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Abstract

Title: The effect of soy protein with isoflavones on menopausal symptoms

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Background: Somatic-, urogenital- and psychological symptoms related to menopause could have a negative impact on quality of life, and overall health. Impoverished quality of life and health could be related to women’s decreasing estrogen production during menopause. Hormone therapy has been well established for relieving menopausal symptoms. However, recent reports have shown an increased risk of adverse effects. Therefore, “Complementary and Alternative medicine” has brought attention to soy. Soy protein with isoflavones could possibly replace the decreasing estrogen production during, and after menopause, and therefore decrease the incidence of menopausal symptoms.

Objective: The aim of this review is to compile available scientific research on intervention with soy isoflavones, and the effect on menopausal symptoms, among healthy women during and post menopause, when using “Menopause Rating Scale”.

Search strategy: This systematic literature review was made searching in the databases Pubmed and Scopus. The following search terms was used: “menopause”, “climacteric”, “soy”, “soy proteins”, “soy foods”, “soy supplement”, “soy isoflavones”, “menopause rating scale” and “MRS”, in different combinations.

Selection criteria: Inclusion criteria were human studies using soy protein with isoflavones as only intervention. The articles were to be written in English or Swedish language. Outcome measures were assessed with “Menopause rating scale”. The study population were peri- or postmenopausal, healthy women.

Data collection and analysis: Two studies were reviewed and evaluated, using the survey “Mall för kvalitetsgranskning av randomiserade studier” written by Swedish agency for health technology assessment. The selected endpoints evidence were graded using “Underlag för sammanvägdt bedömning enligt GRADE”, written by Institution of medicine, Sahlgrenska akademin.

Main results: Both studies displayed a statistically significant, positive effect on intervention with soy protein withholding isoflavones, regarding somatic- and urogenital symptoms related to menopause. There were no positive effects discovered when studying psychological, menopausal symptoms.

Conclusions: The strength of evidence regarding the effect of intervention with soy protein withholding isoflavones on somatic- and urogenital symptoms after 12-16 weeks is high (++++) when using the MRS on healthy peri- and postmenopausal women. The strength of evidence regarding the effect on psychological symptoms, when using soy protein with isoflavones as intervention, is high (++++) regarding a default in statistic significant relief of symptoms after 12-16 weeks.

Keywords: menopause, climacteric, soy protein, isoflavones, menopause rating scale, MRS.