BOOK REVIEWS

New Books Received


Nitrate and Man: Toxic, Harmless or Beneficial?


The concluding paragraph of the book notes that “The history of nitrate is that of a world-scale scientific error that has lasted for more than 50 years. The time has now come to rectify this regrettable and costly misunderstanding.” The senior author of this book was a pediatrician who devoted a portion of his life to the study of methaemoglobinaemia in order to create another source of information on water quality. This book is not a biased casual overview of the literature but an extremely thorough and thought-provoking analysis of our current understanding of the role of nitrate and nitrite in our health. This book provides the supporting evidence for policy that is based on recent data being used to drive a lot of the current research on nitrogen management. The authors have conducted a review of the evidence for the 10 mg L$^{-1}$ on nitrate and conclude that there is confounding data on the topic because many of the studies that show a health effect are old and may have been more related to biological contamination rather than the current nitrate levels. The authors do not have any stake in the nitrate debate and offer the evidence as a pursuit of a more complete understanding of the confusion over nitrate and its effect on the human body. The appendix in this book is a summary of the role of nitrate in the human diet and results from all of the different studies, and is valuable and educational in itself.

The current debate on nitrate levels in drinking water is a world-wide issue in the United States and throughout the world. It is important to use the potential energy to be expended on reducing the amount of potential energy to be expended on reducing nitrate levels to less than 10 mg L$^{-1}$. I don’t believe we should base our conclusions from the book to cease our efforts to reduce nitrate leaching and the potential improvement in water quality but to place our efforts to focus on helping farmers use nitrogen more efficiently. I recommend this book as a resource for all researchers involved in studying nitrite levels not because of the introduction to the debate but the approach these authors have taken to survey the literature and evaluate the current literature to arrive at conclusions that raise questions. This book helps place nitrate into a context about nitrate levels in our water and the meaning of these concentrations on our health. It would be a good resource for environmental scientists and anyone interested in the effects of nitrate on human health.