## Exercise in the elderly

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## Abstract

Aging is associated with functional systems decay and unfavorable consequences on exercise capacity. The principal factors that limit the movement are those ones due to the locomotor's apparatus modifications during aging: bones, joints (at the level of cartilages, ligaments and tendons) and muscles modifications. Sedentarism causes the apparition of the elders' deconditioning syndrome.

The direct benefits of physical exercise are multiple and they include: physiological, psychic and social function improvements, functional ability improvement, prevention and treatment of some diseases, prevention of accidents by falling and of the lesions due to that, reduction of general mortality and reduction of iatrogenic incidence. The most common risks of exercise in the elderly are osteo-musculary lesions (ligaments and muscles sprainings).

Evaluation by use of interviews or a questionnaire is recommended to all elderly patients to start an adequate exercise program. The optimal indicator for the evaluation of the exercise aerobic capacity of the aged organism is the maximal oxygen consumption (VO<sub>2</sub> max).

Recommendations regarding types of physical exercise type include: endurance exercises, muscular force exercises, training exercises for equilibrium improvement and flexibility exercises.

**Keywords:** elderly, physical exercise, benefits, risks, effort testing.

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