



BioMed Research International

Special Issue on
**Physical Exercise as an Effective Antiaging
Intervention**

CALL FOR PAPERS

In elderly people, functional independence is directly dependent on physical fitness, and ageing is inevitably associated with the declining functions of systems and organs (heart, lungs, blood vessels, and skeletal muscles) that determine physical fitness. Thus, age-related diminished physical fitness contributes to the development of sarcopenia, frailty, or disability, all of which severely deteriorate independent living and thus quality of life. Among the physiological changes associated with aging, those affecting the cardiorespiratory and vascular system and skeletal muscles most affect physical fitness, whereas exercise can attenuate multisystem age decline.

Physical inactivity is becoming a major public health problem worldwide. Exercise can certainly not reverse the aging process, but it does attenuate its deleterious systemic and cellular effects. Most common age-associated chronic conditions are diseases of physiology and thus physiological interventions, of which physical exercise is arguably the best example, are largely the answer. It would be wise to determine which is the most effective exercise dosage (frequency, duration, and intensity) to counteract aging for older people and to implement efficient exercise interventions for this and younger population segments.

We invite researchers to contribute original research articles as well as review articles that will help in understanding the antiaging effects of physical exercise, the development of exercise interventions to counteract aging, and improving physical fitness in elderly.

Potential topics include, but are not limited to:

- ▶ Molecular mediators of the benefits of exercise as antiaging
- ▶ Exercise as prevention or treatment of main chronic diseases (e.g., cardiovascular disease, musculoskeletal disease)
- ▶ Impact of exercise in longevity outcomes
- ▶ Protective effects of exercise prior to and following immobilization, bed rest, and periods of disuse
- ▶ Meta-analysis of dose-response exercise

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/geriatrics/peaa/>.

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