

THE LATIN LANGUAGE AND MEDICAL TERMINOLOGY BASICS

TEXTBOOK

*Edited by PhD,
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Fourth edition

APPROVED
by the Ministry of Education and Science
of Ukraine as a textbook for students
of higher medical education establishments

RECOMMENDED
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The development of medicine as a separate science and particularly the final dissociation of the medical terminology resulted in the strengthening of its ties with other sciences. Thus the Latin language is an effectual means of broadening the outlook of a future doctor. The Latin aphorisms and quotations that supplement the textbook will assist in developing the logical and rational understanding of the peculiarities of the Latin grammar and will provide students with ample opportunity to estimate at true worth the uniqueness and wisdom of the ancient world.

The textbook is designed both for classroom use and for self-study training. The authors hope that the textbook will arouse interest in further studying of the medical language by giving students and teachers of higher education establishments — medical universities, institutes and academies the essential language tools to understanding the meaning and proper use of anatomical, histological, pharmaceutical and clinical terms.

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PREFACE

The English language, as well as most modern European languages including the Slavic ones, is a descendant of the Latin language. In its turn, Latin is a descendant of an ancient language commonly called Indo-European. Although these languages are different in structure, some similarities can be found. A characteristic of the Indo-European languages is expressing syntactic relations by means of word endings, and English words proved to be scarcely inflected. Still, there are more than 75 % Latin words in the English language, especially among medical terms.

As a matter of fact, Latin was the language of ancient Romans, who together with Greeks were the creators of the ancient civilization – the basis of the European culture. The Latin alphabet was derived from Greek (via the Etruscans, a tribe that inhabited Italian territories), which can be seen from its name: *ALPHA–BETA*, the first two letters of the Greek alphabet. In their turn, the English, German, Polish and other alphabets were derived from the Latin one. As the Roman state developed, the Roman armies moved throughout Mediterranean lands, bringing Latin to the outlying regions of the known world. Over time, the colloquial language, influenced by the native tongues and dialects, evolved into a group of new languages called the Romance languages.

It is well known that medical science was highly developed as early as ancient times. One of the most famous physicians at that time in Greece was Hippocrates (460–377 BC); in ancient Rome – Claudius Galenus (130–200 AD); in Arabia – Avicenna (Ibn Sina, 980–1037 AD). The latter wrote the *Canon of Medicine*, in which he described and classified different topics of medicine.

This textbook will acquaint students with medical terminology. It is a historical fact that the Greek and Latin languages are the source of medical vocabulary formation. Medical terminology consists of several groups of words: words of Greek and Latin origin; words artificially created on the basis of Latin and Greek words; words originated from other languages, mostly Arabic, because the ancient Arabic medical school has greatly influenced the European medical science; words of some other languages. Such a variety has been conditioned by the historical development of medical science. Consequently, along with studying Latin grammar and vocabulary, we suggest learning Greek equivalents of some Latin medical terms.

In this manual, great attention has been paid to word-forming elements of Latin and Greek origin – nouns, adjectives, numerals and other parts of speech. The book

offers applied study of the Latin language. The main objective of the course is to master the terminology fundamentals. It is essential for the understanding and using of medical terms.

One should know that the first Anatomical Nomenclature was adopted at the Basel congress of the Anatomische Gesellschaft (Anatomical Society) in 1895 and was called the Baseler Nomina Anatomica – BNA. At the same time, as morphology was developing, anatomical terminology was improving and expanding, and the German Anatomical Society initiated a new register of terms (Jena, 1935). This register was named the Jenaer Nomina Anatomica – JNA – and was used in Europe only.

In 1950, at the Fifth International Congress of Anatomists there was made a decision to check and renew the existing register of anatomical terms to make them shorter and easier to memorize. The renewed and optimized register of terms was presented at the Sixth International Congress of Anatomists (Paris, 1955). The new register was named the Parisiana Nomina Anatomica (PNA). This version of anatomical nomenclature was widely used, but at each subsequent International Congress of Anatomists several changes were introduced (Montreal, 1987; Budapest, 1988; New York, 1989). In 1989 the Federative Committee on Anatomical Terminology (FCAT, now called FICAT) was established to prepare revised lists of anatomical terms. After that, in Sao Paulo (1997), the latest universal anatomical nomenclature was approved.

Each lesson in the textbook introduces new word forms and vocabulary followed by a variety of exercises based on the new material. A special section entitled “*Do you know that...*” deals with some historical and cultural events connected with medical science. Some Latin sayings and proverbs are given to acquaint students with ancient social order and philosophy.

The manual aims to answer the question of the essential nature of medical terminology fundamentals. The chapters of this textbook represent three parts of medical terminology: anatomical, clinical and pharmaceutical terms. At the end of the manual, a dictionary of the most basic and frequently used medical terms can be found. This Latin-English and English-Latin glossaries are intended to acquaint students with scientific medical terms.

Pavlo Sodomora

In via est in medicīna via sine lingua Latīna
There is no way in medicine without Latin language

THEME

The Latin alphabet. The pronunciation of vowels, diphthongs and consonants

OBJECTIVES

- to learn names and writing
of Latin letters
- to practise pronunciation
of letters and letter
combinations

U
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I

§ 1 The Latin alphabet

The Latin alphabet initially contained 21 letters (1st cent. B.C.). But later, due to the necessity to transliterate Greek words, new letters – *y* (igrek) and *z* (zet) were added for the reproduction of Greek letters and sounds. In the course of time the specific pronunciation of these letters was lost, but the letters remained in the borrowings of Greek origin.

The Latin alphabet consisting of 26 letters was established in Western Europe since the 16th century. Letters *j* and *v* were introduced into practice by *Peter Ramus*. Also, the letter *w* was initially used in borrowings, such as geographical and proper names, as well as in medical and pharmaceutical terms.

| Letter | Name | Latin pronunciation | English pronunciation |
|-----------|-------|---------------------|-----------------------|
| Aa | a | a | [ei] |
| Bb | be | b | [bi:] |
| Cc | ce | c, k | [si:], [kei] |
| Dd | de | d | [di:] |
| Ee | e | e | [i:] |
| Ff | ef | f | [ef] |
| Gg | ge | g | [dʒi:] |
| Hh | ha | h | [eitʃ] |
| Ii | i | e | [ai] |
| Jj | jot | j | [dʒei] |
| Kk | ka | k | [kei] |
| Ll | el | l' | [el] |
| Mm | em | m | [em] |
| Nn | en | n | [en] |
| Oo | o | o | [ov] |
| Pp | pe | p | [pi:] |
| Qq | qu | qu | [kju:] |
| Rr | er | r | [a:] |
| Ss | es | s, z | [es], [zed] |
| Tt | te | t | [ti:] |
| Uu | u | u | [ju:] |
| Vv | ve | v | [vi:] |
| Ww | w | v | [dʌblju:] |
| Xx | ex | ks, kz | [eks] |
| Yy | igrek | e | [wai] |
| Zz | zet | z, c | [zed] |

§ 2 The pronunciation of vowels

There are six vowels in Latin: **a, e, i, o, u, y**. The pronunciation of these sounds is similar to the pronunciation of corresponding English ones, though some peculiarities do exist: **ána** – equally; **línea** – line; **ós** – bone; **intérnus** – internal; **inférior** – inferior.

I, i -

A vowel “*i*” is pronounced as “*i*” before and after consonants, e.g.: **íta** – such, **túnica** – layer. “**I**” is pronounced as “*j*” at the beginning of a word or a syllable, before a vowel and between two vowels. In modern medical and pharmaceutical terminology the letter “*j*” is used in the above-mentioned cases, e.g.: **májor** – big, **jejúnum** – intestine, **majális** – May*.

N.B.! There is no “*j*” in the borrowings of Greek origin, because there was no “*j*” in the Greek language, e.g.: **Iódum** – Iodine (G. *iódes* – violet), **Iodofórmium** – iodoform, **iódidum** – iodide, **Iodinólum** – iodinole).

Y, y -

A vowel “*y*” is pronounced as “*i*” and is used only in the borrowings of Greek origin, e.g.: **pylórus** – pylorus, **myología** – myology.

*A twofold writing of such terms is possible: *jejunum* or *ieiunum*. Besides, in International Medical Terminology the letter J is commonly used.

§ 3 The Greek prefixes, roots and suffixes containing the letter “y”

| | | Meaning | Examples |
|---------------|---------------|--|---|
| Prefix | dys- | disorder, disturbance | dysfúnció – any disturbance or abnormality in the function of an organ or part |
| | hypo- | under, beneath, below, decreased, abnormally low | hypogástrum – the lower front central region of the abdomen, below the navel |
| | hyper- | over, excess, increased, abnormally high | hypertónia – high blood pressure |

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