

The Effects of Physical Activity on Menopausal Symptoms and Metabolic Changes around Menopause

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Abstract: Perimenopausal women experience symptoms like hot flushes and night sweats, dyspareunia and urethritis, mood swings, and sleep disturbances. Furthermore, the decreasing ovarian steroid hormone production, including both 17 β -estradiol and progesterone, affects several metabolic systems such as the turnover of bone tissue, lipoprotein metabolism, and also the direct estrogen effects on the vessel walls. Estrogen substitution treatment has been proven to counteract many of these symptoms and metabolic changes, but some women have medical contraindications for estrogen treatment while some other women prefer to avoid such treatment. There is thus a need for alternative treatment. Regular physical exercise counteracts some of the changes due to menopause. Thus, exercise protects against bone loss, changes in lipoprotein metabolism, hypertension, and may even decrease vasomotor symptoms. Exercise also has a positive impact on mental health. This article reviews data concerning the effects of exercise in peri- and postmenopausal women. Exercise may cause the same magnitude of change as that induced by estrogen therapy. Positive effects of exercise are influenced by other factors such as general awareness of lifestyle, diet, smoking habits. There is a need for long-term prospective, randomized studies before definitive conclusions can be drawn as to the benefits of exercise on well-being and various menopause and other age-related health factors.

Key Words: Exercise -- Metabolic effects -- Hot flushes -- Cardiovascular disease.