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Sommario/riassunto

In the current edition, *Selenium: Its Molecular Biology and Role in Human Health* expands extensively on the previous editions providing readers with the most significant advances in the rapidly developing selenium field. Evidence from epidemiology and veterinary science supports the essential role of selenium in (human) health, but its split personality in both preventing and supporting cancer and also in promoting insulin resistance has become more clearly defined. The pivotal role of glutathione peroxidase 4 in a new process of programmed cell death, ferroptosis, brings new impetus to the field. Recently defined mutations in selenoprotein and biosynthesis factor genes have been identified in patients, and the resulting disorders further emphasize the significance of selenoproteins in human health. The mechanism of selenoprotein biosynthesis, the functions of selenoproteins, and the roles of dietary selenium have been further elucidated, and new regulatory mechanisms involving selenoproteins discovered. The book, therefore, covers the breadth of current selenium research. With up-to-date chapters written by leaders in their fields, it serves as an invaluable resource for novices as well as specialists.
