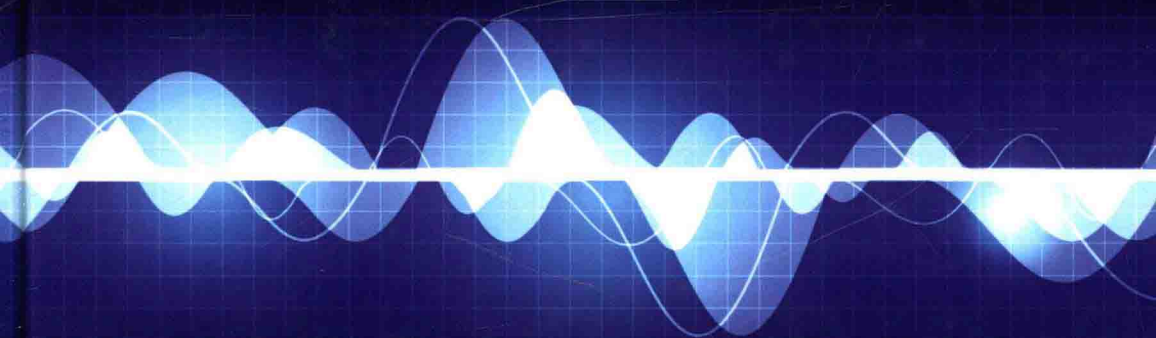


# MEASUREMENT OF ANTIOXIDANT ACTIVITY & CAPACITY

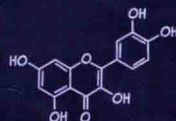
## RECENT TRENDS AND APPLICATIONS

**Edited by Resat Apak, Esra Capanoglu and Fereidoon Shahidi**



## Functional Food Science and Technology

Series Editor: Fereidoon Shahidi



WILEY

## **A comprehensive reference for assessing the antioxidant potential of foods and essential techniques for developing healthy food products**

*Measurement of Antioxidant Activity & Capacity* offers a much-needed resource for assessing the antioxidant potential of food and includes proven approaches for creating healthy food products. With contributions from world-class experts in the field, the text presents the general mechanisms underlying the various assessments, the types of molecules detected, and the key advantages and disadvantages of each method. Both thermodynamic (i.e. efficiency of scavenging reactive species) and kinetic (i.e. rates of hydrogen atom or electron transfer reactions) aspects of available methods are discussed in detail.

A thorough description of all available methods provides a basis and rationale for developing standardized antioxidant capacity/activity methods for food and nutraceutical sciences and industries. This text also contains data on new antioxidant measurement techniques including nanotechnological methods in spectroscopy and electrochemistry, as well as on innovative assays combining several principles. Therefore, the comparison of conventional methods versus novel approaches is made possible. This important resource:

- Offers suggestions for assessing the antioxidant potential of foods and their components
- Includes strategies for the development of healthy functional food products
- Contains information for identifying antioxidant activity in the body
- Presents the pros and cons of the available antioxidant determination methods, and helps in the selection of the most appropriate method

Written for researchers and professionals in the nutraceutical and functional food industries, academia and government laboratories, this text includes the most current knowledge in order to form a common language between research groups and to contribute to the solution of critical problems existing for all researchers working in this field.

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Shahidi

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ANTIOXIDANT ACTIVITY  
& CAPACITY

WILEY

# **Measurement of Antioxidant Activity & Capacity**

## **Recent Trends and Applications**

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