

Abstract

Musculoskeletal Ageing—Dietary Modification of Longevity Mechanisms to Improve Skeletal Health [†]

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Abstract: Ageing is inextricably linked to a deterioration of the musculoskeletal system. This suggests factors governing lifespan might also impact the maintenance of skeletal integrity throughout life. The Oxford Musculoskeletal Ageing group studies the causes and consequences of skeletal ageing. Recent findings indicate dietary constituents (polyphenols, omega 3 fatty acids, polyamines) have the potential to activate longevity mechanisms in vitro and prevent the onset of age-related disorders in vivo. Alterations in RedOx mediators, autophagic flux, sirtuin enzymes and senescence all contribute to an inter-linked ageing nexus manipulated by diet, to maintain health throughout life.

Keywords: ageing; nutrition; skeleton; polyphenols; polyamines

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