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Physical activity in older individuals: scientific evidence

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Scientific evidence indicates that regular physical activity slows the rate of decline of most physiological age-related parameters associated with health, fitness and quality of life [1]. Senior athletes provide an ideal model for successful aging. Although most of the information derives from individual closed-skill sports, little information is available regarding the motivation to sport participation and dietary and training regimens of senior athletes who might be at risk of incorrect training schedules or nutritional patterns. More recent studies focused on open-skill sports, which require aerobic and anaerobic energy productions, various exercises, cognitive functions, technical capabilities, and inter-individual interactions to cope with the playing environment.

Findings suggest that older athletes maintain good anaerobic and aerobic capacities [2,3], coordination capabilities [4], and attentional skills that outweigh age-related deficits [5].

Furthermore, older athletes competing at a local level are less supported by self-determination as compared to age-matched athletes competing at national or international levels [6]. Moreover, senior competitions elicit high physiological responses, which represent a potential danger when no medical approval is obtained before starting the program [1,2]. Furthermore, older athletes undergoing improper diet regimens show amplified subjective perception of training intensity, attributable to their feelings rather than training parameters per se [5].

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