

1. Record Nr.	UNINA9910784658403321
Autore	Finch Caleb Ellicott
Titolo	The biology of human longevity [[electronic resource]] : inflammation, nutrition, and aging in the evolution of lifespans // Caleb E. Finch
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Academic Press, c2007
ISBN	1-281-03721-4 9786611037215 0-08-054594-7
Descrizione fisica	1 online resource (640 p.)
Disciplina	612.6/8
Soggetti	Longevity - Physiological aspects Aging - Physiological aspects Inflammation Nutrition
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(p. 417-599) and indexes.
Nota di contenuto	Front Cover; The Biology of Human Longevity; Copyright Page; Contents; Preface; Acknowledgments; Chapter 1: Inflammation and Oxidation in Aging and Chronic Diseases; Part I; 1.1. Overview; 1.2. Experimental Models for Aging; 1.2.1. Mortality Rate Accelerations; 1.2.2. Mammals; 1.2.3. Cultured Cell Models and Replicative Senescence; 1.2.4. Invertebrate Models; 1.2.5. Yeast; 1.2.6. The Biochemistry of Aging; 1.2.7. Biomarkers of Aging and Mortality Risk Markers; 1.2.8. Evolutionary Theories of Aging; 1.3. Outline of Inflammation; 1.3.1. Innate Defense Mechanisms 1.3.2. Genetic Variations of Inflammatory Responses 1.3.3. Inflammation and Energy; 1.3.4. Amyloids and Inflammation; 1.4. Bystander Damage and Dependent Variables in Senescence; 1.4.1. Free Radical Bystander Damage (Type 1); 1.4.2. Glyco-oxidation (Type 2); 1.4.3. Chronic Proliferation (Type 3); 1.4.4. Mechanical Bystander Effects (Type 4); Part II; 1.5. Arterial Aging and Atherosclerosis; 1.5.1. Overview and Ontogeny; 1.5.2. Hazards of Hypertension; 1.5.3. Mechanisms; 1.5.3.1. Inflammation; 1.5.3.2. Hemodynamics; 1.5.3.3. Aging; 1.5.3.4. Endothelial Progenitor Cells

1.5.4. Blood Risk Factors for Vascular Disease and Overlap with Acute Phase Responses
1.6. Alzheimer Disease and Vascular-related Dementias; 1.6.1. Neuropathology of Alzheimer Disease; 1.6.2. Inflammation in Alzheimer Disease; 1.6.3. Prodromal Stages of Alzheimer Disease; 1.6.4. Overlap of Alzheimer and Cerebrovascular Changes; 1.6.5. Insulin and IGF-1 in Vascular Disease and Alzheimer Disease; 1.6.6. Blood Inflammatory Proteins: Markers for Disease or Aging, or Both?; 1.7. Inflammation in Obesity; 1.8. Processes of Normal Aging in the Absence of Specific Diseases; 1.8.1. Brain
1.8.2. Generalized Inflammatory Changes in Normal Tissue Aging
1.9. Summary; Chapter 2 :Infections, Inflammogens, and Drugs; 2.1. Introduction; 2.2. Vascular Disease; 2.2.1. Historical Associations of Infections and Vascular Mortality; 2.2.2. Modern Serologic Associations; 2.3. Infections from the Central Tube: Metchnikoff Revisited; 2.3.1. Humans: Leakage from Periodontal Disease and Possibly the Lower Intestine; 2.3.2. Worms and Flies as Models for Human Intestinal Microbial Intrusion; 2.4. Aerosols and Dietary Inflammogens; 2.4.1. Aerosols; 2.4.2. Food
2.5. Infections, Inflammation, and Life Span
2.5.1. Historical Human Populations; 2.5.2. Longer Rodent Life Spans with Improved Husbandry; 2.6. Are Infections a Cause of Obesity?; 2.7. Inflammation, Dementia, and Cognitive Decline; 2.7.1. Alzheimer Disease; 2.7.2. HIV, Dementia, and Amyloid; 2.7.3. Peripheral Amyloids; 2.7.4. Inflammation and Cognitive Decline During 'Usual' Aging; 2.8. Immunosenescence and Stem Cells; 2.8.1. Immunosenescence and Cumulative Exposure; 2.8.2. Immunosenescence and Telomere Loss; 2.8.3. Inflammation and Stem Cells; 2.9. Cancer, Infection, and Inflammation
2.9.1. Helicobacter Pylori and Hepatitis B Virus

Sommario/riassunto

Written by Caleb Finch, one of the leading scientists of our time, *The Biology of Human Longevity - Inflammation, Nutrition, and Aging in the Evolution of Lifespans* synthesizes several decades of top research on the topic of human aging and longevity particularly on the recent theories of inflammation and its effects on human health. The book expands a number of existing major theories, including the Barker theory of fetal origins of adult disease to consider the role of inflammation and Harmon's free radical theory of aging to include inflammatory damage. Future increases in lifespan a
