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Soggetti	Medicine - Research Biology - Research Geriatrics Cytology Nutrition Aging Post-translational modification Biomedical Research Cell Biology Ageing Post-translational Modifications
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Preface -- Epigenetics and Nutrition -- Calorie restriction as a potent epigenetic modifier -- Anti-inflammatory action of calorie restriction for aging intervention -- Hormonal influence and modulation on aging

-- Epigenetic modification by exercise -- Physiological bases and underlying mechanisms of exercise -- Sarcopenia and its intervention -- Nutritional impacts on osteopenia and osteoporosis -- Nutritional interventions for cardiac aging and age-related cardiovascular diseases -- Nutritional influence on aging brain -- Mechanistic bases of calorie restriction mimetics -- Lessons learned from calorie restricted non-human primate research.

Sommario/riassunto

This book focuses on the three most important aspects of ageing research: nutrition, physical exercise and epigenetics. The contributors discuss ways that age-related epigenetic imprints such as DNA methylation and histone acetylation are modified by these two interventions. The emphasis on epigenetics helps to illuminate the underlying mechanisms of anti-ageing interventions, as ageing and disease are predominately epigenetic phenomena. Among the highlights are chapter-length discussion of such topics as: how anti-inflammatory action of calorie restriction underlies the retardation of ageing and age-related diseases (Chapter 3); epigenetic modification of gene expression by exercise (Chapter 5); the role of functional foods and their bioactive components in bone health (Chapter 8); and an account of the first decade of a study of calorie restriction in nonhuman primates, conducted by the National Institute on Ageing. .
