LOOMIS'S ESSENTIALS OF Toxicology

FOURTH EDITION

Ted A. Loomis A. Wallace Hayes

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PREFACE

oxicology is the study of the harmful actions of chemicals on biologic tissue. Therefore it requires an understanding of chemical reactions and interactions and of biologic mechanisms. The vastness of these subjects as well as the rapid day-by-day increase in knowledge that is directly or indirectly pertinent to these subjects precludes the possibility that any one mind could absorb and retain more than a small fraction of this information. However, it is evident that certain principles of modern toxicology are applicable to large numbers of chemicals and an understanding of these principles is essential for the development of an insight into the subject. These principles become basic to the study of toxicology and are the "essentials of toxicology."

When the first edition of this text was in preparation there were very few periodicals and reference volumes that were directly relevant to toxicology, whereas there are currently many excellent sources of information specific to the subject. Furthermore, these sources of information have become readily accessible through not only texts and periodicals but also computer databases. Because of this availability of information the current edition of Essentials of Toxicology employs a modified reference format. This book intentionally continues to be a concise presentation of the subject of toxicology as a basic science and considers toxicity of individual agents only in regard to their use as examples. Except for a few pertinent references directly in the text, references at the end of each chapter have been deleted and a separate chapter has been included to familiarize those readers new to this subject with the major sources of information in modern toxicology.

This edition of the book would not have been completed without the fortuitous joint interests and discussions between Drs. Loomis and Hayes together with the encouragement of Dr. Jasna Markovac, of Academic Press, all of which led to the current product.

We would be grateful to readers for suggestions, corrections, and criticisms that would make the next edition an even more accurate and worthwhile text.

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