The Biology of Human Longevity: Inflammation, Nutrition, and Aging in the Evolution of Lifespans

Caleb E. Finch
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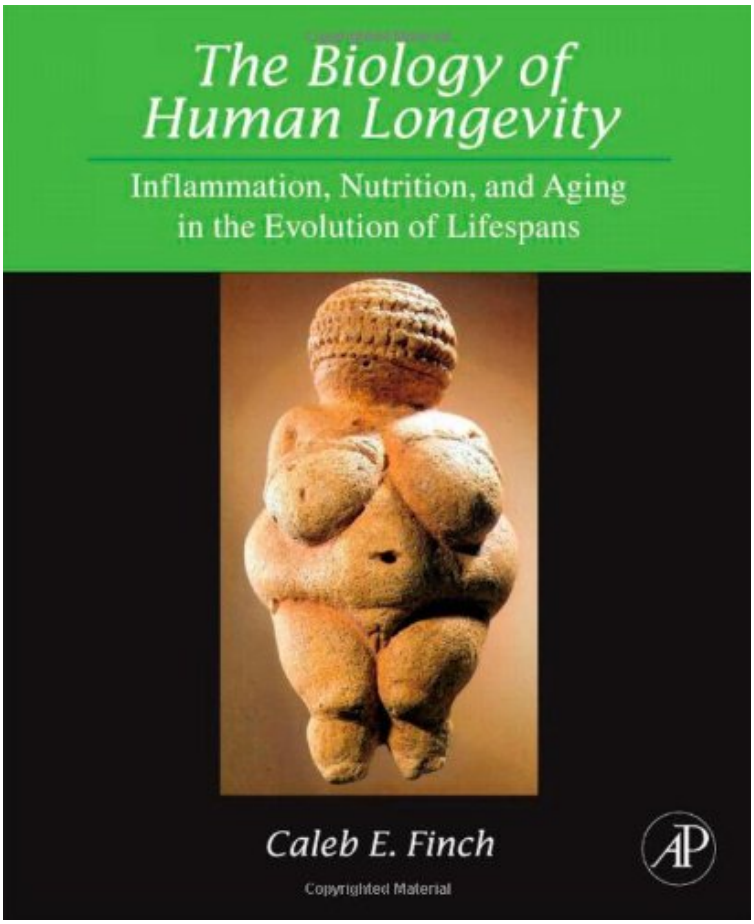

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Caleb E. Finch : The Biology of Human Longevity: Inflammation, Nutrition, and Aging in the Evolution of Lifespans before purchasing it in order to gage whether or not it would be worth my time, and all praised The Biology of Human Longevity: Inflammation, Nutrition, and Aging in the Evolution of Lifespans:

2 of 2 people found the following review helpful. Great overview of the fieldBy Cory GilesAs someone who is trained in other areas of molecular biology, but new to aging research, I found this book really helpful for getting a high-level overview of the field. It covers a broad swath of topics: the comparative biology of aging, specific diseases of aging, various aspects of tissue, cell, and molecular-level aging, and genetic and environmental perspectives.It assumes about the same level of background knowledge as your typical review article, so it isn't really suitable for a lay audience (my wife, who has no biology background but has an interest in aging, tried it, and didn't get very far). Conversely, I think a professional in aging would find it a bit basic, especially now that it is a little dated.Seemingly every aging researcher has a unique theory about the causes of aging and the best way to study it, and the author is no exception.

He is, however, up-front about his biases toward viewing gene-environment interactions and inflammatory processes as especially important, and sensibly portrays aging as "event-related, rather than time-related". Overall, I found this to be a very balanced and well-written introduction to the field and highly recommend it.18 of 20 people found the following review helpful. Mildly disappointedBy G. LautenslagerThis is a great book in some respects. It collects many concepts concerning aging and disease. That said; it is a disappointment because the book suffers from poor editing. It is replete with misspellings and grammatical errors. Further, there are sentences that are completely meaningless, as if the author was interrupted in the middle of a thought.This is a tough read, not because of the subject matter or because of the level of sophistication. It is a tough read because of the errors, and because of the sentence structure. Too bad really, I expected more after reading the review in Science.0 of 1 people found the following review helpful. Four StarsBy Evon H. DialsBought as a request from daughter-in-law for a Christmas gift

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 are challenged by the obesity epidemic and spreading global infections which may reverse the gains made in lowering inflammatory exposure. This timely and topical book will be of interest to anyone studying aging from any scientific angle.Author Caleb Finch is a highly influential and respected scientist, ranked in the top half of the 1% most cited scientistsProvides a novel synthesis of existing ideas about the biology of longevity and agingIncorporates important research findings from several disciplines, including Gerontology, Genomics, Neuroscience, Immunology, Nutrition

"Overall, this is a rich and timely book full of facts, figures, ideas and connections. Finch has generously referenced this work with 182 pages of literature citations, so it can also serve as an excellent reference volume. One wonders how he can keep producing such comprehensive books on so many diverse topics in aging research, and I hope he is not yet finished!" --Huber R. Warner, Associate Dean for Research University of Minnesota in The Gerontologist, March 2009 "With the coupling of his expertise in neuroscience and clinical medicine to his keen interests in demography and comparative zoology, Finch arguably remains our most potent synthesizer of biology and gerontology. Here his writing conveys a sense of urgency not present in his classic Longevity, Senescence, and the Genome.... the intellectual framework Finch provides in it will be intensely stimulating to both experts and newcomers in the field of aging." --Donna J. Holmes, Washington State University, in SCIENCE Magazine, Vol 319, 22 Feb 2008 "This is a monumental book, which reviews and discusses over 3,000 scientific publications on mechanisms of aging and longevity, with special emphasis on the role of inflammation in senescence and age-related degenerative diseases. The author is an internationally recognized leader in the field of biogerontology, and his volume could serve as a useful reference book for a wide readership including biomedical scientists, biogerontologists and clinicians in areas of vascular disease, diabetes, obesity, Alzheimer disease and other neurodegenerative diseases, genetics of aging and longevity, animal models of aging, anthropology and primatology, evolutionary biology, demography and epidemiology." --Dr. Leonid Gavrilov and Natalia S. Gavrilova, Center on Aging, University of Chicago, in Quarterly of Biology (March 1, 2008) "Finch exemplifies the ideal of thorough scholarship, and we should be grateful for his comprehensive summary of ideas and data that bear upon the intriguing question of why humans live as long as they do." --TOM KIRKWOOD, Institute for Ageing and Health, Newcastle University in Age and Ageing 2009; 38: 636-637From the Back CoverAging is a great scientific mystery. Longevity has increased remarkably in the last two hundred years, with doubling of the life expectancy from about 40 to more than 80 years. In the evolutionary past, the human species also evolved longer lifespans apparently doubling that of a great ape ancestor. These redoublings of longevity may be understood in terms of reduced levels of inflammation. There is a remarkable overlap of inflammatory processes in arterial disease, Alzheimer's, cancer, and diabetes. In animal models, these diseases are attenuated by drugs with anti-inflammatory effects or by diet restriction which is also anti-inflammatory. Moreover, the evolution of the human lifespan from great ape ancestors required adaptation to new levels of inflammation during the shift from herbivory to our preferred meat-rich diet. In short, inflammation-diet interactions might well explain the evolution of human longevity and indicate its future potential. The book The Biology of Human Longevity - Inflammation, Nutrition, and Aging in the Evolution of Lifespans synthesizes several decades of top research, and 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 are challenged by the obesity epidemic and spreading global infections which may reverse the gains made in lowering inflammatory exposure. Professor Caleb Finch is one of the leading scientists of our time. Ranked in the top half of the 1 % most cited scientists, Professor Finch is director of the Gerontology Research Institute and the Alzheimer Research Center at the University of Southern California. He has received most of the major awards in

biomedical gerontology. This book will be a scientific publishing event on the same level as his "Longevity, Senescence, and the Genome", published in 1990. A new synthesis expanding on existing ideas about the biology of longevity and agingIncorporates important research findings from several disciplines, including Gerontology, Genomics, Neuroscience, Immunology, NutritionA book of major importance from one of the great scientists of our timeAbout the AuthorDr. Finchs major research interest is the study of basic mechanisms in human aging with a focus on inflammation. He has received numerous awards in biomedical gerontology, including the Robert W. Kleemeier Award of the Gerontological Society of America in 1985, the Sandoz Premier Prize by the International Geriatric Association in 1995, and the Irving Wright Award of AFAR and the Research Award of AGE in 1999. He was the founder of the NIA-funded Alzheimer Disease Research Center in 1984 and currently serves as co- Director. Dr. Finch became a University Distinguished Professor in 1989, an honor held by sixteen other professors at USC who contribute to multiple fields. He is a member of five editorial boards and has written four books including The Biology of Human Longevity (Academic Press 2007) as well as over 470 articles.