

Sidney P. Colowick and Nathan O. Kaplan

Methods in ENZYMOLOGY

Volume 62

Vitamins and Coenzymes

Part D

Edited by

Donald B. McCormick

Lemuel D. Wright

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Preface

Since 1970–1971, when the earlier volumes (XVIII, A, B, and C) on “Vitamins and Coenzymes” were published as part of the *Methods in Enzymology* series, there has been a considerable expansion of techniques and methodology attendant to the assay, isolation, and characterization of the vitamins and those systems responsible for their biosynthesis, transport, and metabolism. In part, this has been generated by an increasing awareness of the diversity of such vitaminic forms as comprise essential moieties of coenzymes and also through recognition of the function of some derived metabolites as hormones, regulators, and even antioxidants.

As a consequence of this new body of information and its expected impact in the stimulation of further research on vitamins and coenzymes, we have sought to provide investigators with the more current modifications of “tried and true” methods as well as those which have only now become available. Volume 62 is the first of three volumes resulting from our efforts in soliciting contributions from numerous, active experimentalists who have published most of their findings in the usual, refereed research journals. The amount of material which appeared to warrant coverage necessitated a division into three parts, each comprising a volume: D, which covers the vitamin and coenzyme forms of ascorbate, thiamine, lipoate, pantothenate, biotin, and pyridoxine; E, nicotinate, flavins, and pteridines; and F, the B₁₂ group and those classically considered as “fat-soluble.”

We should like to express our gratitude to the contributors for their willingness to supply the information requested and, in some instances, their tolerance of editorial emendations. There has been an attempt to allow such overlap as would offer flexibility in the choice of method, such as modification of an assay procedure. Where some omissions seemingly occur, these may, in some cases, be attributed to the inadvertent oversight of the editors; however, in other cases it was felt that the topics were adequately covered in the earlier volumes on this subject or in other volumes in the *Methods of Enzymology* series.

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LEMUEL D. WRIGHT

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EDITED BY

Sidney P. Colowick and Nathan O. Kaplan

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- I. Preparation and Assay of Enzymes
- II. Preparation and Assay of Enzymes
- III. Preparation and Assay of Substrates
- IV. Special Techniques for the Enzymologist
- V. Preparation and Assay of Enzymes
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