

Mediators and Drugs in Gastrointestinal Motility I

Morphological Basis and
Neurophysiological Control

Editor G. Bertaccini



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Neurophysiological Control

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Preface

Since the exhaustive Handbook of Physiology (Alimentary Canal, Section 6, Motility) edited by CHARLES F. CODE in 1968, no complete survey of the morphological basis and the physiological control of intestinal motility has been published, in spite of the enormous amount of new data in the literature on this topic. The new techniques and methodologies, the use of electron microscopy, radioimmunoassay and binding techniques, as well as ever more sophisticated electrophysiological procedures have made possible a real flood of discoveries in this field. Moreover, the possibility of new studies of the endocrine cells in biopsies of human intestinal mucosa even during routine endoscopies, has opened new horizons for gastroenterologists and generated a number of important contributions to our knowledge of the morphology and physiopathology of the gut. As usual, new discoveries have also revealed both ignorance and many new problems. For this reason, although many of the data reported in this volume can be considered as firmly established, others still require confirmation, and the results of new research in this field are awaited with extreme interest.

Since advances are occurring so rapidly, even experts in the specific topics need frequent comprehensive reviews. To avoid an excessively large volume, considerations of the pancreas, liver, and biliary system were not included in this Handbook, which, nevertheless, has attempted to offer the reader the essence of more than 1,500 papers. In a volume with so many contributors treating different aspects of the subject, some overlapping was unavoidable; however, as Editor I tried to reduce this to a minimum. The diversity of views expressed by different authors actually may represent an advantage for workers in the field and open new pathways for exploring the same subject. The authors' major goal has been to interpret and clarify concepts derived from different disciplines and to provide not only an exhaustive compilation of data but also a synthesis (at times critical) of information that should enable the reader to appreciate the significance of the advances in this field.

This is a Handbook of Experimental *Pharmacology*, but we deemed it necessary to deal extensively with the anatomical, histological, biochemical, and physiological bases for the understanding of the pharmacology of the gastrointestinal tract (this is included in Part II, Endogenous and Exogenous Agents). Separate chapters deal with various techniques that are usually employed either *in vitro* or *in vivo* in the study of gut motility. Tables and selected figures help the reader to focus upon the most impressive data.

I should like to express my profound gratitude especially to Professor H. Herken, member of the Handbook's Editorial Board, for the opportunity to serve as Editor of this volume.

Despite some lack of punctuality in delivery of manuscripts, which delayed publication, all authors deserve my thanks for their participation in this work and for their exceptionally competent contributions.

GIULIO BERTACCINI

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