

LECTURE PRESENTATION

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# The protective role of physical activity in different pathologies

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The protective role of physical activity in different pathologies has been shown in numerous scientific studies on the general public and especially among older adults [1].

Physical activity has been shown to be effective in reducing the onset of several chronic pathologies, such as cardiovascular diseases, hypertension [2], diabetes, osteoporosis, obesity [3]. and neoplastic diseases, also it helps to diminish depression and anxiety by maintaining a balanced mood.

Exercise activates the metabolic system in order to supply energy, in a trained organism it increases the use of glucose from part of the muscle which increases or diminishes the onset of hyperglycemia, typical of diabetes [4].

Lipid metabolism is favorably influenced by the decrease of the lipoprotein at low density LDL by increasing the HDL [5].

An exercise that burns out 4-7 Kcal/minute reduces cardiovascular mortality rate in men and women, no matter the age group. Increasing the intensity of muscle activity, the risk of mortality rate in cardiovascular diseases tend to progressively diminish [6].

Regular physical activity has also significantly been shown to decrease the risk of colon and breast cancer [7].

The mechanical stimulus produced by physical activity promotes bone remodelling. In particular, physical activity transfers stimulus to the bone in two ways: directly to the body's weight on the skeleton, and indirectly through muscle activity [8].

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