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| Titolo | Human body size and the laws of scaling : physiological, performance, growth, longevity and ecological ramifications // editor, Thomas Samaras |
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| ISBN | 1-62417-074-9 |
| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (x, 381 pages) : illustrations (some color) |
| Altri autori (Persone) | SamarasThomas T |
| Disciplina | 611 |
| Soggetti | Body size Human ecology Human evolution |
| 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 | Why the study of human size is important / Thomas Samaras -- Human scaling and the body mass index / Thomas Samaras -- Advantages of taller human height / Thomas Samaras -- Advantages of shorter human height / Thomas Samaras -- Body height and its relation to chronic disease and longevity / Thomas Samaras -- BMI and weight: their relation to diabetes, CVD, cancer and all-cause mortality / Thomas Samaras -- The obesity epidemic, birthweight, rapid growth and superior nutrition / Thomas Samaras -- Long-lived mutant, gene knockout and transgenic mice / Andrzej Bartke -- The evolutionary ecology of body size with special reference to allometry and survivorship / C. David Rollo -- Overview of research on giant transgenic mice with emphasis on the brain and aging / C. David Rollo -- Speculations on the evolutionary ecology of Homo sapiens with special reference to body size, allometry and survivorship / C. David Rollo -- Birthweight, height, brain size and intellectual ability / Thomas Samaras -- Impact of body size on resources, pollution, the environment and economics / Thomas Samaras -- Final remarks on human size, scaling and ecological implications / Thomas Samaras. |
| Sommario/riassunto | Several books have been published on scaling in biology and its |

ramifications in the animal kingdom. However, none has specifically examined the multifaceted effects of how changes in human height create disproportionately larger changes in weight, surface area, strength and other physiological parameters. Yet, the impact of these nonlinear effects on individual humans as well as our world's environment is enormous. Since increasing human body size has widespread ramifications, this book presents findings on the human species and its ecological niche. In biology, an 'ecological niche' refers to the role played by a species in its community and how the species interacts with its environment. Thus, a few chapters provide an ecological overview of how increasing human body size relates to human evolution, fitness, health, survival and the environment. This book provides a unique purview of the laws of scaling on human performance, health, longevity and the environment. Numerous examples from various research disciplines are used to illustrate the impact of increasing body size on many aspects of human enterprises, including work output, athletics and intellectual performance.
