



## Selección de Resúmenes de Menopausia

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### Red Wine as an Aromatase Inhibitor: A Narrative Review

Joseph Pergolizzi Jr 1, Jo Ann K LeQuang 2, Morgan Wagner 3, Rania Salah 4, Peter Magnusson 5, et al.

As estrogen-dependent breast cancer is more affected by the local production of estrogen via aromatase than serum estrogen, aromatase inhibitors for treating breast carcinomas in postmenopausal women have been developed. As the aromatase enzyme converts endogenous androgen to estrogenic compounds, its blockade lowers the in situ production of estrogen, demonstrated to encourage tumor proliferation. Red wine, but not white wine, may have aromatase-inhibiting properties that are being elucidated, although the exact mechanisms of action are not known. Polyphenols, tannins, and resveratrol have all been implicated as aromatase blockers, and there may also be synergistic interplay among selected constituents. The role of red wine would be in chemoprevention, the use of natural or synthetic substances to retard, block, or reverse cancer. One gene encodes aromatase, so aromatase inhibition would stop endogenous estrogen production. The role of aromatase inhibition in breast cancer in premenopausal women is not clear. While animal studies have demonstrated that red wine contains constituents that could block aromatase in vivo, the benefits also exist with nonalcoholic grape seed extract. Further investigation is needed but there are challenges in designing appropriate clinical trials for a substance as variable as red wine. While there is insufficient evidence to advocate for red wine as an aromatase inhibitor, there is sufficient evidence to warrant further investigation.

**J Lipid Atheroscler. 2024 May;13(2):97-110. doi: 10.12997/jla.2024.13.2.97. Epub 2024 Jan 16.**

### Differences in Risk Factors for Coronary Atherosclerosis According to Sex

Hack-Lyong Kim 1

Interest in sex differences related to coronary artery disease (CAD) has steadily increased, and the risk factors for CAD show distinct sex differences. For women, cardiovascular risk increases significantly after menopause due to a decrease in estrogen levels. In older individuals, increased arterial stiffness results in a higher pulse pressure, leading to a more common occurrence of isolated systolic hypertension; these changes are more noticeable in women. While the incidence of diabetes is similar in both sexes, women with diabetes face a 50% higher relative risk of fatal coronary heart disease compared to men. Smoking significantly increases the risk of ischemic heart disease in women, particularly those who are younger. The decrease in estrogen in women leads to a redistribution of fat, resulting in increased abdominal obesity and, consequently, an elevated cardiovascular risk. Pregnancy and reproductive factors also have a significant impact on CAD risks in women. Additionally, disparities exist in medical practice. Women are less likely to be prescribed cardioprotective drugs, referred for interventional or surgical treatments, or included in clinical research than men. By increasing awareness of these sex differences and addressing the disparities, we can progress toward more personalized treatment strategies, ultimately improving patient outcomes.

**Explore (NY). 2024 May 22:S1550-8307(24)00092-2. doi: 10.1016/j.explore.2024.05.010. Online ahead of print.**

### The effect of soy isoflavones given to women in the climacteric period on menopausal symptoms and quality of life: Systematic review and meta-analysis of randomized controlled trials

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Objective: This systematic review and meta-analysis aimed to examine the effect of soy isoflavones on menopausal symptoms and quality of life in climacteric women. Method: The literature search was conducted in PubMed, CINAHL, Scopus, and Science Citation Index (Web of Science) until September 2023. This study is based on the recommendations of the Cochrane guidelines. The data were analysed using the Review Manager computer software (Version 5.4). The methodological quality of the studies was assessed with the RoB-2 tool. Results: This analysis was completed with five studies and 425 climacteric women. According to the results of the analysis, menopausal symptoms (SMD: -0.49, 95 % CI: -1.13 to 0.16, Z = 1.47, p = 0.14), physical component (MD: -1.10, 95 % CI: -4.22 to 2.01, Z = 0.70, p = 0.49) and mental component (MD: 0.81, 95 % CI: -6.73 to 8.35, Z = 0.21, p = 0.83), but there

was a significant difference in depression level (SMD: -0.41, 95 % CI: -0.73 to -0.09,  $Z = 2.53$ ,  $p = 0.01$ ). Conclusion: According to the results of the analysis, soy isoflavones had no effect on menopausal symptoms (vasomotor, psychosocial, physical, sexual, and urogenital complaints) and quality of life in climacteric women but did reduce the level of depression. There was a high risk of conflict of interest in the included studies.

**Cancer. 2024 Jun 2. doi: 10.1002/cncr.35391. Online ahead of print.**

### **Alcohol intake and endogenous sex hormones in women: Meta-analysis of cohort studies and Mendelian randomization**

Sandar Tin Tin 1, Karl Smith-Byrne 1, Pietro Ferrari 2, Sabina Rinaldi 2, Marjorie L McCullough 3, et al.

Background: The mechanisms underlying alcohol-induced breast carcinogenesis are not fully understood but may involve hormonal changes. Methods: Cross-sectional associations were investigated between self-reported alcohol intake and serum or plasma concentrations of estradiol, estrone, progesterone (in premenopausal women only), testosterone, androstenedione, dehydroepiandrosterone sulfate, and sex hormone binding globulin (SHBG) in 45 431 premenopausal and 173 476 postmenopausal women. Multivariable linear regression was performed separately for UK Biobank, European Prospective Investigation into Cancer and Nutrition, and Endogenous Hormones and Breast Cancer Collaborative Group, and meta-analyzed the results. For testosterone and SHBG, we also conducted Mendelian randomization and colocalization using the ADH1B (alcohol dehydrogenase 1B) variant (rs1229984). Results: Alcohol intake was positively, though weakly, associated with all hormones (except progesterone in premenopausal women), with increments in concentrations per 10 g/day increment in alcohol intake ranging from 1.7% for luteal estradiol to 6.6% for postmenopausal dehydroepiandrosterone sulfate. There was an inverse association of alcohol with SHBG in postmenopausal women but a small positive association in premenopausal women. Two-sample randomization identified positive associations of alcohol intake with total testosterone (difference per 10 g/day increment: 4.1%; 95% CI, 0.6-7.6) and free testosterone (7.8%; 4.1-11.5), and an inverse association with SHBG (-8.1%; -11.3% to -4.9%). Colocalization suggested a shared causal locus at ADH1B between alcohol intake and higher free testosterone and lower SHBG (posterior probability for H4, 0.81 and 0.97, respectively). Conclusions: Alcohol intake was associated with small increases in sex hormone concentrations, including bioavailable fractions, which may contribute to its effect on breast cancer risk.

**Cureus. 2024 Apr 29;16(4):e59277. doi: 10.7759/cureus.59277. eCollection 2024 Apr.**

### **Balance in Transition: Unraveling the Link Between Menopause and Vertigo**

Melissa Castillo-Bustamante 1 2, Neşe Çelebisoy 3, Luis G Echavarría 4, Isabela Franco, Santiago Valencia, et al.

The onset of menopause, marked by hormonal fluctuations and a decline in estrogen levels, is suggested to be linked to increased susceptibility to vestibular disturbances. Estrogen, beyond its established association with reproductive physiology, plays modulatory roles in various physiological systems, including neurosensory function. The vestibular system, crucial for balance and spatial orientation, is influenced by hormonal changes during menopause, potentially contributing to the emergence of vertigo symptoms. This interplay between hormones and the vestibular system is a burgeoning area of research with clinical implications, offering insights into novel diagnostic and therapeutic approaches for managing postmenopausal women with vestibular disorders. The article reviews current scientific literature, delves into the hormonal intricacies of menopause, and investigates potential mechanisms underlying the connection between hormonal fluctuations and vertigo symptoms.