Record Nr. UNINA9910633969203321 Iron metabolism: a double-edged sword / / edited by Marwa Zakaria, **Titolo** Tamer Hassan Pubbl/distr/stampa London:,:IntechOpen,,[2022] ©2022 **ISBN** 1-83962-998-3 Descrizione fisica 1 online resource (162 pages). : illustrations Collana IntechOpen series. Biochemistry;; Volume 37 612.3924 Disciplina Iron - Metabolism Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. Dietary Iron. 2. Iron in Cell Metabolism and Disease. 3. Role of Transferrin in Iron Metabolism. 4. Hepcidin. 5. Abnormal Iron Metabolism and Its Effect on Dentistry. 6. Ferroptosis: Can Iron Be the Downfall of a Cell? 7. Potential Marker for Diagnosis and Screening of Iron Deficiency Anemia in Children. 8. FERALGINE™ a New Oral iron Compound. Sommario/riassunto Iron is an essential element for numerous fundamental biologic processes. Iron-containing proteins are required for vital cellular and organismal functions including oxygen transport, mitochondrial respiration, intermediary and xenobiotic metabolism, nucleic acid replication and repair, host defense, and cell signaling. However, excess iron is toxic. This book provides a comprehensive overview of the essential role of iron in biology, the regulation of systemic and cellular iron homeostasis, and how imbalances in iron homeostasis contribute to disease.