

1. Record Nr.	UNINA9910800188203321
Autore	Valentine Raymond C
Titolo	Human Longevity
Pubbl/distr/stampa	CRC Press, 2014
ISBN	0-429-16877-2 1-4665-9487-X
Descrizione fisica	1 online resource (248 p.)
Classificazione	MED008000SCI049000TEC012000
Altri autori (Persone)	ValentineDavid L
Disciplina	612.6/7
Soggetti	Aging - Genetic aspects Mitochondria Oxidative stress Omega-3 fatty acids - Health aspects
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 at the end of each chapters.
Nota di contenuto	Chapter 5: Remarkable Longevity of Queens of Social Insects Likely Involves Dietary Manipulation to Minimize Levels of Polyunsaturates and Decrease Membrane PeroxidationChapter 6: Membrane Peroxidation Hypothesis Helps Explain Longevity in Birds, Rodents, and Whales; Chapter 7: Did Longevity Help Humans Become Super Humans?; Chapter 8: Mitochondrial Diseases and Aging Have Much in Common; Chapter 9: Revised Mitochondrial Hypothesis of Aging Highlights Energy Deficiency Caused by Errors of Replication (Mutations) of mtDNA; Chapter 10: Benefits of Polyunsaturated Mitochondrial Membranes Chapter 16: Uncoupling Proteins (UCPs) of Mitochondria Purposely Waste Energy to Prevent Membrane DamageChapter 17: Mitochondrial Fission Protects against Oxidative Stress by Minting a Continuous Supply of Cardiolipin and Other Polyunsaturated Phospholipids; Chapter 18: Mitophagy Eliminates Toxic Mitochondria; Chapter 19: Longevity Genes Likely Protect Membranes; Chapter 20: Aging as a Cardiolipin Disease That Can Be Treated; Back Cover
Sommario/riassunto	More than 7 billion people inhabit the earth and all of them are subject to aging. This book is aimed at persons interested in a molecular explanation of how our cells age. Human Longevity: Omega-3 Fatty

Acids, Bioenergetics, Molecular Biology, and Evolution is built on the proposition that we age as our mitochondria age. It suggests a revised version of Harman's famous hypothesis featuring mitochondrial oxidative and energy stresses as the root causes of aging. Human cells are protected from the ravages of aging by a battery of defensive systems including some novel mechanisms against membran
