speech and number of the paragraph where it is to be found are given in brackets.

- 1. the study of how diseases spread and how to control them (N., para. 1)
- 2. very little in amount or number (Adj., para. 2)
- 3. an all-solution; something considered to solve every problem (N., para. 3)
- 4. a type (N. para. 4)
- 5. an organism that is different from other members of its type due to a genetic change (N., para. 4)
- 6. easily harmed or hurt (Adj., para. 5)
- 7. make ill, weak or less effective (V., para. 9)
- 8. originating in a hospital (Adj., para. 9)
- 9. causing feelings of anxiety (Adj., para. 9)
- 10. fight (V./N., para. 11)

D. Find words from the text to fill out the blanks in the following sentences. The paragraph where the word can be found is identified with a number at the end of every sentence. Make any necessary changes to the words.

1. There is no doubt in our time that the development of a large number of respiratory diseases is ----- smoking. [para. 1]
2. Do vegetarians ----- any form of animal products from their diet or are they at ease with some food containing little fat (such as chicken or fish)? [para. 1]
3. His fever ----- seemed to be nothing serious, but in time, it proved a sign of a major problem with his immune system. [para. 2]
4. Pharmaceutical companies have in recent decades been able to ----
----- insulin that closely resembles the one produced by human body, decreasing our dependence on animals for such production. [para. 3]
5. If you get too stressed out over -----, daily matters, I guess you should see a doctor to have the balance of your hormones checked—this could be a sign of hyperthyroidism. [para. 3]
6. In countries where the harm to the Ozone layer is noticeable, people can be more ----- to different types of skin problem as there is no natural protective mechanism to filter out the harmful rays from sunlight. [para. 4]
7. Do you think that the ----- of a single disease can change over time; did the flu that our forefathers got, for instance, have more (or less) strength than the one we get nowadays? [para. 5]
8. Lack of the necessary research tools and equipment can ----- a highly knowledgeable and capable researcher completely unproductive. [para. 7]
9. Cacti are hardy plants, capable of remaining ----- even if you do not tend to them regularly. [para. 9]
10. People who undergo organ transplant have to take certain medication that would ----- the immune system. This is to prevent the rejection of the received organ, which is recognized by the body as an ‘invader’. [para. 9]
11. Some people think they are capable of doing two ----- tasks (such as studying and listening to music). However, psychology has

proved that doing two things at the same time will greatly reduce the efficiency of the work at hand. [para. 10]

12. The speed of the ----- of intelligent cell phones in our time has been unbelievable; in just a few years, the number of such phones possessed by people have increased 10-fold. [para. 11]

E. Word Families: Fill in the blanks using the correct form of the words given in the list.

Verb	Noun	Adjective
infect	infection	a. infectious b. infected
recognize	recognition	Recognized
X	mortality	a. mortal b. immortal
migrate	a. migration b. migrant	migratory
initiate	a. initiation b. initial	initial
appropriate	appropriation	a. appropriate b. inappropriate
Resist	a. Resistance b. resistor	resistant
adapt	adaptation	adaptive
X	a. therapy b. therapeutics	therapeutic
acquire	acquisition	a. acquired b. acquisitive

1. You have to be very careful to avoid any touch with the patient; his wound is highly -----.

2. The ----- of the fact by the general public that hand-washing is so important in the spread of communicable diseases can go a long way towards controlling them.

3. No matter how hygiene standards and preventive and curative medicine advance, we should not forget that man is a ----- creature;

no one has ever lived eternally.

4. Every time the environmental conditions of a location become favourable, the number of ----- to that region increases.

5. Pasteur was the scientist who ----- the war against microbes; for the first time in history, he obliged the surgeons of his time to disinfect their hands and tools before the operation.

6. Making judgments about people's character only based on their appearance is quite ----- and unethical.

7. As a rule of thumb, the stronger one's immune system is, the more ----- one will be against disease.

8. 'Chills' that one gets in cold weather is in fact an ----- behaviour; through quick and constant movement, the body tries to make up for the lost heat.

9. People sometimes have unrealistic and exaggerated ideas about the ----- qualities of herbs; some even think herbs can do miracles for the sick.

10. Consumerism has made many people so -----; they just love gathering more and more materials possessions, often even without needing them or without knowing how or when to use them.

Further Reading

UN says "eat less meat to curb global warming"

1. According to the world's leading expert on global warming, people should give up meat for one day a week if they want do something that would help tackle climate change. Dr. Rajendra Pachauri, chair of the United Nations Intergovernmental Panel on Climate Change, said that people should then go on to reduce their meat consumption even further. So far this is the most controversial advice the panel has given on how individuals can help tackle global warming.



2. Dr. Pachauri said diet change was important because of the huge greenhouse gas emissions and other environmental problems – including habitat destruction – associated with rearing cattle and other animals. It

was relatively easy to change eating habits compared to changing means of transport, he said.

3. The UN's Food and Agriculture Organization estimates that meat production causes nearly 20% of global greenhouse gas emissions. These gases are generated during the production of animal feeds, for example, while ruminants, particularly cows, emit methane, which is 23 times more effective as a global warming agent than carbon dioxide. The agency has also warned that meat consumption will probably double by the middle of the century.

4. "Reducing meat consumption is the most attractive option because it can be done almost immediately and it will bring about reductions in greenhouse gas emissions in a short period of time," said Pachauri. "Give up meat for one day [a week] initially, and then continue to decrease it," said the Indian economist, who is a vegetarian. However, he also said that other changes in lifestyle would help to tackle climate change. "That's what I want to emphasize: we really have to reduce consumption in every sector of the economy."

5. Pachauri can expect some strong responses from the food industry to his advice, though he has received unexpected support from restaurateur John Torode, who is about to publish a new book, *John Torode's Beef*. "I have a little bit of meat and enjoy it," said Torode. "Too much meat for any person is gluttony. But there's a more important question here: where [the meat] comes from. If we all bought British food and stopped buying imported food, we'd save a huge amount of carbon emissions."

6. Pachauri will be speaking at an event organized by animal welfare group Compassion in World Farming, which has calculated that if the average UK home reduced meat consumption by 50%, that would reduce emissions more than if people cut car use by 50%. The group wants the government to lead campaigns to reduce meat consumption by 60% by 2020. Campaigners have also pointed out the health benefits of eating less meat. The average person in the UK eats 50g of protein from meat a day, equivalent to a chicken breast and a lamb chop – a relatively low level for rich nations but 25-50% more than World Health Organization guidelines.

7. Professor Robert Watson, a government scientific adviser, said the government could help educate people about the benefits of eating less meat, but it should not 'regulate'. "Eating less meat would help, there's no question about that, but there are other things," Watson said. However, Chris Lamb, head of marketing for the pig industry group BPEX, said the

meat industry had been unfairly targeted and was working hard to find out which activities had the biggest environmental impact and reduce those. Some ideas were contradictory, he said – for example, one solution to emissions from livestock was to keep them indoors, but this would damage animal welfare. “Climate change is a very young science and our view is there are a lot of simplistic solutions being proposed,” he said.

8. Last year a report into the environmental impact of meat eating claimed livestock generated eight per cent of UK emissions – but eating some meat was good for the planet because some habitats benefited from grazing. It also said vegetarian diets that included lots of milk, butter and cheese would probably not reduce emissions much because dairy cows produce the potent greenhouse gas methane, which is released through flatulence.

A. Look in the text and find the answers to these questions as quickly as possible. You can write your answers in the table below.

1.	2.	3.
4.	5.	6.

1. According to the UN’s Food and Agriculture Organization, how much of global greenhouse gas emissions are produced by meat production?

2. How much meat protein does the average person in the UK eat each day?

3. By what percentage is UK meat consumption above WHO guidelines?

4. Which is a more effective global warming agent – methane or carbon dioxide?

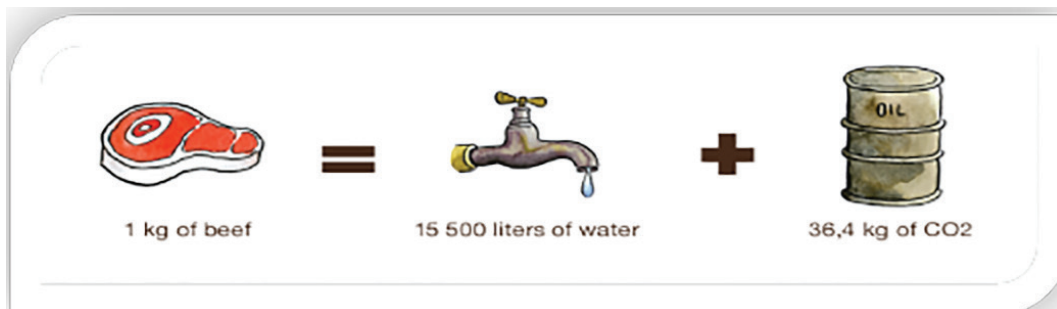
5. To what degree does Compassion in World Farming want to reduce meat consumption by 2020?

6. What percentage of UK emissions is generated by livestock?

B. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

-----1. If people reduced car use by 50%, it would reduce greenhouse gas emissions more than if they reduced meat consumption by 50%.

- 2. Dairy cows release methane through flatulence.
- 3. Meat consumption is expected to double by the middle of the 21st century.
- 4. The average person in the UK eats less meat than what the WHO guidelines recommend.
- 5. Eating less meat is good for your health.
- 6. If everyone became vegetarian, greenhouse gas emissions would decrease dramatically.



C. Fill in the blanks using the words in the list.

consumption ruminant gluttony simplistic contradictory
 graze livestock flatulence controversial habitat

1. An animal's ----- is the place it normally lives.
2. ----- is when a person or animal has too much gas in their stomach or intestines.
3. If two or more ideas are -----, they disagree with each other and cannot both or all be true.
4. ----- is the process of eating or drinking something.
5. If an idea is -----, it causes strong disagreement or disapproval.
6. A ----- idea treats something in a way that makes it seem simpler than it really is.
7. When animals -----, they eat grass growing in a field.
8. ----- is the collective word for animals such as cows, sheep and pigs that are kept on farms.

9. A ----- is an animal such as a cow or sheep that brings food back from its stomach into its mouth to chew it a second time.

10. ----- is the bad habit of eating more than you need.

**D. Look in the text and find the following words and expressions.
The paragraph numbers are given to help you.**

1.	2.	3.	4.
5.	6.	7.	8.

1. to make an organized and determined attempt to deal with a problem
[Verb, para 1]

2. a group of people who make decisions or judgments. [Noun: para 1]

3. extremely large [Adj., para 2]

4. to make something happen [Phrasal Verb, para 4]

5. to tell someone something [Phrasal Verb, para 6]

6. of the same value as something else [para 6]

7. effect [Noun, para 8]

8. powerful or effective. [Adj., para 8]

Unit 8

Pre-reading Activity

A. Scan through the text and answer the following questions.

1. What is euthanasia?
2. Is euthanasia legal?
3. Which country's laws has made euthanasia legal?



Euthanasia

It is always helpful, when discussing euthanasia, to begin by looking at the meaning of the term, as definitions vary widely. The definition I use reflects the way the word is often used in the bioethics literature, though the word is used in a more narrow sense in some countries. By euthanasia, I mean the intentional shortening of life, by act or omission, on the grounds that it is not worth living. **On** this definition, euthanasia can be voluntary or non-voluntary, active or passive, depending on the method used and on whether the patient has **consented**. Note that it is not euthanasia if life is shortened as a side-effect of trying to achieve some other goal. It is not euthanasia to give high doses of painkillers with the aim of alleviating pain, if only **foresee**, and do not intend, that the patient will die sooner as a result. Nor is it euthanasia to **refrain from** giving (for example) some **burdensome** treatment, if we only foresee, and do not intend, that the patient will die sooner as a result. Only if our aim is to shorten life, by act or by omission, can one speak of euthanasia.

according to;
based on

agreed

predict

avoid/causing
problems

There are some countries, the Netherlands, Luxembourg, and Belgium, in which euthanasia is legal under certain conditions. In these countries, the law on **palliative** care and the law relating to patients' rights have imposed several major obligations before access to euthanasia.

a medical
treatment that
will not cure but
will reduce the
pain

They consist of: 1) giving to the patient all information about other therapeutic options and prognosis, particularly in relation to palliative care; 2) obtaining the opinion of a second or even a third doctor (in case

What does
"they" refer to?

of unforeseeable short-term death); and 3) making sure that all persons designated by the patient have been met beforehand. The term euthanasia must be understood as being the act of ending, at their request, the life of an adult (or **emancipated minor**) who is capable of taking the decision, according to the legal definition. At the same time the patient must suffer from a serious incurable condition, owing to an illness or accident, and must experience constant and unbearable physical and psychological suffering, despite the best possible control that can be achieved with conventional treatment. This request must be repeated, with **serenity**, without external pressure. A “third party”, in the case considered here a physician, will carry out the act, namely the euthanasia. It is important to stress that the physician can refuse to carry out euthanasia but can refer the patient to another one. Although of ethical concern, terminal or palliative sedation is not considered euthanasia from a legal point of view, despite the fact that in all situations, the patient will die following this medical decision.

a young person with social and legal right to do sth

calmness

4. The legislators have not specified the practical medical methods to be used as they believed that **this** was not their role. However, recommendations are available and have been published many times. It is useful to specify that the legal texts avoid the notion of medically assisted suicide and that the stages of the condition (“terminal phase”, “palliative phase” and “end of life”) are removed.

What does “this” refer to?

Since the implementation of the law, the Federal Control and Evaluation Committees (Review Committees) in these countries have published the conclusions detailing the declarations of physicians who have carried out euthanasia. There has not been indication given regarding the specific diagnosis, except for “cancer” or “neurological disease”, in the annual reports provided by the Review Committees. Nevertheless, the majority of the declared euthanasia **concerned** patients with progressing advanced cancer near the end of life. It must be emphasized that physicians have to give enough information about the case and that an accurate diagnosis is required. This information is not communicated in the annual report but is available on individual request.

was about

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

-----1. Euthanasia is defined more or less the same all over the world.

-----2. If you provide the patient with a drug to relieve his/her pain and he/she dies, it is not euthanasia.

-----3. Most Western countries have relaxing laws concerning euthanasia.

-----4. A “minor” cannot undergo euthanasia even if he/she is suffering a lot.

-----5. Legally, terminal sedation is considered euthanasia.

-----6. Regarding euthanasia, legal texts are silent on different stages of the patients’ condition.

-----7. The law has determined which practical medical methods of euthanasia are legal and which are not.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. According to paragraph one, when discussing something, we should -----.

- a. look into each aspect of it in detail
- b. find out what others have found about it
- c. look for the most comprehensive definition of it
- d. provide an operational definition for it

2. Based on the definition of the euthanasia given by the author, -----.

- a. the patient’s consent is not essential to be obtained
- b. an essential element is the intention of stopping life
- c. when it is not worth living, euthanasia is permissible
- d. stopping burdensome treatment, if leading to death, is euthanasia

3. The countries mentioned in paragraph two -----.

- a. allow euthanasia if some conditions are met
- b. have provided the patients with more rights
- c. are the only countries with some relaxing laws on euthanasia
- d. are more concerned with palliative care than other countries

4. All of the following are the obligations to be met before access to euthanasia **except** -----.

- a. observing or meeting the patient’s rights to have information about any potential treatment
- b. providing the patient with enough information about the disease prognosis
- c. providing the choice of the method of euthanasia by the patient
- d. consulting with at least a second doctor

5. In countries where euthanasia is legal under certain conditions, -----.

- a. it should be done in the presence of the patient's relatives
- b. a "third party" must carry out the act
- c. the patient has to be informed about the method of euthanasia used
- d. palliative sedation is considered an appropriate form of euthanasia

C. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. It is important to keep up-to-date with the ----- in our field.

- a. diagnosis
- b. indication
- c. literature
- d. intention

2. Your organs will only be used after your death if you give your ----- beforehand.

- a. consent
- b. instance
- c. option
- d. dose

3. Greater financial and human resources are needed to meet such health -----.

- a. declarations
- b. prescriptions
- c. stages
- d. tribulations

4. Some argue that when the patient suffers from an incurable disease and the ----- is gloomy, mercy killing might be justifiable.

- a. diagnosis
- b. serenity
- c. detection
- d. prognosis

5. Because of her qualifications as well as her experience, Mrs. Thompson was ----- the head nurse of the ward.

- a. designated
- b. declared
- c. administered
- d. defined

6. Informed ----- was obtained from all participants before the study began.

- a. opinion
- b. consent
- c. options
- d. omission

7. The doctor prescribed her a/an ----- that eased the pain, but prolonged the illness.

- a. palliative
- b. notion
- c. achievement
- d. evaluation

8. The 20s and 60s are often regarded as the most ----- decades, when women got the vote and the pill, respectively.

- a. conventional
- b. emancipated
- c. unbearable
- d. designated

9. It is impossible to ----- exactly how our actions will affect future.

- a. foresee
- b. implement
- c. intend
- d. legislate

10. In her lecture, the dietician ----- the importance of a balanced diet in leading a happy and healthy life.

- a. discounted
- b. undermined
- c. stressed
- d. computed

D. Word Families: Fill in the blanks using the correct form of the words given in the list.

accurate, accuracy, accurately

- a. We hope to become more ----- in predicting earthquakes.
- b. Her novel is an ----- reflection of the health problems and epidemics people suffered from in the medieval ages.
- c. The plan should be drawn as ----- as possible, showing all the measurements.
- d. The computer can predict changes within a surprising degree of -----.

cure, curable, curative, curability, incurable

- a. Preventive medicine is concerned with preventing a disease, whereas ----- medicine is concerned with healing.
- b. Many illnesses which once killed a lot of people are today -----.
- c. The best ----- for boredom is hard work.
- d. Do you believe in the ----- power of herbal medicine.
- e. A ----- all is something that people think will remove any problem or ----- any illness.
- f. The saying “What can’t be ----- must be endured.” means if you can’t change something, you must bear it patiently.
- g. Most malignancies are still -----.

terminate, termination, terminal, terminally

- a. A ----- disease is one which will lead to death soon.
- b. If you ----- a pregnancy, you end it intentionally, usually by having a medical operation.
- c. Although her pregnancy was not planned, she was very happy about it and turned down the possibility of a ----- when it was suggested

by her doctor.

d. He is a ----- ill child.

stress, stressor, stressful, stressed

a. She's been feeling very ----- since she started her new job.

b. Teaching can be a tiring and ----- job.

c. The president ----- the need for calmness in TV and radio broadcast throughout the election campaigns.

d. Employers should do more to reduce the number of working days lost through -----related illness.

e. ----- management is the limitation of ----- and its effects by learning special types of behavior and ways of thinking which reduce it.

f. Many joggers are plagued by knee ----- and foot strains caused by undesirable footwear.

g. When "present" is an adjective or a noun, the ----- is on the first syllable, but when it is a verb the ----- is on the second syllable.

serenity, serene, serenely

a. What amazes me is his ----- approach to all the trouble around him.

b. I admire her ----- in the midst of so much chaos.

c. She smiled ----- and said nothing.

E. Match the words in column I with their equivalents in column II.

I	II
1. consent	a. troubles and events that cause suffering
2. alleviate	b. to put (a plan or system) into operation
3. constant	c. to cause, suggest or lead to sth
4. implement	d. to think about sth you might do in future; to consider
5. declare	e. to make something less painful
6. inspire	f. happening regularly or all the time
7. trials and tribulations	g. to give permission for sth or agree to do sth
8. contemplate	h. to state officially and publically

F. Cloze Test: Fill in the blanks using the words in the list.

either active or passive	letting the patient die
in which	literally speaking
has not expressed their choice	being mentally impaired
by contrast	the patient is not allowed to die
an irreversible coma	need to be worse than death

The New Oxford Dictionary of English defines “ euthanasia” as “ the painless killing of a patient suffering from an incurable and painful disease or ---1---”. “Euthanasia” comes from two Greek words, ‘*eu*’, a prefix meaning ‘good’ or ‘well’, and ‘*thanatos*’, meaning ‘death’. ---2---, when someone undergoes euthanasia, their death is good. Normally, for death to be good, living would ---3---. Incurable, painful disease and irreversible coma are two ways ---4--- living can be worse than dying. In these cases, we might say life is not worth living.

We can distinguish three types of euthanasia. *Involuntary* euthanasia is euthanasia when the patient does not want to die. *Non-voluntary* euthanasia is euthanasia when the patient ---5---, for example, if they are too young to express choices, or they can’t express choices now—e.g. because of ---6--- through senile dementia—and did not express their choices earlier. *Voluntary* euthanasia is euthanasia when the patient wants to die and has expressed this choice.

Each of these three types can be ---7---. Active euthanasia is when the patient is killed, for instance, by lethal injection. Passive euthanasia is when ---8---, for instance, by withholding treatment for the disease that then kills them.

Passive euthanasia does not fit the dictionary definition above, because it involves ---9--- rather than killing them. It also doesn’t fit because it can sometimes be very painful and prolonged. Active euthanasia, ---10---, is almost always painless since very high (fatal) doses of painkillers can be given with the injection.

Further Reading

Medical Ethics and Euthanasia

In the field of medical ethics, some argue that patient autonomy ought to be an unlimited right of medical care, and others argue that God places limits on the choices we are allowed to make as we care for our bodies, especially at the end of life.



This week the panel addresses a question **inspired** by a note from a suggested reader, Cecil:

“Should euthanasia be an acceptable medical practice? In a terminally ill patient, is there an ethical difference between the withdrawal of medical care and the administration of a treatment to hasten death?”

Fred Wooden, the pastor of Fountain Street Church, responds:

“To answer the first question, I say that euthanasia is not a medical practice at all, even though it involves administering drugs. Medicine is care intended to promote health and well-being. Euthanasia is certainly not the former, and only inferentially the latter. Therefore, if I am right, physicians should not actively practice euthanasia. But their tools, drugs notably, can be administered by others. More than one physician has prescribed enough medicine to a terminal patient telling them and their family quite clearly that if they take too much, it will cause death. More than one patient or family used that information. Conversely, when medical care is eroding health and well-being, that is not good medicine. Withdrawing treatment even if death comes sooner is a sound medical choice so long as it is an informed choice, in this case meaning that the patient and/or family know beforehand.”

Aly Mageed, a physician and a Shura member (roughly equivalent to an elder or a member of the Board of Trustees) of the Islamic Mosque and Religious Institutes of Grand Rapids, responds:

“In Islam, man only has limited free will that allows him/her to make decisions and act them out but the outcome of these actions is up to God. God is in full control of all aspects of the universe at all the times. His wisdom to extend or shorten someone’s life can sometimes be beyond our immediate comprehension. If one decides to terminate his/her life prior to its appointed time, it is considered suicide which is prohibited.

“It is also important to **contemplate** that one’s life is impossible to be consider shortened or extended anyway when the pre-appointed time comes. Therefore, if one would have waited on the assisted or unassisted suicide,

his/her life would have come to an end at the same exact appointed time anyway. What we also frequently overlook are the benefits – in this existence and in the hereafter – of going through all God-given life experiences, **trials and tribulations** even the seemingly harder/tougher tests that some of us want to end prematurely.

troubles and
events that cause
suffering

“In a situation of an illness that has gone through its currently known list of possible effective therapies while the patient is on life supporting technologies, the opinion among scholars have differed in situation on the ethics of withdrawal of care. Therefore, the patient, family and medical team would have to contemplate earnestly before making those decisions.”

Euthanasia: Pros and Cons of Mercy Killing

Reasons for Euthanasia

- Everyone has a right to decide when their life should end.
- If the quality of life has become so bad, a person may feel too much **physical** or **emotional** pain.
- Today’s hospitals are **overcrowded** and have too many patients. Some **argue** that they should let those die that do not have a chance of living on. In that way there could be more room for patients with diseases that can be **cured**.

Reasons against Euthanasia

- Doctors have a problem with euthanasia because they have **sworn** an **oath** that does not allow them to take part in the killing of people.
- Sometimes it is not clear if an ill person really wants to die. Euthanasia should only take place if someone really wants it or if they understand how ill they are.

Euthanasia and Religion

Many religions think that euthanasia is **immoral**. Some religions **regard** it a type of murder.

- The official Roman Catholic is against euthanasia and says it is a crime. Protestants, on the other side, take a more **liberal view**.
- In Islam all forms of euthanasia are **forbidden**.
- Hindus think that, even though helping a person end a painful life may be good, it **interferes** with the **cycle** of **death** and **rebirth**.

- In Japan more than half of all Shintoists think that you should be allowed to help a person die if they ask for it.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

-----1. Fred Woodman believes that euthanasia is against medical practice.

-----2. “The former” and “the latter” (line 6) refer to “medical practice” and “administering drugs”, respectively.

-----3. According to Fred Woodman, euthanasia is right to do if it is with patient’s informed choice.

-----4. Aly Mageed, the Moslem scholar, has the same view on euthanasia as Fred Woodman, the senior pastor.

-----5. It is said that in Islam euthanasia is a kind of murder.

-----6. All religions have more or less the same view on euthanasia

-----7. The defenders of euthanasia insist on the individual’s right to decide when to die.

-----8. The detractors of euthanasia believe that euthanasia is against doctor’s oath.

B. Discuss the following questions with your classmates.

1. What difference do you see between Fred Woodman’s opinions and those of Aly Mageed? Whose views do you think is more justifiable? Why?
2. Whose arguments (those of the pros or those of the cons) on mercy killing are more justifiable? Why?
3. Is euthanasia a type of murder as some religions maintain? What do you believe?

Unit 9

Pre-reading Activity

A. Skim through the text and answer the following questions.

1. Is organ transplantation ethical in all communities?
2. What is organ donation?



3. Are organs to be transplanted taken from a dead body or a living one?

Organ Transplantation

Organ transplantation is a thrilling new option of modern surgery yielding hope for chronically ill patients, and, at the same time, **stirring** controversial ethical questions on human identity and the meaning of human body. Being a global transnational endeavor, organ transplantation raises universal ethical concerns and, yet, has to be adapted to culturally -mediated beliefs. Case studies are particularly **apt** to illustrate the range of global and local, ethical, social, and cultural problems associated with this new form of treatment.

stimulating

suitable

The value of case studies for medical ethics teaching has been sufficiently demonstrated. They stimulate ethical debates by calling for a combination of concrete problem solving and abstract principled reasoning. Through case studies, students will learn, firstly, to develop sensitivity for ethical problems and to describe an ethical conflict, secondly, to identify and analyze the underlying ethical principles and values, which are relevant to the case and, thirdly, to stimulate ethical decision-making in the practice of health care. Thus, case studies serve as a valuable instrument of health-care ethics education.

Definition and medical practice of organ transplantation

Organ transplantation is the surgical replacement of a malfunctioning organ by another human organ. Kidney, heart, pancreas, liver, or lung have already been successfully transplanted, as well as organ parts or tissues such a bones, cornea, skin, or bone marrow. Even the

transplantation of several organs at once has been ventured (so-called multi-organ transplantation). More recently and still rarely, extremities such as hand, arm, or foot, and even a face were transplanted. In general, three types of grafts are distinguished:

- a. autografts which originate from the recipients themselves (e.g. in the case of skin or bone transplantation)
- b. allografts which are transplants between genetically non-identical humans
- c. xenografts which are living animal organs or tissue transplanted into humans

Most organ transplantations are of allogeneic origin. From dead donors any kind of organ or tissue can be transplanted (so-called cadaveric or post-mortem donation). Kidney, lobes of liver or lung, and bone marrow can be donated by living donors, too.

Life-long immunosuppression in the recipient is a necessary condition for all transplantations between human beings except for monozygotic twins. Thus, the side-effects of these drugs such as infectious diseases or cancer have to be taken into account.

The ethics of organ and tissue donation

Organ transplantation is a complex modern medical invention. Long-term successful organ transplantation became possible when the first effective immunosuppressive, Ciclosporin, was introduced by medical practice in 1978. Acceptance of organ transplantation by the public was accompanied by a gradual change in mentality, attributing personhood to an isolated region of the body, the brain, and developing an instrumental, mechanistic attitude towards the other body parts. Organ transplantation required a complex interaction of surgery, anesthesia, neurology, legal medicine, religions, and state authorities that was **negotiated** in scientific communities, political circles, and the media.

determined,
agreed upon

The ethical problems of organ transplantation result from the fact that it is a highly risky and, at the same time, highly beneficial procedure involving questions of personhood, bodily integrity, attitudes towards the dead, and the social and symbolic value of human body parts. Moreover, words in organ transplantation implicitly and, often, uncritically transport ethical meanings. The word “donation”, for example, implies that there is a person acting voluntarily to benefit someone else. “Donors”, however, can be dead or are no longer able to act. Organs,

moreover, are sometimes harvested without the dead “donor’s” former consent. In ethical debates, this problem of an adequate wording has to be kept in mind.

However, for the sake of argument, here the donor’s and the recipient’s perspective will be separated. It will be asked: who could and should give an organ? Who could and should receive an organ?

Post-mortem donors

In most western industrial countries the major source for transplanted organs are dead or brain-dead persons, while in countries like Iran and Japan living organ donation **prevails**. Post- mortal organs can be harvested from brain-dead or non-heart-beating donors. The concept of brain dead was discussed in the 1960s after the spread of artificial respiration techniques in intensive care medicine and **implemented** in clinical practice when heart transplantation increased the need for a new definition of death. Although brain death is not always defined in exactly the same way, it usually means the irreversible damage of the whole human brain (comprising brain stem and neo-cortex). According to various national and international guidelines developed in late 1960s, the brain-death criterion is adequate to determine the death of a person. Mechanical **ventilation** allows for the explanation of adequately perfused organs and thus for better survival rates in the recipient. Non heart-beating donors are another organ source. Some of these are dead patients brought into hospital, sometimes after unsuccessful recovery. They can be donors of skin, bones, cornea, or heart valves. Others can be patients on intensive care units with heart failure who, for reasons of **futility** of treatment, will not be or are unsuccessfully resuscitated and who have agreed (or would presumably not object) to become organ donors. They can be a source of any kind of organ or tissue. In these cases, the transplant team will retrieve organs after treatment withdrawal and a waiting time of about 10 minutes after cardiac arrest occurs.

A major ethical question is related to the role of personal autonomy: Is explicit or implicit informed consent required, or does death put an end to a person’s right to determine what will happen with her body?

Different legal and ethical solutions to this problem have been proposed throughout the world. Some countries have adopted a so-called “opt-in” solution. In this case, explicit informed consent by the deceased person before death is required (by carrying an organ donor card, a written statement, a notice in the driver license etc.). On the other hand, some countries foster a combination of individual consent and proxy consent, the latter being a substitute for the former. This means that

family members can ensure the deceased person's will is observed. In contrast, the "opt-out" solution is based on the idea that everyone counts as potential organ donor and **dissenters** have to explicitly state their will (e.g., by registering in a data bank, or by personal communication). In both the "opt-in" and "opt-out" systems, individuals have the freedom of choice. Yet, in the first case the patient's autonomy is understood as something to be actively **enacted** that cannot be substituted, whereas the second and third options put more weight on relieving the donor from the responsibility to decide and on the interests of organ recipients. A fourth, albeit rare, position states that dead bodies are no longer subject to personal rights and, thus, implies the right of society to dispose of organs.

protestors

enforced

Objections to post-mortem donations can, for example, be based on cultural and religious assumptions on how to appropriately handle the human corpse. Some religious authorities of **monotheistic** religions like Islam and Christianity have accepted brain death as criterion for the death of a human being and have, thus, **endorsed** organ transplantation. Yet, others deny the right to call a still breathing person dead. Cultural exceptions of death, like in Japan, can **contravene** scientific convictions. Therefore, every case needs an assessment of the donor's and recipient's cultural and religious attitudes towards brain death and organ donation.

believing in a single God

approved

conflict with

A. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. In the first paragraph, the writer points to all of the following aspects of organ transplantation EXCEPT its -----.

- a. technicality
- b. universality
- c. morality
- d. novelty

2. Organ transplantation case studies for medical ethics teaching are said to be valuable for medical students in all of the following cases EXCEPT that the students -----.

- a. become sensitive concerning the related ethical problems
- b. get familiar with and go deep into the ethical problems involved
- c. develop ethical decision-making strategies in their health care responsibility
- d. decide on the treatment options based on the concrete problem-solving strategies

3. Several risk-taking organ transplantations have been performed at once. "At once" means -----.

- a. skillfully
- b. immediately

- b. a documented approval is arranged prior to the death of a person
 - c. any agreement whether verbal or written indicates the consent
 - d. either the individual or his relative's consent is available
11. The concepts of brain death and organ donation after death are a -----.
- a. merely cultural-bond issue
 - b. religiously serious concern
 - c. socially related matter
 - d. cultural and religious ones

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. Dr. Bernard's first human heart transplantation was a/n ----- one; it excited the whole world.
a. alarming b. thrilling c. deleterious d. erroneous
2. People should definitely ----- hope for others rather than disappointment.
a. yield b. deduce c. glisten d. count
3. They were ----- to take action when the fake drugs were widely sold.
a. sorted b. rushed c. stirred d. cheated
4. What we can do to improve literacy in our country is now a/n ----- --- issue; a national effort is called for to settle the issue.
a. controversial b. affluent c. interracial d. haphazard
5. The term ----- refers to being genetically-different although belonging to or obtained from the same species.
a. xenogeneic b. allogeneic c. isogeneic d. syngeneic
6. To accept everything ----- might end in disaster; one has to think deeply about matters.
a. unbelievably b. uncomfortably
c. understandably d. uncritically
7. Monozygotic twins are also called ----- twins.
a. maternal b. identical c. fraternal d. paternal
8. That surgeon got a/an ----- attitude towards human body parts; he cared less about whom they belong to.
a. instrumental b. integrative c. reciprocal d. inhibitive

9. In my opinion, bodily -----, the idea that no person has the right to use another person's body against his or her will, is the strongest argument.
a. autonomy b. awareness c. rhythm d. integrity
10. She had her eggs ----- and frozen for her own future use.
a. comprised b. implemented c. transported d. harvested
11. In physiology, a/an ----- organ is the one delivering blood in its biological tissue.
a. accessory b. perfused c. circulatory d. diffused
12. The car accident victim is now suffering from a/n ----- damage to the brain.
a. inhabitable b. irreversible c. imaginable d. illegible
13. The patient stopped breathing but the doctors were able to ----- her.
a. reassemble b. recapitulate c. regurgitate d. resuscitate
14. When the seriously incurable man agreed to donate his organs, surgeons started ----- his organs at once.
a. prevailing b. ascending c. suspending d. retrieving
15. Scientists evaluated the thigh bones of 121 ----- men for whom they had measured both weight and height prior to death.
a. diseased b. declared c. dispensed d. deceased
16. An agreement by means of a substitute is called a/an ----- consent.
a. award b. sticky c. proxy d. palsy
17. Ministry of Health should ----- the best possible therapy modes for the good of our people.
a. entail b. foster c. cease d. prevail
18. When the majority decide to do something, ----- have to also comply.
a. wanderers b. dissenters c. announcers d. conductors
19. This surgical procedure is not ----- by the surgical research committee; the interested surgeons should reconsider it.
a. submitted b. stooped c. implied d. endorsed

20. To break the speed limit is to ----- the law which limits speed on the highway.

- a. contravene b. contaminate c. collaborate d. compensate

C. Match the words in column I with their equivalents in column II.

I	II
1. raise	a. to try to reach an agreement by formal discussion
2. endeavor	b. uselessness, worthlessness
3. apt	c. to perform, to achieve
4. concrete	d. an attempt to do something
5. at once	e. although
6. negotiate	f. a way of thinking about something
7. perspective	g. implemented, enforced
8. futility	h. likely or having a natural tendency to do something
9. enacted	i. a standard or principle by which something is done
10. endorse	j. based on facts, not on ideas or guesses
11. criterion	k. to approve something formally
12. albeit	l. to mention sth to people to discuss or to deal with
	m. at the same time
	n. to assume, suppose

D. Word Families: Fill in the blanks using the correct form of the words given in the list.

prevail (to exist or be very common at a particular time or in a particular place), prevalence, prevalent, prevailing

a. Miserably, some superstitions still ----- among certain social groups.

b. The ----- view seems to be that the researchers are finding a cure for this ----- deadly new disease.

c. So sorry to say that there is an increase in the ----- of smoking among young people.

suppress (to prevent something from growing, developing or continuing), suppressor, suppressant, suppression

a. Some drugs known as appetite ----- tend to ----- physical desire of food, that is to say, to bring about appetite -----.

b. The role of ----- T cells in regulation of immune responses was selected as a topic for discussion.

invent (to produce or design something that has not existed before), invention, inventive, inventively, inventiveness

a. "I wish mobile phones have never been ----- ." The mother angrily said for she believes this ----- has caused lack of communication among parents and their children.

b. Luckily, my teacher has a highly ----- mind; the teaching materials are ----- presented to us.

c. The ----- of modern advertising has increased the sale of sometimes unnecessary goods.

ethical (connected with beliefs and principles about what is right or wrong), ethics, ethically, ethic

a. The branch of philosophy that deals with moral principles is called -----.

b. The ----- problems of human embryo research are listed here for you.

c. Doctors are ----- obliged to treat all patients, no matter who they are, since it is an important ----- in their career.

E. Choose the words with opposite meanings from the specified paragraphs for the words given.

1. concrete (par: 2) -----

2. lead to (par: 3) -----

3. ignore (par: 5) -----

4. incompleteness (par:7) -----

5. boring (par: 1) -----

6. obligatory, unwilling (par: 7) -----

7. usefulness, fruitfulness (par: 9) -----

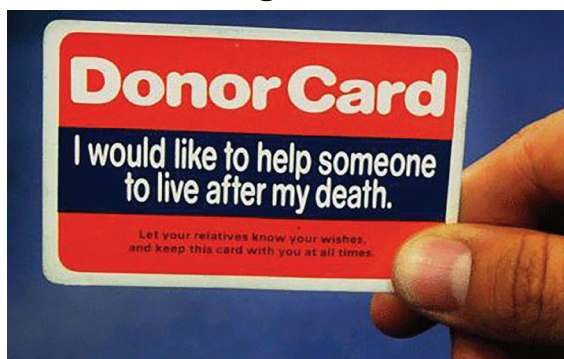
8. deceased (par: 11) -----

F. Cloze Test: Fill in the blanks using the words in the list.

therapy	infusion	procedure	solid
envisioned	either	goal	source
temporary	targets	artificially	recent

Due to the ethical problems of human-to-human donation, scientists are searching for alternative ways of organ replacements such as xenotransplantation. The aim is to produce organs or tissues ---1--- by using sources from other species or cell types. Xenotransplantation is defined as any ---2--- that involves the transplantation, implantation, or ---3--- into a human recipient of ---4--- live cells or tissues, or organs from a non-human animal ---5---. In biomedical research, the most ---6--- approach to xenotransplantation ---7--- the pig as a source animal with the ---8--- of transplanting genetically modified ---9--- pig organs such as kidneys, hearts and livers into humans. In some cases, external (ex vivo) pig liver is used for ---10--- perfusion to bridge acute liver failure. Other ---11--- applications are the use of encapsulated porcine islet cells for diabetes ---12---, or the use of fetal porcine neurocells for Parkinson cell therapy.

Further Reading



Organ Transplantation

Living donors

Due to many problems, in many countries, donating living organs is seen as an important alternative to cadaveric donation. Depending on legal regulations and cultural attitudes, the frequency of living organ donation ranges from 20% to 90% of all organ donations. Close family members, spouses, friends, or sometimes even strangers are considered as possible living organ donors. While living organ donation largely benefits the

recipients, the donors' risks include severe health problems or even death. For the donor, organ removal is a non-therapeutic intervention, and the risks are usually not balanced by direct benefits. With regard to the donor, physicians have to **infringe on** the ethical rule "First do no harm!", passed on in the traditional medical **ethos** and expressed in the Hippocratic Oath. However, in modern bioethics respect for individual autonomy is often given priority over other moral rules, including the principle of **non-maleficence**. Hence, one can argue that the wishes of the potential donor to donate should be respected. This, however, points to the problem of how to ensure free and informed decision-making in organ transplantation. Many people think that love and compassion for a close relative are reasonable motives for a donation. Additionally, from a pragmatic point of view, the chances to improve the quality of life of a close relative add another motive to organ donation because a patient's improved quality of life will have positive effects on the whole of family life. But serious concerns arise from social pressure or even **coercion** exerted by family members who may oblige a relative to agree to donation. To protect the donor from coercion, a thorough examination of the motives of and relationship between donor and recipient is crucial.

moral code

doing no harm

Decision-making can be even more difficult if the potential living donor is a stranger to the recipient. This form of donation is often called "Samaritan donation". The term "Samaritan" in Christian tradition refers to the moral story of the good Samaritan who helped a stranger in great distress by an act of charity and kindness and without expecting any personal benefit from it. The donor in this case is motivated solely by altruistic feelings. In practice, the term "Samaritan donation" is used either for altruistic anonymous living donation or when donor and recipient do not know each other well and no financial compensation is involved. However, as Samaritan donations are quite exceptional and might hide other forms of commercial transaction, ethicists argue that motives and competency of the donors have to be thoroughly scrutinized.

Body concepts and personal identity

The transfer of organs, extremities, or a face also raises questions of personal identity. A widespread fear raised by the transplantation of organs is that the organ recipient might experience psychological change, or more precisely, that personal characteristics might be transferred from one to the other. The idea of the body as **locus** and medium of personal identity has cultural as well as medical historical reasons. Early medical efforts to develop tissue and organ transfer in the 19th century went along with the idea of changing the recipient's mind and personality. Today, in lay perceptions, this idea is still present. Especially in art, movies, and literature this topic is often addressed and

organ transplantation is as a source of fear or hope of changing one's personal identity. This, of course, relates to the meaning of the human body in medical as well as in the respective cultural traditions. The human body is the physical object of medical interventions. In modern medical practice the human body is mainly seen as a material object –as the locus where the diseases reside and the intervention takes place. The metaphor of the human body as “machine” depicts this attitude. The human body, thus, has no social or cultural meaning. In contrast, the essence of the human being, his personality, is located exclusively in the disembodied spirit. However, some bioethicists from different cultural or philosophical backgrounds hold a different perspective. For them, the body is the medium of personality and identity. It is indispensable for personal experience, self-understanding, and perception of the world. Consequently, the transplantation of a body part will change a person's identity –not just in an objective, physiological way, but in the way the recipient perceives and experiences the world. Thus, religious and cultural meanings of particular body parts have to be considered in the ethical debate as the patients' beliefs have an impact on their conception of self and **personhood**.

being an individual person

This includes ethical questions on how living donors and recipients refer to the transferred organ –do they accept the transfer or do they believe it still belongs to the other (like, e.g., my kidney in your body?). Such a **conviction** can have a serious impact on the donor - recipient relationship.

strong belief

Commodification and organ trade

The problems of organ **trafficking** and illegal organ trade have raised increased awareness among ethicists as well as international organizations. Those who criticize a free market of organs fear that this will seriously increase social injustice. Moreover, based on the concept of human dignity, they challenge the right to sell one's body parts. Others, however, argue that a ban on organ trade only leads to illicit and thus badly controlled markets. Instead, national and transnational regulations of the organ market would lead to more transparency, help to stop price dumping, and secure the rights of the vendor. International authorities such as the WHO and UNESCO have expressed concerns about transnational organ trafficking and have set the aim to combat illicit trafficking of organs and tissues. Organ trafficking rests upon complex social networks. Donors often come from poor, developing countries while recipients usually live in rich and highly industrialized countries. Illegal organ trafficking involves so-called brokers dealing in organs as well as surgeons willing to transplant them illegally.

trading in something illegal

The main types of arguments in favor of commercialization can be grouped around four moral principles: a) *justice*: it is unjust to let people die due to organ scarcity when, in principle, more than enough organs are available: b) *liberty*: personal autonomy implies that one has the right to dispose of one's body as one pleases: c) *beneficence and utility* : commercialization would lead to a win-win situation, both donors and recipients would likewise benefit from it: and d) *efficiency*: a free market will make the system more efficient and solve the problem of demand. At the same time, these tendencies and arguments can be criticized on the basis of nearly the same principles. So it is feared that a) the practice of paying money for organs will increase injustice because only the wealthy will then be able to afford an organ transplantation treatment, b) the autonomy of the poor will in fact be limited to their lower social status and financial constraints, c) commercial donation will discourage altruistic donors and, consequently, the number of altruistic donations will seriously decrease, and d) a commodification of the human body ignores the existential meaning of the body for personal identity and self-understanding.

A. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. According to the passage, which statement is FALSE?
 - a. With respect to the organ donor, physicians can violate the ethical rule "First do no harm".
 - b. In Hippocratic Oath, organ donation can be considered harm to the donor.
 - c. In modern bioethics, the rule "First do no harm" is more significant than other considerations.
 - d. Physicians should consider free and informed decision-making in organ donation.

2. In "Samaritan donation", -----.
 - a. organ donation is more financially oriented
 - b. humanitarian issues are basically involved
 - c. organ donors' motives are less significant
 - d. organ recipients are kin to organ donors

3. The issue of the transfer of personality and identity through transplantation -----.
 - a. is mostly held by modern bioethicists
 - b. has no place in modern transplantation
 - c. is still controversial among bioethicists
 - d. has been ethically resolved by the bioethicists

4. It is said that organ trafficking -----.
- a. is quite common all over the world
 - b. may lead to social injustice
 - c. is going to be banned by all nations
 - d. may be irrelevant to the concept of human dignity
5. All of the followings are in favor of organ commercialism EXCEPT:
- a. demotivation of altruistic donors
 - b. human independency
 - c. death due to lack of enough organs
 - d. benefit of both donors and recipients

B. Here are some words (bold ones) from the text with their definitions and example sentences for you to go through.

1. infringe (v.)= to break a law or rule, to limit someone's legal right
It is unethical to **infringe** on others' privacy by checking their emails.
2. ethos (n.)= moral ideas and attitudes belonging to a particular group or society
The **ethos** of religions should all be respected so that the whole world can live a peaceful life.
3. non-maleficence (n.)= do no harm
The teaching of medical ethics has long focused on beneficence (provide good care), and **non-maleficence** (do no harm).
4. coercion (n.)=an action of making somebody do something using force or threatening to use force
External pressure or **coercion**, as he said, made him agree with their decision.
5. altruistic (adj.)= characterized by kindness and concern for others
Because Mary is an **altruistic** nurse, she has decided to spend two years of her life volunteering in an African health center.
6. competency (n.)= competence, capability, capacity
My teacher has already proved that he has the **competency** to run our class efficiently.
7. scrutinize (v.)= to look at or examine something carefully
Do not sign your name on any document you have not had time to **scrutinize**.

8. locus (n.)= location, a center of activity, attention, or concentration
It is impossible to specify the exact **locus** in the brain specialized for this process.

9. lay (adj.)= not having expert knowledge or qualification in a particular subject.

From a **lay** viewpoint, the questionnaire is almost incomprehensible.

10. metaphor (n.)= a word or phrase for one thing that is used to refer to another thing to show or suggest that they are similar

He is the apple of my eye. The use of apple as a **metaphor** refers to someone who is very dear and near.

11. disembodied (adj.)= disconnected from a solid form or body

The mentally-ill patient said that she heard a **disembodied** voice in the frightening old house.

12. indispensable (adj.)= absolutely necessary or required

Physical as well as mental exercises are **indispensable** activities one should have to be healthy.

13. personhood (n.)= state of having unique characteristics, state of being a person.

One's **personhood** is more important than his or her economic status.

14. conviction (n.)= a strong opinion or belief

Moslems are motivated by their deep religious **convictions** to fight racism and injustice.

15. trafficking (n.)= the act of selling or trading something illegally

Drug **trafficking** and drug traffickers are the main concerns in some countries.

16. dignity (n.)= a calm and serious manner that deserves respect

Poverty won't allow him to lift up his head; **dignity** won't allow him to bow it down.

17. ban (n.)= an official or legal prohibition

A **ban** on smoking at work and in the public places is strongly asked by people.

18. illicit (adj.)= against the rule, unlawful

We Moslems are religiously disallowed to consume alcohol, or use **illicit** drugs.

19. price dumping (n.)= selling goods at low prices

There is nothing we can do about **price dumping** by some producers; selling goods at below production cost is intolerable.

Unit 10

Pre-reading Activity

A. Scan through the text and answer the following questions.

1. What did World Summit for Children in 1990?
2. What was the goal of World Summit for Children?
3. Is there any relationship between undernutrition and mortality?



Nutrition and Health

Global health trends in the 1990s reflected many past successes and pointed to many future challenges. Nations experienced significant progress toward end-of-decade goals established at the 1990 World Summit for Children. Downward trends in mortality of infants and children under five from all causes were encouraging- the summit named a 33 percent rate reduction as its goal; **a reduction of 14 percent** was attained, resulting in 3 million fewer child deaths each year.

What does “a reduction of 14 percent” in the paragraph suggest?

Other trends were less positive. For example, the 1990 summit specified a 50 percent reduction in the maternal mortality ratio by 2000. The ratio remained relatively static, however, at 400 maternal deaths per 100,000 live births. Increases in the percentage of the population with access to safe drinking water and sanitation were estimated at 3 and 5 percentage points, respectively — far short of targets—leaving 1.1 billion people without access to safe water and 2.4 billion without access to adequate sanitation.

Moreover, an estimated 40 million people were living with HIV/AIDS at the end of 2001. Five million of those were newly infected, a slight decline from the previous year. In some regions, the majority of new infections were seen in young adults, especially young women.

The spread of tuberculosis (TB) and the HIV pandemic continued to fuel one another, and the growing threat of co-infection posed new risks for already vulnerable populations. By 1998, just six countries had reached the World Health Organization (WHO) goal of detecting 75 percent of new infectious TB cases and curing 85 percent of those detected. The adoption of DOTS (directly observed treatment short-course) therapy for TB holds enormous potential for stemming an epidemic that continues to kill 2 million people annually.

The general relationship between infection and under-nutrition is well established. So what can improved nutrition status do to reinforce these positive trends in health and reverse the negative ones?

Nutrition as a Promoter of Good Health

Under-nutrition affects both the body's immunological and non-immunological defenses. As a result, it increases the incidence, severity, and duration of common childhood diseases, such as diarrhea, acute respiratory infections, and measles. Approximately 55 percent of under-five mortality in developing countries is associated with malnutrition, and a modest increase in breastfeeding rates alone has the potential to prevent up to 10 percent of deaths among children under five.

Evidence is also mounting on the specific relationships between certain types of under-nutrition and morbidity and mortality. Research has shown that improving the vitamin A status of vulnerable populations can reduce under-five mortality rates by at least 23 percent, preventing between 1.3 and 2.5 million deaths each year and saving hundreds of thousands of children from irreversible blindness. In addition, adequate vitamin A may also have a protective effect on mother-to-child transmission of HIV, and weekly supplements given to women of reproductive age have been shown to reduce maternal mortality by **up to** 44 percent. Recent research has also demonstrated that vitamin A supplementation can mitigate the adverse effects of HIV infection, malaria, and diarrhea on child growth.

“up to” means....

Iron deficiency is also a serious cause of ill health. The WHO *Global Burden of Disease* report ranks iron deficiency anemia as second among leading causes of disability. Its effects, shouldered disproportionately by women and children, represent serious obstacles to the health and socioeconomic development of nations. The WHO upholds that improvements in the iron status of affected populations can increase levels of national productivity by 20 percent. Iron interventions can also be expected to reduce maternal mortality considerably, as anemia is a contributing factor in 20 percent of all maternal deaths.

The most common cause of preventable mental retardation and brain damage, iodine deficiency takes a profound toll on health and productivity in affected countries. While substantial progress has been made toward universal salt iodization, it is clear that sustained effort will be required to curb a problem that still affects 50 million children. Investing in programs to address iodine deficiency and its disorders has the potential to protect more than one and a half billion people still at risk of impaired development, physical deformities, and poor birth outcomes.

Interestingly, under-nutrition may also play a role in increasing the virulence of infections, putting even well-nourished populations more at risk in the future. Researchers are reexamining the interactions of diet, agent, and host, with at least one group of investigators concluding that deficient levels of nutrients, such as selenium, may increase not only the host susceptibility to infection, but also the virulence of the pathogen itself.

The role of obesity and poor diet quality in the development of chronic disease has long been recognized in the industrialized world. Evidence is emerging, however, that the linkages are equally strong in developing countries, with the added wrinkle that malnutrition suffered in the womb may lead to a predisposition to hypertension, coronary heart disease, and diabetes later in life. The double burden of early under-nutrition and later over-nutrition is especially evident in countries undergoing rapid economic development, where chronic disease rates are showing alarming increases. The WHO estimates that by 2025 the prevalence of noninsulin-dependent diabetes will have increased by 170 percent in developing countries.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

-----1. 14 percent drop in the mortality of infants and children under 5 years of age reflected a reduction of 3 million child mortality in a year.

-----2. The most successful trend in the 1990 World Summit for Children was maternal mortality rate.

-----3. In the year 2000, there were 3 and 5 percent increases in people's access to sanitation and safe drinking water, respectively.

-----4. The number of people infected with HIV in 2000 was larger than

those infected in 2001.

-----5. The body's immune system can hardly be influenced negatively by malnutrition.

-----6. The improvement of vitamin A in vulnerable populations can reduce the number of children from blindness.

-----7. Sufficient vitamin A may prevent the transmission of HIV from the mother to the child.

-----8. The proportion of iron deficiency is larger in men than women.

-----9. Insufficient iodine in the body can contribute to brain damage.

-----10. Under-nutrition hardly worsens the risk of infections.

-----11. Researchers have recently realized that in the developed countries obesity plays a part in the development of chronic diseases.

-----12. Obesity and malnutrition in the developed countries differ from those in the developing countries with respect to the linkages in the development of chronic diseases.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. The 1990 World Summit for Children intended a ----- drop in child deaths as its goal.

- | | |
|--------------|---------------|
| a. 3 million | b. 33 percent |
| c. 5 million | d. 14 percent |

2/3. The 1990 World Summit for children stated a ---2--- percent decrease in maternal deaths by the end of 1990s. But they continued to exist at 400 per ---3--- live birth.

- | | | | |
|---------|------|-------|-------|
| 2. a. 3 | b. 5 | c. 14 | d. 50 |
|---------|------|-------|-------|

3. a. 1.1 billion b. 2.4 billion c. 100,000 d. 3 million

4. Malnutrition does not intensify the ----- of childhood diarrhea.

- | | |
|--------------|--------------|
| a. duration | b. incidence |
| c. treatment | d. severity |

5. 55 percent of deaths in children below five years of age in developing countries will be reduced to 45 if the number of ----- increases slightly.

- a. breastfeeding cases
- b. respiratory infections
- c. mortality rates
- d. measles infections

6. Scientific studies have recently shown that vitamin A supplements may alleviate the harmful effects of all of the followings on the child's growth except -----.

- a. diarrhea
- b. malaria
- c. HIV infection
- d. cardiac diseases

7. Improving iron deficiency can increase the ----- by 20 percent each.

- a. productivity and decrease anemia
- b. paternal deaths but reduce maternal mortality
- c. productivity and lessen maternal deaths
- d. maternal mortality and national productivity

8. All of the following statements are true except:

- a. Iodine deficiency may lead to physical impairments.
- b. It would be advantageous to invest in programs which concentrate on iodine deficiency.
- c. Children are still the main target of iodine deficiency.
- d. Salt iodization deteriorates iodine deficiency.

9. Researchers who study the effects of under-nutrition on health have concluded that ----- may aggravate infection in the host.

- a. nutrients
- b. inadequate nutrition
- c. selenium
- d. absence of pathogens

10. Early under-nutrition and late over-nutrition may result in rises in -----.

- a. chronic diseases
- b. infections
- c. mental retardation
- d. diarrhea

C. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. The study indicates that early ----- of cancers is vitally important since treatment of the disease in advanced stages is difficult.

- a. transmission
- b. impairment
- c. detection
- d. reinforcement

2. The dismissal of some nurses by hospital managers has ----- rumors about the financial crisis the hospital is confronted with.
- a. fuelled
 - b. clenched
 - c. endangered
 - d. underwent
3. Drugs taken during pregnancy may cause physical ----- in babies.
- a. deformity
 - b. demonstration
 - c. exercise
 - d. maternity
4. Prices on the stock market, which have been -----, are now rising again.
- a. dynamic
 - b. productive
 - c. static
 - d. substantial
5. To help people have a better life, a range of measures have been taken by the government aiming at ----- inflation.
- a. drilling
 - b. hosting
 - c. boosting
 - d. curbing
6. Researchers have reported that stress can ----- people to heart attacks.
- a. refer
 - b. predispose
 - c. pose
 - d. deliver
7. Some plant varieties can withstand being sprayed by the most ----- herbicides; other approaches should be followed to destroy them.
- a. irreversible
 - b. prevalent
 - c. profound
 - d. virulent
8. The cut was bandaged to ----- the bleeding.
- a. stem
 - b. boost
 - c. mount
 - d. challenge
9. The committee reported an increased ----- of heart disease in women in their thirties; urgent measures are recommended to be taken to reduce the mortality rate.
- a. stem
 - b. productivity
 - c. decline
 - d. incidence
10. This drug is known to have ----- side effects; the doctors should not prescribe it unless its advantages outweigh its disadvantage.
- a. maternal
 - b. annual
 - c. adverse
 - d. favorable

D. Word Families: Fill in the blanks using the correct form of the words given in the list.

immunize, immunization, immunity, immune

- a. The vaccine provides longer----- against flu.
- b. The doctor ----- the children against measles.
- c. The committee is planning an ----- program to prevent measles.
- d. Adults are often ----- to German measles.

nutrient, nutrition, nutritious, nutritional

- a. Plants draw minerals and other ----- from the soil.
- b. The process by which living things receive the food necessary for them to grow and be healthy is called -----.
- c. Porridge is both cheap and -----.
- d. Not only is breast milk's ----- composition uniquely designed for the needs of human babies, but it also contains antibodies from the mother's immune system that help the infant fight off infections and diseases.

demonstrate, demonstration, demonstrative, demonstrable

- a. The lecturer provided ----- of video conferencing over the Internet for the academic staff.
- b. His findings ----- that boys commit more suicides than girls.
- c. It is a ----- fact that the medical school has lecturers with universal reputation.
- d. The complicated surgeries he performs are ----- of his skill.

prevent, prevention, preventable, preventive

- a. The police were able to take ----- measures and avoid a possible riot.
- b. Nothing would ----- him from speaking out against injustice.
- c. An ounce of ----- is better than a pound of cure.
- d. In Africa, the mere numbers of the sick with ----- diseases soon overwhelm Africans by their magnitude.

E. Cloze Test: Fill in the blanks using the words in the list.

organizations	fact	population
effects	legumes	intake
status	diabetes	

Epidemiological studies on the relationship between dietary habits and disease risk have shown that food has a direct impact on health.

It is generally accepted that plant derived foods such as fruits, nuts, vegetables, grains, ---1---, spices, etc. exert some beneficial ---2--- on human health, particularly on age-related diseases. As the human ---3--- lives longer, chronic age-related diseases such as cardiovascular diseases, neurodegenerative diseases, type II ---4---, and several types of cancer (e.g. gastrointestinal cancer), known to be related to dietary habits, continue to expand. This ---5--- has encouraged several health ---6--- around the world to recommend an ---7--- of plant derived food in order to improve our health ---8--- and to delay the development of these diseases.

F. Match the words in column I with their equivalents in column II.

I	II
1. summit	a. to accept the responsibility for something
2. sanitize	b. state; name
3. supplement	c. moving or pointing towards a lower level
4. sustain	d. sterilize; clean
5. shoulder	e. to invent something new or a new way of doing something
6. disproportionate	f. the best possible
7. retard	g. an official meeting
8. downward	h. too large or too small when compared with something else
9. optimal	i. to postpone or defer an action
10. devise	j. very fat in a way that is not healthy
	k. to maintain; continue
	l. that cannot live forever and must die
	m. a thing that is added to something else to improve it

Further Reading



Incorporating Nutrition Interventions into Health Sector Programs

Good nutrition is critical to preventing not only diseases of deprivation, but also chronic diseases that afflict affluent and non-affluent populations alike. But are there opportunities for development practitioners in the health community to incorporate nutrition? Recent experience suggests that there are.

For example, the integration of high-dose vitamin A supplementation with National Immunization Days (NIDs) has facilitated impressive increases in coverage. In Sub-Saharan Africa, approximately 60 percent of children were estimated to have received at least one dose in the last six months of 1998, double the coverage from two years earlier. Progress in the elimination of polio, however, is leading to the outphasing of NIDs in many countries where vitamin A supplementation remains a priority, and program planners must devise new ways to establish and sustain high coverage among vulnerable populations.

Several countries have already included vitamin A campaigns in Child Health Weeks. Expanding the nutrition component of Child Health Weeks is also a promising possibility. In addition, the millions affected by HIV, TB, and other infections stand to benefit greatly from programs that consider their special nutritional needs and the ways in which optimal dietary practices can improve overall health. Global initiatives to combat the pandemics may provide a platform for expanded nutrition programs, particularly supplementation and counseling.

As the health community increasingly recognizes the value of adopting

integrated tactics for high-priority programs, nutrition emerges as critical. Programs that address malnutrition offer not only direct benefits for the well-being of participants, but also benefits for future generations and remarkable synergies with other types of interventions. In the context of global health priorities, the potential of investments in nutrition is striking. It is the rare public health problem today that would not experience some mitigation through improvements in the nutritional status of the people it afflicts.

A. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. All of the following statements are false except:
 - a. Chronic diseases are more prevalent among the poor than the rich communities.
 - b. Nutritionally balanced foods are more effective to control malnutrition compared to chronic diseases.
 - c. Nutrition plays a crucial part to curb both malnutrition as well as chronic diseases.
 - d. Malnutrition and chronic diseases are similarly influential in both affluent and non-affluent communities.

2. National Immunization Days integration with high-dose vitamin A supplementation has contributed to -----.
 - a. significant increases in insurance coverage
 - b. dramatic rises in immunization coverage
 - c. facilitation in news coverage
 - d. partial changes in coverage

3. The attempt to remove polio is contributing to the -----.
 - a. disturbance of National Immunization Days in a number of countries
 - b. reinforcement of NIDs in many countries
 - c. stabilization of NIDs in some countries
 - d. reiteration of National Immunization Days in countries in which vitamin A supplementation is in demand

4. Incorporating nutrition programs into health would be advantageous to -----.
 - a. outpatient clinics
 - b. people suffering from HIV and TB
 - c. surgical procedures
 - d. transplant operations

5. Which statement is true?
- a. Vitamin A campaigns may result in Child Health Weeks.
 - b. Because of nutritious meals, Child Health Weeks will expand dramatically.
 - c. Vitamin A supplementation will eradicate the pandemics.
 - d. Fighting epidemics may be responsible for the extension of nutrition programs.

6. According to the passage, -----.
- a. The health community is hesitant to acknowledge the integration of nutrition into health programs
 - b. tackling malnutrition appears beneficial to people suffering from it but not to future generations
 - c. the integration of nutrition into health programs has more advantages over other integrated tactics in the industrialized world
 - d. investment in nutrition is one of the priorities in health throughout the world

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. About 50% of the country's population are ----- with tuberculosis.
- a. afflicted
 - b. alleviated
 - c. practiced
 - d. mitigated
2. The sudden resignation of the financial director put the company in a very ----- position.
- a. initial
 - b. impressive
 - c. integral
 - d. vulnerable
3. These programs can be ----- your existing software.
- a. deprived from
 - b. criticized by
 - c. integrated with
 - d. impressed by
4. We have ----- all the latest safety features into the design in order to improve it.
- a. peeled
 - b. privatized
 - c. encashed
 - d. incorporated
5. The TV news reported that the cause of the rioting was unemployment and-----.
- a. deprivation
 - b. prosperity
 - c. synergy
 - d. accumulation

6. Pioneering new forms of surgery should be a/an ----- for the National Health Service.

- a. affliction
- b. priority
- c. practitioner
- d. obstacle

7. The vaccine provides longer ----- against flu.

- a. elimination
- b. virulence
- c. immunity
- d. emergence

Unit 11

Pre-reading Activity

A. Skim through the passage and discuss its main idea with your friends.

B. Now answer the following questions.

1. What are the risks of smoking for the body?
2. When was cigarette smoking uncommon?

Reading

Eventual Hazards of Smoking

Tobacco is the biggest external cause of non-communicable disease and is responsible for even more deaths than adiposity both in high-income countries such as the United States and globally. The risks in middle age are much greater for smokers who started in early adulthood than for those who started later. This means that the ratio of mortality among smokers to that among persons who have never smoked is much more extreme now (Fig.1) than it was half a century earlier, when the epidemic of smoking-attributable deaths was at an earlier stage.



Cigarette smoking was uncommon throughout the world in 1900, but smoking rates increased substantially in many high-income countries during the first half of the 20th century, first among men and then, in some countries, among women. By 1950 in the United States and the United Kingdom, substantial numbers not only of men but also of women smoked, and rates of lung cancer were increasing steeply, particularly among men. In 1950, major studies in both countries showed that smoking was a cause of most deaths from lung cancer, and subsequent reports showed that smoking caused even more deaths from other diseases than from lung cancer.

After 1950, cigarette consumption continued to rise for some decades in high-income countries, and it has risen among men (though generally not among women) in many low- and middle-income countries. Although there has been widespread cessation in many high-income countries (in some, consumption per adult has been halved since the 1970s), about 1.3 billion people worldwide now smoke, most in low- and middle-income countries where cessation is uncommon. Two thirds of all smokers live (in descending order of numbers of smokers) in China, India, the European Union (in which central tobacco legislation can influence 28 countries),

Indonesia, the United States, Russia, Japan, Brazil, Bangladesh, and Pakistan (Table 1). In India, manufactured cigarettes are now displacing bidis (locally manufactured small cigarettes). Cigarette consumption in China continues to rise steeply and now accounts for more than 2 trillion of a worldwide total of about 6 trillion cigarettes smoked per year. A useful approximation suggested by studies in high-income countries is that 1 ton of tobacco yields about 1 million cigarettes and causes about 1 death, so just 1 trillion cigarettes consumed a year will eventually cause about 1 million deaths a year.

One reason why the mid-century evidence of hazard was not at first taken seriously, even in countries where it was generated, is the delay of about half a century between widespread adoption of smoking by young adults and the main effect on mortality in later life. Among all U.S. adults, for example, cigarette consumption averaged 1, 4, and 10 per day in 1910, 1930, and 1950, respectively, after which it stabilized. The long-delayed result of this increase in consumption during the first half of the century was seen only in the second half of the century; tobacco caused about 12% of all U.S. deaths in middle age in 1950 but about 33% of such deaths in 1990. A similar pattern was seen about 40 years later among Chinese men, who consumed about 1, 4, and 10 cigarettes per day in 1952, 1972, and 1992, respectively. In 1990, tobacco caused about 12% of all deaths among middle-aged Chinese men, and it could well cause about 33% in 2030. (Tobacco causes few deaths in Chinese women because less than 1% of Chinese women born in each decade since 1950 smoke).

“such deaths”
refers to ...

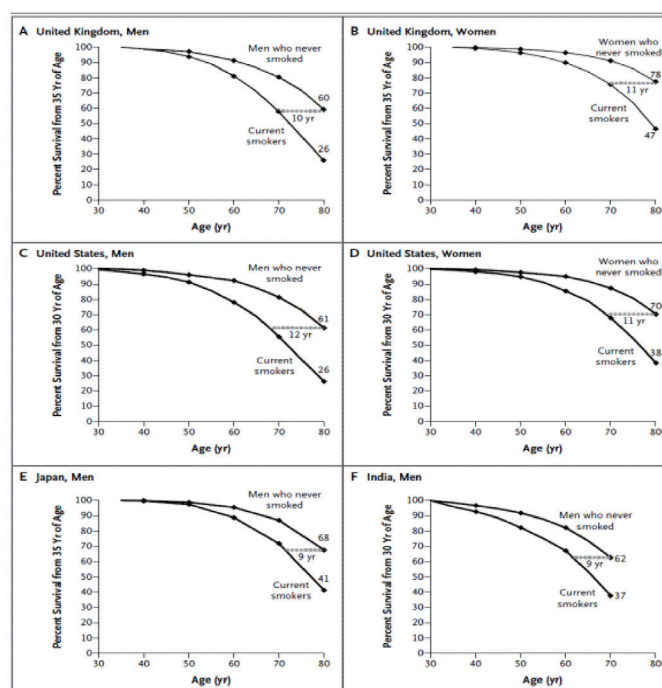


Figure 1: Loss of a Decade of Life Expectancy from Smoking Cigarettes throughout Adulthood.

Shown are probabilities of survival from 30 or 35 years of age (current smokers vs. persons who never smoked, linked by dots representing 1 year each) among U.K. men and women, U.S. men and women, Japanese men, and Indian men.

Because men started smoking before women, the effects in middle-aged men are now apparent in most high-income countries. The full eventual effects of persistent smoking in women, however, can be accessed directly in only a few countries (e.g., the United States and the United Kingdom) and only in the present (21st) century. The ratio of mortality from lung cancer among U.S. women who currently smoke to the (constant) mortality among women who have never smoked has increased greatly during the past half-century: it was only 3 in the 1960s, but it was 13 in the 1980s and 26 (similar to that among men) in the 2000s. The reason for the jump from a ratio of 3 to a ratio of 26 is that in the 2000s many U.S. women in their 60s who were smokers had smoked ever since early adulthood, whereas in the 1960s few women in their 60s who were smokers had done so.

Even though mortality from lung cancer among U.S. women was still low in the 1960s, women who were then in their 20s and who continued to smoke without quitting faced substantial hazards 40 years later. Similarly, among men in low- and middle-income countries where many smoke but the death rates in middle age from smoking are not yet substantial, a full decade of life expectancy will eventually be lost by young adults who continue to smoke. Tobacco already accounts for about 12 to 25% of deaths among men in low- and middle-income countries such as China, India, Bangladesh, and South Africa; given current smoking patterns, these proportions are likely to increase. Worldwide, about half a billion of the children and adults younger than 35 years of age already smoke or will do so if current uptake rates persist, and given current cessation patterns, relatively few will quit. In all countries, young adults who smoke face about a decade of life lost if they continue and hence have much to gain by stopping.

Table 1: Current and Former smokers in selected Areas, 2008-2012 *

Region or country	≥ 15yr of Age		45-64 yr of Age		
	Current smokers	Former smokers	Current smokers	Former smokers	Stopped Smoking **
	no. in millions		no. in millions		%
European union	115	83	37	36	49
United states	50	54	18	22	55
Japan	28	14	9	5	36
Low- and middle- income countries ***					
China	317	42	115	21	15
India	122	15	46	7	13
Indonesia	115	6	17	2	11
Russia	47	10	15	4	21
Brazil	26	21	9	10	53
Bangladesh	25	5	7	2	22

*Data are from Giovino et al. and Zatonski and Manczuk, combined with United Nations population estimates for 2012.

**The percentage of persons who have stopped smoking is calculated as former smokers divided by the sum of current smokers and former smokers.

***There are approximately 25 million current smokers in Pakistan but no standardized surveys.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

-----1. Obesity kills more people in high-income countries than tobacco.

-----2. Many wealthy countries witnessed a chronological decline in smoking in the first half of the 20th century.

-----3. Presently, smokers in high-income countries outnumber those in low- and middle-income countries by two to one.

- 4. On average, the number of cigarettes smoked by U.S. adults was 4 per day in 1950.
- 5. Presently, it is possible to assess the effects of continuous smoking on women in the United States.
- 6. The ratio of U.S. female smokers to non-smokers who died of lung cancer was 13 in the 1960s.
- 7. The ratio of lung cancer mortality among U.S. female smokers to non-smokers was identical to that of lung cancer mortality among male smokers to non-smokers from 2000 to 2010.
- 8. Tobacco is responsible for 12% of deaths among women in China.
- 9. There are around 500 million smokers younger than 35 years of age throughout the world.
- 10. Young smokers who continue to smoke normally lose 10 years of life expectancy.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

“This means that the ratio of mortality among smokers to that among persons who have never smoked is much more extreme now -----”.
(paragraph 1, lines 4-5)

1. What does "this" refer to?
 - a. Middle age smokers are less at risk than middle age non-smokers.
 - b. Middle age smokers who have started smoking since the beginning of adulthood are more at risk than those starting recently.
 - c. Middle aged smokers have smoked since early adulthood.
 - d. Middle aged smokers risk their health less than middle age non-smokers.
2. What does “that” refer to?

a. smoking outbreak	b. passive smoking
c. initial phase	d. death proportion
3. Smoking investigations in the United States and the United Kingdom in 1950 indicated that smoking -----
 - a. was a factor in the occurrence of most lung cancer deaths
 - b. led to more mortality from lung cancer than from other diseases
 - c. was second to cancer in mortality rate among infants
 - d. was the most preventable factor in malnutrition

4. All of the following statements are false except:
- Smoking cessation mostly happens in poor countries.
 - Smoking cessation is more prevalent in rich countries.
 - Cigarette consumption increased steeply among women in low- and middle-income countries after 1950.
 - Cigarette consumption became more common among women than men in high-income countries after 1950.
5. Based on approximation indicated in high-income countries, cigarette consumption in China causes about more than ----- deaths a year.
- 1.7 million
 - 2 million
 - 1 million
 - 1.5 million
6. One reason behind ignoring the mid-century signs of danger in smoking was -----
- cigarette exemption from tax
 - the 50 year gap between widespread adoption of smoking by youngsters and its consequences on death later in life
 - rapid growth of cigarette consumption
 - sex discrimination in smoking
7. All of the following statements are false except:
- Tobacco consumption accounts for 33% mortality rate among middle-aged Chinese men in 1990.
 - Among Chinese men, cigarette consumption averaged 4 and 10 per day in 1952 and 1972, respectively.
 - Tobacco consumption resulted in more deaths among Chinese women than American women in 1990.
 - Tobacco consumption is responsible for few deaths among women in China.
8. Lung cancer mortality ratio among U.S. women smokers to non-smokers was -----
- 3 in the 1980s
 - 13 in the 2000s
 - 26 in the 2000s
 - 26 in the 1980s
9. The reason for the increase in lung cancer mortality among U.S. women from a ratio of 3 in the 1960s to 26 in the 2000s is that -----
- in the 1960s, many American women were housewives and could not afford smoking

- b. in the 2000s, U.S. women smokers had a wide choice of brands
- c. in the 2000s, many American smoker women in their 60s had started smoking since adulthood, whereas in the 1960s few female smokers in their 60s had done so
- d. in the 1960s, few 60 year old women in America were smokers, as stated by themselves and as shown in the reports

10. Considering the present smoking patterns, mortality ratios among men in China and South Africa are -----

- a. likely to diminish
- b. improbable to double
- c. possible to boost
- d. impossible to increase

C. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. I often wonder what future ----- will make of our efforts; they are so louzy

- a. generations
- b. nutrients
- c. communications
- d. prevalence

2. Our results should be a good ----- of the true state of affairs.

- a. hazard
- b. celebration
- c. uptake
- d. approximation

3. The use of herbal medicine rather than conventional therapy is ----- among people living in certain areas of that country.

- a. accessible
- b. eventual
- c. prevalent
- d. promotive

4. Being back with his family should provide emotional ----- for the children.

- a. stability
- b. magnitude
- c. legislation
- d. consumption

5. Mexico called for an immediate ----- of hostilities; any delay will lead to disaster.

- a. epidemic
- b. adoption
- c. cessation
- d. proportion

6. Gradually, factory workers were ----- by machines, so many of them were dismissed

- a. allocated
- b. consumed
- c. displaced
- d. generated

7. The ----- of applications to available places currently stands at 100:1.

- a. prevalence
- b. recovery
- c. mortality
- d. ratio

8. A higher ----- of Americans go on to higher education than is the case in Britain.

- a. subscription b. currency c. proportion d. survival

9. Her father's death was a great suffering for her; nobody cared for her during the ----- years.

- a. subsequent b. global c. substantial d. widespread

10/11. Though tobacco advertising is ---10--- throughout the European Union, China, and some other countries, cigarettes are still among the most ---11--- advertised and promoted products in the world.

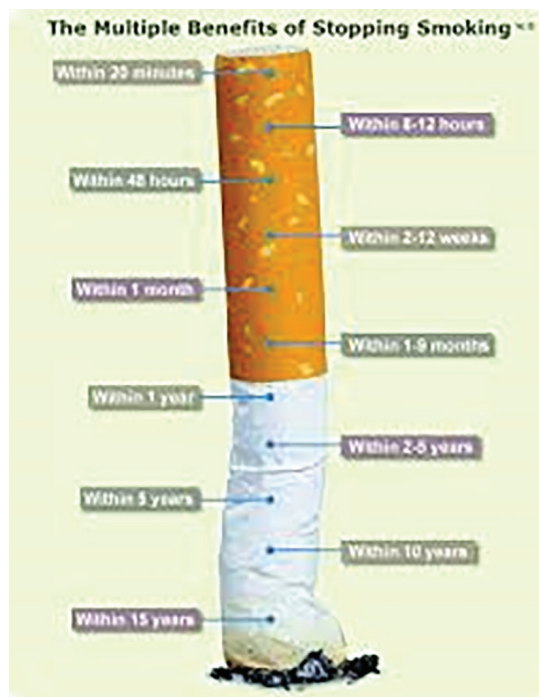
10. a. determined b. banned c. manufactured d. stipulated

11. a. respectively b. heavily c. eventually d. locally

12. Cessation is the only practicable way to ----- a substantial proportion of tobacco-attributable deaths before 2050.

- a. multiply b. outnumber c. avoid d. triple

Further Reading



Global Effects of Smoking and of Quitting

On the basis of current smoking patterns, with a global average of about 50% of young men and 10% of young women becoming smokers and relatively few stopping, the annual tobacco-attributable deaths will rise from about 5 million in 2010 to more than 10 million a few decades hence, **as** the young smokers of today reach middle and old age. This increase

"as" in this sentence means:
a. since
b. sb/sth appearing to be sb/sth else
c. in the same way

is due partly to population growth and partly to the fact that, in some large populations, generations in which few people smoked substantial numbers of cigarettes throughout adult life are being succeeded by generations in which many people did **so**. There were about 100 million deaths from tobacco in the 20th century, most in developed countries. If current smoking patterns persist, tobacco will kill about 1 billion people this century, mostly in low- and middle-income countries. About half of these deaths will occur before 70 years of age. “so” refers to...

The 2013 World Health Assembly called on governments to reduce the prevalence of smoking by about a third by 2025, which would avoid more than 200 million deaths from tobacco during the remainder of the century. Price is the key determinant of smoking uptake and cessation. Worldwide, a reduction of about a third could be achieved by doubling the inflation-adjusted price of cigarettes, which in many low- and middle-income countries could be achieved by tripling the specific excise tax on tobacco. Other interventions recommended by the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) and the WHO six-point MPOWER initiative could also help reduce consumption and could help make substantial increases in specific excise taxes on tobacco politically acceptable. Without large price increases, a reduction in smoking by a third would be difficult to achieve.

The WHO has also called for countries to achieve a 25% reduction between 2008 and 2025 in the probability of dying from non-communicable disease between 30 and 70 years of age. Widespread cessation of smoking is the most important way to help achieve this goal, because smoking throughout adulthood substantially increases mortality from several major noncommunicable diseases (and from tuberculosis).

To help achieve a large reduction in smoking in the 2010s or 2020s, governments, health professionals, journalists, and other opinion leaders should appreciate the full eventual hazards of smoking cigarettes from early adulthood, the substantial benefits of stopping at various ages, the eventual magnitude of the epidemic of tobacco-attributable deaths if current smoking patterns persist, and the effectiveness of tax increases and other interventions to reduce cigarette consumption.

Three Key Messages for Smokers in the 21ST century

First, the risk is big. Large studies in the United Kingdom, the United States, Japan, and India have examined the eventual effects on mortality in populations of men and of women in which many began to smoke in

early adult life and did not quit. All these studies showed that in middle age (about 30 to 69 years of age), mortality among cigarette smokers was two to three times the mortality among otherwise similar persons who had never smoked, leading to a reduction in life span by an average of about 10 years. This average reduction combines zero loss for those not killed by tobacco with an average loss of well over a decade for those who are killed by it.

"otherwise"
refers to ...

Second, many of those killed are still in middle age, losing many years of life. Some of those killed in middle age might have died soon anyway, but others might have lived on for decades. On average, those killed in middle age by smoking lose about 20 years of life expectancy as compared with persons who have never smoked.

Third, stopping smoking works. Those who have smoked cigarettes since early adulthood but stop at 30, 40, or 50 years of age gain about 10, 9, and 6 years of life expectancy, respectively, as compared with those who continue smoking.

A. Read the following sentences and decide if based on the information provided in the text they are true or false. Then show your choice by writing T (for true) or F (for false) in the blank space next to each sentence.

-----1. Annual deaths caused by tobacco use will increase more than double within a few decades since 2010.

-----2. Developing countries include most of the tobacco-attributable deaths in the 20th century.

-----3. Reducing tobacco-attributable deaths by about a third in the next 12 years since 2013 represents a drop of 200 million deaths from tobacco.

-----4. Price is the main determining factor used to end smoking.

-----5. Preventive measures proposed by the 2013 World Health Assembly would save more than 200 million tobacco-attributable deaths during the remaining part of the century.

-----6. Smoking throughout adulthood is a major contributor to death from tuberculosis.

-----7. Smokers dying in the middle age from tobacco suffer 30 years loss of life expectancy.

-----8. People who start smoking at early adulthood and give it up around 40 years of age save life expectancy by 6 years.

B. Read the following sentences carefully and decide which one of the four options (a, b, c, or d) best completes each item.

1. "On the basis of current smoking patterns..." (paragraph 1). What are the present patterns of smoking?

a. 50% of young men and 10% of young women quit smoking on average throughout the world.

b. 50% of young men and 10% of young women become cigarette addicts on average throughout the world.

c. 50% of young men and 10% of young women die on average due to smoking.

d. Globally, 10% and 50% of young men and women become smokers respectively on average.

2/3. The increase in death toll due to tobacco is partly determined by ---2--- and partly by ---3---.

2. a. tobacco use

b. inflation growth

c. tax increase

d. inhabitants' growth

3. a. new generation's tax increases

b. old generation's low incomes

c. new generation's number of smokers

d. old generation's more addicts

4. If the present patterns of smoking continue, ----- in the 21st century.

a. there will be about 100 million tobacco-attributable deaths

b. about 1 billion people will die due to tobacco

c. there will be more deaths from tobacco in high-income than low-income countries

d. there will be 1 billion tobacco-attributable deaths before the age of 70

5. The 2013 World Health Assembly requested governments to ----- of smoking by about a third by 2025.

a. lessen the widespread prevalence

b. augment the commonness

c. diminish the scarcity

d. elevate the extensiveness

6. Regarding deaths from non-communicable disease, cessation of smoking, according to WHO, would result in a -----.
 - a. 52% reduction in death among 30 to 70 year old individuals
 - b. decrease of one-fourth in death among adolescents during 2008- 2025
 - c. decrease of one-fourth in death in 30-70 year individuals during 2008 and 2025
 - d. 25% reduction in death in the first half of the 21st century
7. To decrease smoking radically in the 2010s or 2020s, governments, health officials, etc. should realize all of the following issues except:
 - a. final dangers of smoking
 - b. the advantages of quitting smoking
 - c. tobacco companies' interests
 - d. the ultimate number of deaths from smoking

C. Word Families: Fill in the blanks using the correct form of the words given in the list.

prevail, prevalence, prevalent, prevailing

- a. Those beliefs still ----- among certain social groups.
- b. The ----- view seems to be that they will find her guilty.
- c. The discussion focused on the social ills ----- in society today.
- d. The report highlighted the ----- of smoking among teenagers over the last three years.

affect, effect, effective, effectively

- a. Long prison sentence can be a very ----- deterrent for offenders.
- b. Modern farming methods can have an adverse ----- on the environment.
- c. The company must reduce costs to compete -----
- d. The south of the country was worst ----- by the drought.

determine, determination, determined, determinable

- a. During the third month of pregnancy, the sex of the child becomes-----
- b. The proposal had been dropped in the face of ----- opposition.
- c. An inquiry was set up to ----- the cause of the accident.
- d. He fought the illness with courage and -----

substance, substantial, substantially, substantiate

- a. The results of the tests ----- his claims.
- b. A ----- number of people supported the reforms.
- c. The plane was ----- damaged in the crash.
- d. It was a malicious gossip, completely without ----- .

D. Cloze Test: Fill in the blanks using the words in the list.

populations

goods

premature

consumption

bans

dependence

promotion

studies

smokers

exposure

In the United States and the United Kingdom, bans on tobacco advertising on television coincided with the start of the long-term downturn in sales, although these partial bans on advertising allowed the industry to shift to other forms of advertising or ---1--- More comprehensive ---2--- on all direct and indirect advertising or promotion of any tobacco ---3--- or trademarks further help to reduce consumption and have the advantage of severing any ---4--- of the media on the tobacco industry. Bans on smoking in public places reduce non-smokers' ---5--- to tobacco smoke and can also help decrease overall ---6---, as can mass-media campaigns. In ---7--- with many long-term ---8---, low-cost epidemiologic ---9--- of various types that monitor the changing extent to which tobacco is causing ---10--- death help to raise political awareness of tobacco hazards and to provide information for the individual smoker.

E. Match the words in column I with their equivalents in column II.

I	II
1. determinant	a. three times as much or as many as sth
2. quit	b. a judgment or opinion about the value or quality of sb/sth
3. steeply	c. final; ultimate
4. persistent	d. a factor that decisively affects the outcome of sth
5. triple	e. investigation; study
6. intervene	f. sharply; unreasonably
7. eventual	g. the number of years that a person is likely to live
8. life expectancy	h. to become involved in a situation in order to improve it
9. survey	i. the act of using energy, food or materials; the amount used
	j. leave; give up
	k. in the same order as the people or things already mentioned
	l. continuing; constant

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انگلیسی

نیمه تخصصی

نویسندگان به ترتیب حروف الفبا:

فرامرز امین لاری
دکتر فرهاد پاکدل
محمد رفعت بخش
دکتر نسرين شکرپور
فاطمه صديق
دکتر علی مهبودی

صفحه آرا:

مهدی ربیعی