

Introduction to

physiological and pathological

Chemistry

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Ph.G., B.S., Ph.D., M.B., M.D.

Revised with the assistance of

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Illustrated sixth edition

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Preface to sixth edition

Before starting this revision, Mrs. Logan and I read a large number of comments and criticisms by teachers who had examined the fifth edition of Introduction to Physiological and Pathological Chemistry. This experience has made it crystal clear that it would be difficult, probably impossible, to write a text pleasing to every teacher. It was interesting to note, however, that the majority of the reviewers thought something should be added; only a few suggested deletions. For example, a number of people apparently want an extended discussion of organic chemistry. One teacher thought that more should have been written about buffers. Another thought the various clinical types of acidosis should have been explained. In view of recent developments, it was not surprising that several people thought the discussion of nucleic acids should have been lengthened. Still another thought that a table listing the radioactive isotopes used in medicine would have been desirable. We are grateful for these and numerous other suggestions, many of which have been incorporated in this edition.

The comments also made it evident that teachers of chemistry to students of nursing remain, as I have mentioned in the prefaces to previous editions, firmly entrenched in one of two camps: either they believe that chemistry should be taught with no reference to clinical medicine, or they believe that numerous references to clinical applications will stimulate the interest of the student. It is, of course, impossible to write a book satisfactory to both groups. I have chosen, as in the past, to provide a text for the latter camp. I have never been a nursing student, but I have been a medical student, and I remember all too vividly how most of those in my senior class wished they might have had some insight into the clinical importance of the basic sciences while they were freshmen and sophomores. I cannot imagine that the reactions of nursing students are very different. Even though the clinical situations chosen as examples may not be familiar to the student, the constant repetition of applications will, I think, prove as nothing else can that it is necessary to understand the basic sciences if modern clinical medicine and nursing are to be understood.