METHODS OF HORMONE RADIOIMMUNOASSAY

EDITED BY

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Preface

Radioimmunoassay systems have been developed to quantitate virtually every hormone available in pure form. Utilizing the potent tools of radioactivity and immunology, these exquisitely sensitive techniques have revolutionized the fields of endocrine physiology and clinical endocrinology. It is therefore remarkable that despite their widespread use, there has been, until now, no one volume available which describes all of the current techniques. This book is comprised of chapters in which methods for measuring hormones by radioimmunoassay are described. Each paper was written by an authority chosen particularly because of his contribution to the radioimmunoassay method.

Although the absence of such a book might alone serve to justify its need at this time, it was the expanded use of radioimmunoassays that prompted its preparation. For example, it is now becoming increasingly obvious that measuring single hormone responses to stimuli is gross oversimplification. Endocrine responses are coordinated activities of multiple hormones and must be studied as such. Thus, there is a tendency now for the utilization of multiple radioimmunoassay systems for the simultaneous evaluation of several hormones. In addition, diagnostic techniques are being refined to the degree that clinical laboratories are starting to use radioimmunoassays. By describing what we think are the best techniques for each hormone, we hope to direct such interests to effective completion.

Although specific problems are associated with specific immunoassays, it must be obvious that there is some overlap. By compiling a series of discussions of the successful management of a variety of problems, we hope to present a wealth of information which might be utilized to solve problems in related areas.

We do not anticipate nor would we recommend that a description of methodology, no matter how detailed, replace laboratory experience. We hope, however, that this volume will point out the problems and advantages of each system, aid in selection of techniques, and serve as a source of reference material.

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