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ISBN	3-031-55287-3
Edizione	[2nd ed. 2024.]
Descrizione fisica	1 online resource (257 pages)
Disciplina	574.1925
Soggetti	Human physiology Enzymology Pharmacology Nutrition Bioinformatics Human Physiology Computational and Systems Enzims Nutrició Farmacologia Bioinformàtica Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Overview -- Foreign Compounds: Foods, Drugs, Chemicals and Life Styles -- Transport and Excretion of Foreign Compounds -- Metabolic Conversion of Foreign Compounds -- Phase I Activation Enzymes -- Phase II Detoxification Enzymes -- Catalytic Reactions of Activation Enzymes -- Catalytic Reactions of Detoxification Enzymes -- Reactive Intermediates and their Interactions -- Metabolite - Associated Cell Toxicities -- Oxidative Stress and Electrophilic Stress -- Metabolic Enzymes: Polymorphism and Species Differences -- Defense Against Oxidative Stress: Nrf2-ARE Pathway -- Inducibility of Metabolic Enzymes -- Inducers of Metabolic Enzymes -- Diversified Classes of Enzyme Modulators -- Metabolite - Mediated Disease Conditions --

## Metabolic Enzyme Induction for Health Benefits -- Diet Effects on Metabolic Enzymes.

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### Sommario/riassunto

This book discusses the many advances in the understanding of the functions and implications of activation and detoxification enzymes. This organized, concise overview will meet the needs of those who are initially exposed to this important subject, particularly for students and researchers in the areas of biomedical sciences, biochemistry, nutrition, pharmacology, and chemistry. The book will also be valuable to advanced researchers. The book discusses subjects associated with foreign-compound-metabolizing enzymes with emphasis on biochemical aspects, including lipophilic foreign compounds, activation and detoxification enzymes, metabolic enzyme catalytic properties, reactive metabolic intermediates, biomedical and biochemical effects, genetic polymorphisms, enzyme inducibility, enzyme modulation for health benefits, dietary-related enzyme modulators, and structural characteristics of enzyme inducers. This new edition is updated throughout and features completely new chapters on Oxidative and Electrophilic Stresses, Metabolite-Mediated Disease Conditions, and Defense Mechanism: Nrf2-ARE Pathway. .

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