Record Nr. UNINA9910155302003321 Antioxidants in Andrology / / edited by Giancarlo Balercia, Loredana **Titolo** Gandini, Andrea Lenzi, Francesco Lombardo Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (VII, 79 p. 7 illus. in color.) Trends in Andrology and Sexual Medicine, , 2367-0088 Collana Disciplina 613.286 Soggetti Andrology Endocrinology Endocrinology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Biochemistry of coenzyme Q10 -- Coenzyme Q10 in male infertility --Carnitine in male infertility -- Free radicals in andrology --Antioxidants in male sexual disorders -- Antioxidants in major accessory gland infections. This book focuses on the use of various molecules with antioxidant Sommario/riassunto properties in the treatment of major male genital tract disorders, especially male infertility, erectile dysfunction, and accessory gland infection. The coverage also includes discussion of pathophysiology, the molecular basis of male infertility, and the rationale for use of antioxidants, with particular attention to coenzyme Q10 and carnitine. Oxidative stress occurs when the production of reactive oxygen species, including free radicals, exceeds the body's natural antioxidant defences, leading to cellular damage. Oxidative stress is present in about half of all infertile men, and reactive oxygen species can produce infertility both by damaging the sperm membrane, with consequences for sperm motility, and by altering the sperm DNA. There is consequently a clear rationale for the use of antioxidant treatments within andrology, and various in vitro and in vivo studies have indicated that many antioxidants indeed have beneficial impacts. In providing a detailed and up-to-date overview of the subject, this book will be of

interest to both practitioners and researchers in andrology.