

专业外语系列教材

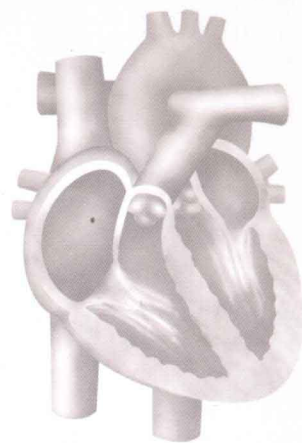
A Course Book of Medical English

(供医学院校本科生、研究生使用)



医学英语教程

■ 田祥斌 主编



WUHAN UNIVERSITY PRESS

武汉大学出版社

专业外语系列教材

A Course Book of Medical English

(供医学院校本科生、研究生使用)

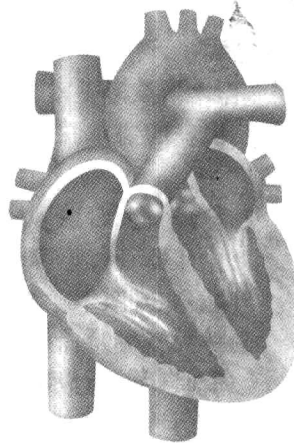


医学英语教程

■ 主 编 田祥斌

副主编 林 俐 王海燕 刘 斌

杨春芳 袁太宁



WUHAN UNIVERSITY PRESS

武汉大学出版社

图书在版编目(CIP)数据

医学英语教程/田祥斌主编. —武汉: 武汉大学出版社, 2008. 1

专业外语系列教材

ISBN 978-7-307-05996-2

I. 医… II. 田… III. 医学—英语—医学院校—教材 IV. H31

中国版本图书馆 CIP 数据核字(2007)第 169599 号

责任编辑:王春阁 叶玲利

责任校对:程小宜

版式设计:詹锦玲

出版发行: 武汉大学出版社 (430072 武昌 珞珈山)

(电子邮件: wdp4@whu.edu.cn 网址: www.wdp.com.cn)

印刷: 湖北新华印务有限公司

开本: 720×1000 1/16 印张: 17.25 字数: 336 千字 插页: 1

版次: 2008 年 1 月第 1 版 2008 年 1 月第 1 次印刷

ISBN 978-7-307-05996-2/H·539 定价: 24.00 元

版权所有, 不得翻印; 凡购我社的图书, 如有缺页、倒页、脱页等质量问题, 请与当地图书销售部门联系调换。

前 言

为了使广大医学院的本科生和研究生能跟踪 21 世纪生命科学发展的信息, 尽快掌握用英语交流的能力, 根据国家教育部大学英语教学大纲的要求, 我们编写了《医学英语》系列教材。

本套教材主要供医学院校高年级学生或研究生使用。教材突出实用性、时代性、知识性和兴趣性, 选材充分反映最新的医学科技发展状况, 体现现代医学理念。侧重阅读, 兼顾听、说、写、译等能力的培养。

《医学英语》系列教材分三册成书。分别是:《医学英语教程》、《医学英语听说教程》、《医学英语写作》。在教学中, 各校可以根据学生实际水平选用。

《医学英语教程》主要供高等医学院校本科高年级学生和研究生选用。本册共分 10 个单元, 每个单元分医学术语学 (Medical Terminology) 和课文阅读 (Readings) 两部分。

医学术语学部分突出医学英语词汇的前缀、后缀、词根的介绍和分析, 并编写相应构词练习。通过医学英语构词法的分析和学习, 使学生理解医学英语术语构成的特殊性和规律性。在练习中和课文的学习中加深对构词法的掌握和运用, 以便扩大医学英语词汇量, 达到事半功倍的目的。

每个单元的课文阅读部分包括三篇相互关联的短文, 其内容包含流行病学、免疫学、解剖学、组织胚胎学、基因、生理学、病理学、传染病学、劳动卫生、社会学、医学心理学和伦理学等。课文均选自国外英语原文权威学术期刊或近期文献资料, 语言规范。部分短文反映近几年生命科学领域的发展信息和新成果, 具有知识性。每篇短文后面编写有注解、生词表和练习, 突出实践性。练习力求形式多样, 围绕理解课文、掌握重点词汇和构词法学习而编写。全书附有总词汇表, 方便读者查询。

本教材内容毕竟不可能穷尽医学科学的全部, 但编者相信读者会从中得到裨益, 奠定医学专业英语交流的坚实基础。

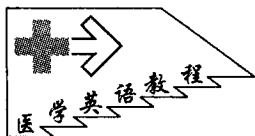
由于编写此类教材尚属探索, 难免出现不妥之处, 希望广大师生提出宝贵意见。

编 者

2007 年 8 月

CONTENTS

Unit One	1
Section I Medical Terminology	1
Section II Readings	5
Text A Plague	5
Text B The Death of Young King Edward VI	16
Text C The Major Infectious Diseases in the World —To Treat or Not to Treat	23
Unit Two	28
Section I Medical Terminology	28
Section II Readings	31
Text A The Human Body	31
Text B Organs and Diseases	43
Text C The Structure of Human Body	49
Unit Three	56
Section I Medical Terminology	56
Section II Readings	59
Text A Biology of Blood	59
Text B ABO Blood Group System	68
Text C Common Medical Tests	74
Unit Four	79
Section I Medical Terminology	79
Section II Readings	81
Text A Smoking Cessation	81
Text B Smoking Cessation	89
Text C Problems Resulting from the Irresponsible Use of Alcohol	93



Unit Five	.....	98
Section I	Medical Terminology	98
Section II	Readings	100
Text A	Puberty	100
Text B	Hypersomnia and Intoxicant Parasomnia	108
Text C	Sleep Apnea Syndromes	112
Unit Six	.....	116
Section I	Medical Terminology	116
Section II	Readings	118
Text A	AIDS	118
Text B	Immunodeficiency	127
Text C	Autoimmune Hepatitis	132
Unit Seven	.....	136
Section I	Medical Terminology	136
Section II	Readings	138
Text A	Written Self-help Treatments for Depression	138
Text B	Integrating Psychological Care into General Medical Practice	146
Text C	The Powerful Placebo and the Wizard of Oz	150
Unit Eight	.....	155
Section I	Medical Terminology	155
Section II	Readings	157
Text A	Human Cloning and Genetic Modification —The Basic Science You Need to Know	157
Text B	Baby Needs a New Set of Genes	167
Text C	Scientists Trying to Make Old Cells Young	172
Unit Nine	.....	177
Section I	Medical Terminology	177
Section II	Readings	180
Text A	Bacteria: Friend or Foe?	180



Text B	Plasmodium Parasites	188
Text C	Are Viruses Alive?	195
Unit Ten	.....	200
Section I	Medical Terminology	200
Section II	Readings	203
Text A	Medical Ethics	203
Text B	No Mercy in Florida	215
Text C	An Ethical Market in Human Organs	220
Appendix I	Vocabulary	226
Appendix II	English-Chinese Common Medical Glossary	262

Unit One

Section I Medical Terminology

A. Introduction to Word Part

Many medical terms are made up of combinations of word parts that are joined. Learning medical terminology is much easier once you understand how the word parts work together to form new words. The three types of word parts are:

Root: foundation of the term.

Suffix: word ending.

Prefix: word beginning.

Combining vowel: vowel that links the root to the suffix or the root to another root.

Combining form: combination of the root and the combining vowel.

B. Word Building Rules

Now that we have identified the word elements (word roots, combining forms, prefixes, and suffixes). Let's see how they all fit together to build medical words. There is a logical order to build medical words:

A prefix is placed at the beginning of the word.

A suffix is placed at the end of the word root.

The use of more than one word root in a word creates the need for combining vowels to connect the roots. This, in turn, creates combining forms that are used in compound words.

Component words are usually composed in the following order: combining form + word root + suffix.

Example: cardi/o + path + y = cardiopathy

leuk/o + cyt + osis = leukocytosis

When several combining forms are used, the order is as follows: combining form +



combining form + word root + suffix.

Example: cardi/o + my/o + path + y = cardiomyopathy

leuk/o + cyt/o + pen + ia = leukocytopenia

When defining a medical word, there is also a logical approach.

The definition of a medical word usually begins with defining the suffix (the word ending) first and continues to “read” backwards through the word as you define it.

Example: For the word *carditis*, the definition is inflammation (-itis) of the heart (card-).

For the word *cardiomegaly*, the definition is the enlargement (-megaly) of the heart (cardi-). It is a noun ending and the *o* is a combining vowel.

Example: For the word *intracardiac*, the definition is pertaining to (-ac) within (intra-) the heart (-cardi-).

For the word *pericardial*, the definition is pertaining to (-al) around (peri-) the heart (-cardi-).

For the word *hypoglycemia*, the definition is blood condition (-emia) of low, or less than normal (hypo-) sugar (-glyc-).

For the word *hyperhidrosis*, the definition is condition (-osis) of excessive (hyper-) sweating (-hidr-).

When a medical word identifies body system or parts, the definition of the word usually begins with defining the suffix first, then defining the organs in the order in which they are studied in the particular body system.

Example: In the word *cardiopulmonary*, the definition is pertaining to (-ary) the heart (cardi-) and lungs (-pulmon-). The *o* is a combining vowel for the two word roots.

In the word *cardioarterial* the definition is pertaining to (-al) the heart (cardi-) and the arteries (-arteri-). The *o* is a combining vowel for the two word roots.

In the word *hysterosalpingectomy* the definition is removal of (-ectomy) the uterus (hyster-) and fallopian tubes (-salping-). The *o* is a combining vowel for the two word roots.

C. Combining Forms, Prefixes and Suffixes

Learn the following combining forms: prefixes and suffixes.

Prefix & Suffix	Meaning	Terminology	Chinese
chemo-	chemistry	chemotherapy chemo-immunity	化学疗法 化学免疫性

续表

Prefix & Suffix	Meaning	Terminology	Chinese
ex-	outside	chemocoagulation exclusion exhalation	化学凝固法 排除 呼出
hemo-	blood	hemoglobin hemocytoblast	血红蛋白 成血细胞
hyper-	above	hyperacusia hyperinfection	听觉过敏 高度传染
immuno-	immunity	immunodeficiency immunocatalysis immunodiagnosis immunology immunodepression immunoassay immunochemistry	免疫缺陷 免疫催化作用 免疫诊断 免疫学 免疫抑制 免疫测定 免疫化学
im-	not	imbalance	失调
in-	not	inadequacy inefficacy insomnia inanition	官能不全 无效 失眠 营养不足, 虚弱
inter-	between	intercostal interdental interaction interferon intercellular	肋间的 牙齿之间的 相互作用 干扰素 细胞间的
intra-	within	intracardiac intravenous	心内的 静脉内的
myco-	fungus	mycobacterium mycology	分支杆菌 真菌学
multi-	many, much	multidrugs multi-infection multivalence	多药物 多菌传染 多价
pre-	before	prenatal preoperative	产前的 手术前的
patho-	disease	pathology pathophobia	病理学 疾病恐怖
re-	again, back	reabsorption recidivation	重吸收 复发



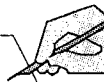
续表

Prefix & Suffix	Meaning	Terminology	Chinese
un-	not	redistribute	重新分配
		replication	复制, 答辩
		replantation	再植
		reproduction	生殖, 繁殖
		unbalance	失调
		unrest	不安
		uninfected	未受感染的
-gen	that which produces	unevenly	不平的
		pathogen	病原体
		antigen	抗原
-therapy	treatment	neurogen	神经原质
		radium-therapy	镭疗法
		tissue-therapy	组织疗法
		X-ray-therapy	X 线疗法
		chemotherapy	化学疗法
		radiotherapy	放射线疗法
		physiotherapy	物理疗法
		bibliotherapy	读书/阅读疗法

Exercises

I. Give the meanings for the following combining forms, prefixes and suffixes, and provide one example for each.

	Meaning	Example
1. -gen	_____	_____
2. myco-	_____	_____
3. chemo-	_____	_____
4. hyper-	_____	_____
5. peri-	_____	_____
6. immuno-	_____	_____
7. un-	_____	_____
8. multi-	_____	_____
9. patho-	_____	_____
10. intra-	_____	_____



II. Explain the meanings of the following medical terms. For example:
immunodeficiency: lack of immunity to some kinds of disease.

1. mycotoxin: _____
2. pathogenic: _____
3. antiandrogen: _____
4. fibrinogen: _____
5. interleukins: _____
6. prepuberty: _____
7. multiparous: _____
8. reimplantation: _____
9. hemochrome: _____
10. exogenous: _____

III. Give the stresses to the following medical terms and then translate them into Chinese. For example: bi'ology 生物学.

- | | |
|--------------------------|---------------------------|
| 1. mycology _____ | 2. antituberculosis _____ |
| 3. pathogenicity _____ | 4. neurogen _____ |
| 5. immunocatalysis _____ | 6. chemocoagulation _____ |
| 7. unbalance _____ | 8. prenatal _____ |
| 9. exhalation _____ | 10. periadenitis _____ |
| 11. recidivation _____ | 12. hyperacousia _____ |
| 13. intercostal _____ | 14. hemocytoblast _____ |
| 15. intracardiac _____ | 16. hemoglobin _____ |

Section II Readings

Text A

Plague

Thirteen hundred and forty-eight years had already passed after the fruitful Incarnation of the Son of God went into the distinguished city of Florence, nobler than any other Italian city, there came the deadly pestilence. It started in the East, either because of the influence of heavenly bodies or because of God's just wrath as a punishment to mortals for our wicked deeds, and it killed an infinite number of people.



Without pause it spread from one place and it stretched its miserable length over the West. And against this pestilence no human wisdom or foresight was of any avail; quantities of filth were removed from the city by officials charged with this task; the entry of any sick person into the city was prohibited; and many directives were issued concerning the maintenance of good health. Nor were the humble supplications, rendered not once but many times to God by pious people through public processions or by other means, efficacious; for almost at the beginning of springtime of the year in question the plague began to show its sorrowful effects in an extraordinary manner.

It did not act as it had done in the East, where bleeding from the nose was a manifest sign of inevitable death, but it began in both men and women with certain swelling either in the groin or under the armpits, some of which grew to the size of a normal apple and others to the size of an egg (more or less), and the people called them buboes. And from the two parts of the body already mentioned, within a brief space of time, the said deadly buboes began to spread indiscriminately over every part of the body; and after this, the symptoms of the illness changed to black or livid spots appearing on the arms and thighs, and on every part of the body, some large ones and sometimes many little ones scattered all around. And just as the buboes were originally, and still are, a very certain indication of impending death, in like manner these spots came to mean the same thing for whoever had them. Neither a doctor's advice nor the strength of medicine could do anything to cure this illness; on the contrary, either the nature of the illness was such that it afforded no cure, or else the doctors were so ignorant that they did not recognize its cause and, as a result, could not prescribe the proper remedy (in fact, the number of doctors, other than the well-trained, was increased by a large number of men and women who had never had any medical training); at any rate, few of the sick were ever cured, and almost all died after the third day of the appearance of the previously described symptoms (some sooner, others later), and most of them died without fever or any other side effects.

This pestilence was so powerful that it was communicated to the healthy by contact with the sick, the way a fire close to dry or oily things will set them aflame. And the evil of the plague went even further: not only did talking to or being around the sick bring infection and a common death, but also touching the clothes of the sick or anything touched or used by them seemed to communicate this very disease to the person involved. What I am about to say is incredible to hear, and if I and others had not witnessed it with our own eyes, I should not dare believe it (let alone write about it), no matter how trustworthy a person I might have heard it from. Let me say, then, that



the power of the plague described here was of such virulence in spreading from one person to another that not only did it pass from one man to the next, but, what's more, it was often transmitted from the ferments of a sick or dead man to animals that not only became contaminated by the disease, but also died within a brief period of time. My own eyes, as I said earlier, witnessed such a thing one day: when the rags of a poor man who died of this disease were thrown into the public street, two pigs came upon them, as they are wont to do, and first with their snouts and then with their teeth they took the rags and shook them around; and within a short time, after a number of convulsions, both pigs fell dead upon the ill-fated rags, as if they had been poisoned.

From these and many similar or worse occurrences there came about such fear and such fantastic notions among those who remained alive that almost all of them took a very cruel attitude in the matter; that is, they completely avoided the sick and their possessions; and in so doing, each one believed that he was protecting his good health.

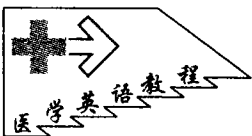
...

And not all those who adopted these diverse opinions died, nor did they all escape with their lives; on the contrary, many of those who thought this way were falling sick everywhere, and since they had given, when they were healthy, the bad example of avoiding the sick, they, in turn, were abandoned and left to languish away without care. The fact was that one citizen avoided another, that almost no one cared for his neighbor, and that relatives rarely or hardly ever visited each other—they stayed far apart. This disaster had struck such fear into the hearts of men and women that brother abandoned brother, uncle abandoned nephew, sister left brother, and very often wife abandoned husband, and—even worse, almost unbelievable—fathers and mothers neglected to tend and care for their children, as if they were not their own.

...

The city was full of corpses. The dead were usually given the same treatment by their neighbors, who were moved more by the fear that the decomposing corpses would contaminate them than by any charity they might have felt towards the deceased; either by themselves or with the assistance of porters (when they were available), they would drag the corpse out of the home and place it in front of the doorstep where, usually in the morning, quantities of dead bodies could be seen by any passer-by; then, they were laid out on biers, or for lack of biers, on a plank.

Nor did a bier carry only one corpse; sometimes it was used for two or three at a time. More than once, a single bier would serve for a wife and husband, two or three brothers, a father or son, or other relatives, all at the same time. And countless times it



happened that two priests, each with a cross, would be on their way to bury someone, when porters carrying three or four biers would just follow along behind them; and where these priests thought they had just one dead man to bury, they had, in fact, six or eight and sometimes more. Moreover, the dead were honored with no tears or candles or funeral mourners but worse; things had reached such a point that the people who died were cared for as we care for goats today. Thus, it became quite obvious that what the wise had not been able to endure with patience through the few calamities of everyday life now became a matter of indifference to even the most simple-minded people as a result of this colossal misfortune.

So many corpses would arrive in front of a church every day and at every hour that the amount of holy ground for burials was certainly insufficient for the ancient custom of giving each body its individual place; when all the graves were full, huge trenches were dug in all of the cemeteries of the churches and into them the new arrivals were dumped by the hundreds; and they were packed in there with dirt, one on top of another, like a ship's cargo, until the trench was filled.

But instead of going over every detail of the past miseries which befell our city, let me say that the same unfriendly weather there did not, because of this, spare the surrounding countryside any evil; there, not to speak of the towns which, on a smaller scale, were like the city, in the scattered villages and in the fields the poor, miserable peasants and their families, without any medical assistance or aid of servants, died on the roads and in their fields and in their homes, as many by day as by night, and they died not like men but more like wild animals.

Because of this they, like the city dwellers, became careless in their ways and did not look after their possessions or their businesses; furthermore, when they saw that death was upon them, completely neglecting the future fruits of their past labors, their livestock, their property, they did their best to consume what they already had at hand. So, it came about that oxen, donkeys, sheep, pigs, chickens and even dogs, man's most faithful companion, were driven from their homes into the fields, where the wheat was left not only unharvested but also unreaped, and they were allowed to roam where they wished; and many of these animals, almost as if they were rational beings, returned at night to their homes without any guidance from a shepherd, satiated after a good day's meal.

Leaving the countryside and returning to the city, what more can one say, except that so great was the cruelty of Heaven, and, perhaps, also that of man, that from March to July of the same year, between the fury of the pestiferous sickness and the fact



that many of the sick were badly treated or abandoned in need because of the fear that the healthy had, more than one hundred thousand human beings are believed to have lost their lives for certain inside the walls of the city of Florence whereas, before the deadly plague, one would not have estimated that there were actually that many people dwelling in that city.

Oh, how many great palaces, beautiful homes, and noble dwellings, once filled with families, gentlemen, and ladies, were now emptied, down to the last servant! How many notable families, vast domains, and famous fortunes remained without legitimate heir! How many valiant men, beautiful women, and charming young men, who might have been pronounced very healthy by Galen, Hippocrates, and Aesculapius (not to mention lesser physicians), dined in the morning with their relatives, companions, and friends and then in the evening took supper with their ancestors in the other world!

New Words and Phrases

plague	[pleig]	<i>n.</i> 瘟疫, 灾祸
fruitful	[ˈfru:tful]	<i>adj.</i> 果实结得多的, 多产的, 富有成效的, 有成效的, 有作用的
pestilence	[ˈpestiləns]	<i>n.</i> 瘟疫
heavenly	[ˈhevənli]	<i>adj.</i> 天空的, 天体的
wrath	[rɔ:θ]	<i>n.</i> 愤怒
mortal	[ˈmɔ:tl]	<i>n.</i> 凡人, 人类
foresight	[ˈfɔ:sait]	<i>n.</i> 远见, 深谋远虑
avail	[ə'veil]	<i>n.</i> 效用, 利益
filth	[filθ]	<i>n.</i> 污秽, 污物
directive	[di'rektiv]	<i>n.</i> 命令, 指示
maintenance	[ˈmeintinəns]	<i>n.</i> 维护, 保持
humble	[ˈhʌmbl]	<i>adj.</i> 卑下的, 谦逊的
supplication	[sʌpliˈkeɪʃən]	<i>n.</i> 恳求, 祈祷
render	[ˈrendə]	<i>vt.</i> 呈递, 实施
pious	[ˈpaɪəs]	<i>adj.</i> 虔诚的, 尽责的
efficacious	[ˌefiˈkeɪʃəs]	<i>adj.</i> 有效的, 灵验的
extraordinary	[iksˈtrɔ:dinəri]	<i>adj.</i> 非常的, 特别的, 非凡的
manifest	[ˈmænɪfest]	<i>adj.</i> 显然的, 明白的
inevitable	[inˈevɪtəbl]	<i>adj.</i> 不可避免的, 必然的
swell	[swel]	<i>v.</i> (使) 膨胀, 增大



groin	[grɔɪn]	<i>n.</i> 腹股沟
armpit	[ˈɑːmpɪt]	<i>n.</i> 腋窝
bubo	[ˈbjʊːbəʊ]	<i>n.</i> 腹股沟腺炎
indiscriminately	[ˌɪndɪsˈkrɪmɪnətli]	<i>adv.</i> 不加区别地, 毫无选择地
symptom	[ˈsɪmptəm]	<i>n.</i> 症状, 征兆
livid	[ˈlɪvɪd]	<i>adj.</i> 青紫色的
impending	[ɪmˈpendɪŋ]	<i>adj.</i> 即将发生的
remedy	[ˈremɪdi]	<i>n.</i> 药物, 治疗法
at any rate		总而言之
communicate	[kəˈmjʊːnɪkeɪt]	<i>v.</i> 感染, 沟通, 通信
oily	[ˈɔɪli]	<i>adj.</i> 油的
afame	[əˈfleɪm]	<i>adj.</i> 燃烧的
virulence	[ˈvɪrələns]	<i>n.</i> 毒力, 危险
transmit	[trænzˈmɪt]	<i>vt.</i> 传染, 传播
ferment	[ˈfɜːmənt]	<i>n.</i> 酵素, 发酵, 骚动
contaminate	[kənˈtæmɪneɪt]	<i>v.</i> 感染, 污染
snout	[snaʊt]	<i>n.</i> 猪嘴
convulsion	[kənˈvʌlʃən]	<i>n.</i> 抽搐, 哄堂大笑
fantastic	[fænˈtæstɪk]	<i>adj.</i> 稀奇古怪的, 幻想的
corpse	[kɔːps]	<i>n.</i> 尸体
charity	[ˈtʃærɪti]	<i>n.</i> 慈善, 施舍, 慈善团体
porter	[ˈpɔːtə]	<i>n.</i> 守门人, 门房
drag	[dræg]	<i>v.</i> 拖, 拖曳
passer-by	[pɑːsəˈbaɪ]	<i>n.</i> 过路人, 行人
plank	[plæŋk]	<i>n.</i> 厚木板, 支架
priest	[priːst]	<i>n.</i> 牧师
funeral	[ˈfjuːnərəl]	<i>n.</i> 葬礼, 出殡
mourner	[ˈmɔːnə]	<i>n.</i> 悲伤者, 哀悼者
calamity	[kəˈlæmɪti]	<i>n.</i> 灾难, 不幸事件
colossal	[kəˈlɒsl]	<i>adj.</i> 巨大的, 庞大的
holy	[ˈhəʊli]	<i>adj.</i> 神圣的, 圣洁的
trench	[trɛntʃ]	<i>n.</i> 沟渠
cemetery	[ˈsemitri]	<i>n.</i> 墓地, 公墓
dump	[dʌmp]	<i>vt.</i> 倾倒
befall	[bɪˈfɔːl]	<i>v.</i> 降临, 落到