VITAMINS IN FOODS

Analysis, Bioavailability, and Stability

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About the Author

George Ball has accumulated many years of commercial and research laboratory experience in pharmaceutical analysis, clinical analysis, biochemical analysis, and food analysis. He has contributed to original research publications relating to biochemistry (platelet function) and endocrinology (control of ovulation) and is the author of several books and book chapters on vitamins. He received the B.Sc. honors degree in agricultural sciences from the University of Nottingham, UK in 1975.

Preface

Optimal vitamin status is a prerequisite for good health, and government-approved food fortification strategies are deemed necessary to ensure adequate intake of certain vitamins. Knowledge about vitamin bioavailability from food is essential for the estimation of dietary requirements. Equally important is knowledge of a vitamin's stability toward post-harvest handling of food, processing, storage, and preparation for consumption. To acquire this knowledge, one must learn about vitamin chemistry and how the vitamin is absorbed and metabolized. Successful research into vitamin bioavailability and stability is entirely dependent on the development and validation of suitable analytical methods. Vitamin bioavailability from food is subject to many variables imposed by food constituents and the preparation of food. Great progress has been made over the past decade, largely attributable to innovative analytical methodology, but there are many inconsistencies and the continuation of a multipronged research effort from independent laboratories must be encouraged to achieve solid and vital data.

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George F. M. Ball

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