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   Titolo   Decreasing oxidative stress and retarding the aging process / / Borut
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   Edizione   [1st ed.]

   Descrizione fisica 1 online resource (220 p.)

   Collana   Aging issues, health and financial alternatives

   Disciplina   616.3/9

   Soggetti   Oxidative stress
                       Aging - Physiological aspects
                       Antioxidants - Physiological effect

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Note generali   Description based upon print version of record.

   Nota di bibliografia   Includes bibliographical references and index.

   Nota di contenuto   Introduction to the aging process -- Description of the problem --
                       Metabolic rate and life span -- The evolutionary reasons for not
                       perfecting the prevention of free radical formation -- Methods to
                       decrease oxidative stress and retard the aging process -- How do
                       methods claiming to decrease oxidative stress compare with studies on
                       long-lived populations? -- Methodology for detection of oxidative state
                       in biological systems.

   Sommario/riassunto Ageing is an inevitable biological process that affects most living
                       organisms. The link between metabolic rate and reactive oxygen
                       species production is an important and long-standing question, and a
                       source of much controversy. A by-product of cell respiration in
                       mitochondria is the formation of reactive oxygen species due to
                       electron leakage from the electron transport chain during oxidative
                       phosphorylation. In simple terms, humans are ageing due to oxygen
                       consumption. Damage induced by oxygen appears to be the major
                       contributor to ageing and the degenerative diseases of ageing such as
                       cancer, cardiovascular disease, immune system decline, and brain
                       dysfunction. This book presents the reasons for oxidative stress
                       formation and the answer to why during the course of evolution the
                       process of free radical damage and defense did not become more
                       perfect so as to produce less free radicals.