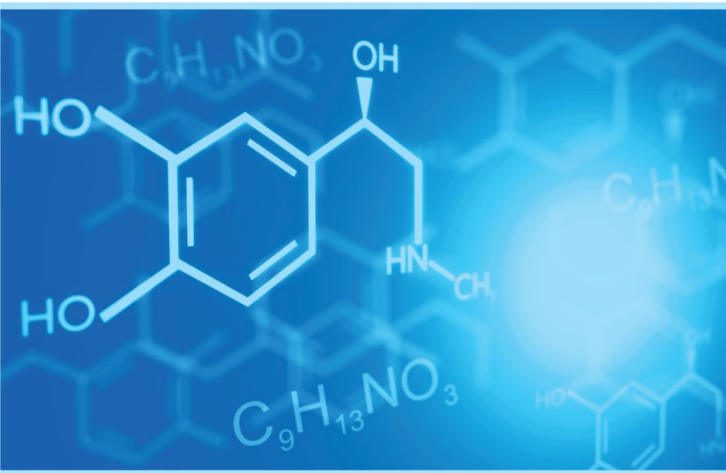
Slovenská Zdravotnícka Univerzita

MEDICAL BIOCHEMISTRY

FOR STUDENTS OF GENERAL MEDICINE

Lecture notes



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RAABE

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PREFACE

Medical biochemistry is not about chemical patterns or about metabolic pathways, but mainly about biochemical thinking: looking at the human body in health and disease from the molecular angle of vision. Anatomy deals with organs, histology with tissues, physiology with functions. Knowledge from these disciplines is a prerequisite for teaching medical biochemistry that unifies anatomical, physiological and histological knowledge by translating them into a common language of molecules.

We have divided the content into four parts: „Substances" (molecules), „Metabolism", „Biochemistry of organs and functions" and „ Biochemistry of systems and processes".

Each part consists of ten chapters and each chapter of six subchapters: „Introduction" (which describes the topic of the chapter's focus), „Biochemical Principles" (viewing the subject of the chapter from the point of view of molecules), Clinical Context" (examples demonstrating the use of biochemical principles in clinical practice), „Remember" (a summary of biochemical principles), „Realize" (a summary of clinical examples), „Formulas and Schemes" (the minimum of the formulas and schemes necessary to understand the problem).

The text is written in the form of lecture notes: it is intended to help the student to recall the lectures and impressions of lectures as easy as possible and also as a tool for the promotion of biochemical thinking. That is why the text is structured as strictly as it can be: subchapters: „Introduction", „Remember", "Realize" use the hierarchy of bold and italics directly in the text, subchapters „ Biochemical Principles „and" Clinical Context „also use the gray band on margins (marginalia), where the headings are placed to indicate the „focus" of the information. The text in the subchapters is not fluent but in the form of bullets and points: the idea is to emphasize the basic idea that needs to be focused and to avoid dispersion and distraction: these are the main obstacles to understanding the essence and development of biochemical thinking.

A Chinese saying is: I listen and forget, I watch and remember, I do and I understand. That is our approach. The aim of our lectures is to get acquainted with the issue: you listen to the lecture and forget about it. The aim of the lecture notes is to recall a lecture: if you look at the text repeatedly, you remember it. There is also something to be done: look into other textbooks and monographs, to attend laboratory classses and confront what you remember with what you did: you will understand. Knowledge itself does not come into the head: it requires an effort and an active approach. We wish you a lot of interest, zest and perseverance.

In conclusion, we would like to thank Ms. Ľubica Kováčová for language editing , Mgr. Monika Šerá and Ing. Vladimír Hudák from publishers Dr.Josef Raabe for technical and editorial support. It was a pleasure to work with them.

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