

Lifestyle changes and healthy aging

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Theme: Lifestyle i menopauza

Aim: The aim of this lecture is to summarize the current scientific evidence dealing with nutrition and microbiota, herbal preparations, relaxation techniques and moderate physical activity in the prevention of premature ageing, with the emphasis on postmenopausal period.

Materials and methods: Based on recent scientific publications selected through PubMed, analysis of the available evidence on possible effectiveness in intervention through food, natural compounds, relaxation techniques and physical activity regarding menopausal symptoms and women's health, has been performed.

Results and Conclusion: Existing data and results obtained by many scientific research groups acknowledge a set of guidelines, but also report uncertainties and yet undiscovered features when premature ageing during the menopause is considered. Briefly, i) **Nutrition:** Nutrient-rich, "microbiota-friendly" and low-calorie diet is recommended to avoid premature aging and preserve hormonal balance ii) **Herbal preparations:** Although, used by women who are reluctant to use estradiol, the potential beneficial effect in menopause still needs to be proven, as well as safety when combined with some medications; iii) **Relaxation techniques:** Some forms of relaxation techniques reduce stress and increase mental and cognitive functions, which in turn increase positive cellular biomarkers, suggesting amelioration of stress-induced cellular aging processes; and iv) **Moderate physical activity:** moderate altitude hiking provides number of cardiovascular benefits in patients with metabolic diseases. Additionally, the mild hypoxic state was proven to reduce premature ageing at molecular levels in *in vivo* experiments.