Modern Analytical Methodologies in Fat- and Water-Soluble Vitamins
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PREFACE

The role of vitamins in human health is constantly being redefined and expanded. As a result, accurate and precise values for the various forms of each vitamin in small biological samples as well as in foods and beverages are in great demand. This volume constitutes an update of the state of the art of vitamin analysis and highlights new, sensitive analytical procedures for biological samples. Reversed-phase, high-performance liquid chromatography (RP-HPLC), coupled with appropriate detection procedures, constitutes the “workhorse” measurement system for vitamins. This status has been promoted by recent advances in reversed-phase column technology and by advances in HPLC detectors. Where appropriate, the applications of other separation systems, e.g., gas chromatography and capillary zone electrophoresis, are also described.

Sample extraction and preparation are time-consuming activities during the analysis of foods and biological samples for vitamins. The applications of new instrumentation, which greatly reduces sample preparation time, are discussed by several authors.

This volume is designed primarily for those who have a familiarity with the different sample preparation and chromatographic techniques. However, each author has provided useful information for a beginner in this field.

This work could not have been presented without the hard work and cooperation of the various authors. We are grateful for their efforts and patience.

Won O. Song  
Gary R. Beecher  
Ronald R. Eitenmiller
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