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## The effect of Resveratrol on menopausal symptoms: a systematic review

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Menopause-related complaints negatively impact the quality of life of women experiencing menopausal transition worldwide<sup>(1)</sup>. Comprehensive hormone-based therapies have been the treatment of choice for menopausal symptoms such as vasomotor symptoms (e.g., hot flushes and night sweats). Vasomotor symptoms may lead to increased anxiety, stress and embarrassment affecting psychological well-being and negatively impacting aspects of quality of life including cognitive impairment, mood disturbances, physical pain, fatigue, and social and work-related challenges. Nutraceutical supplementation has increased as an alternative or complementary approach to alleviate menopause-related complaints<sup>(1)</sup>. Nutraceuticals refer to a class of natural compounds isolated or purified from foods with potential health benefits and are typically available in medicinal forms (e.g., powders and pills<sup>(2)</sup>. Resveratrol (3,5,4'-trihydroxystilbene) belongs to a family of polyphenolic compounds known as stilbenes found in foods such as red grapes, berries, peanuts, and red wine and other plant sources and has gained interest for its potential beneficial effects on menopausal symptoms. The objective of this systematic literature review was to assess the impact of resveratrol supplementation (oral) on menopausal related complaints in women experiencing menopause. A literature search of electronic databases PubMed, CINAHL, Science Direct, Sport Discuss and the Science Citation Index and Conference Proceedings Citation Index (Web of Science) was conducted in February 2022. Criteria for inclusion were: (i) menopausal women; (ii) interventions that employed resveratrol supplementation; (iii) menopausal related complaints as an outcome (iv) studies published within the past five years. Studies were excluded if they were not; original research, published in English or included participants with a serious illness or health condition. Nine articles from 239 searched including 730 participants formed the basis of this qualitative review. When compared to placebo/ control resveratrol supplementation significantly improved cognitive function, bone mineral density, perception of pain experienced and enhanced cerebrovascular function in postmenopausal women. No significant effects were observed in depressive symptoms (CES-D) with resveratrol supplementation however when combined with other ingredients improvements in depressive symptoms and insomnia were observed. Marginal improvements in measures of mood states with a trend towards improved overall wellbeing and quality of life were observed. Overall, the studies included indicate that regular consumption of resveratrol may enhance cerebrovascular function, improve cognition, slow bone loss and reduce overall perception of pain experienced in postmenopausal women. Resveratrol supplementation may provide a promising therapeutic treatment for menopause-related complaints. Further research of resveratrol supplementation in this cohort is warranted.

## References

1. Rattanatantikul T, et al. (2022) J Dietary Supplements 19, 168-183.

2. Trottier G, et al. (2010) Nat Rev Urol 7, 21-30.