

## Selección de Resúmenes de Menopausia

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**Am J Geriatr Psychiatry Open Sci Educ Pract. 2025 Dec;8:63-74. doi: 10.1016/j.osep.2025.10.002.**

### **Bidirectional Associations Between Obesity and Depressive Symptoms: Results From the Multiethnic Postmenopausal Cohort of the Women's Health Initiative Study**

Nicole P Yuan 1, Hamza Butt, Jordan F Karp, Eniola Idowu, Chengcheng Hu, Aladdin H Shadyab, Julie C, et al. Objectives: Although obesity and depression are prevalent among postmenopausal women, few cohort studies have examined the association between obesity and depression among this population. We examined longitudinal and bidirectional associations between obesity and depressive symptoms among U. S. postmenopausal women. Design: We analyzed data from Women's Health Initiative (WHI) study. Participants: Sample consisted of 95,238 postmenopausal women, aged 50-79, from the WHI study who had obesity and depression data at baseline and 3-year follow-up. Measurements: The dataset included anthropometric measurements of height and weight and the Burnam self-report screening instrument for depression. We conducted logistic regression analyses to assess the bidirectional association between obesity and depressive symptoms, adjusting for confounding factors, including age, race, ethnicity, years since menopause, marital status, education, employment status, and family income. Results: At baseline, 11.3% of the women reported depressive symptoms and 25% were categorized as obese (body mass index  $\geq 30$  kg/m<sup>2</sup>). Women who were obese at baseline were significantly more likely to report depressive symptoms at 3-year follow-up (OR = 1.26, 95% CI: 1.19-1.34) compared to women who were not obese. Women who reported depressive symptoms at baseline had higher odds of being obese at 3-year follow-up (OR = 1.33, 95% CI: 1.20-1.46) compared to women who did not. Age, race, ethnicity, and years since menopause did not modify the associations. Conclusions: Our findings of longitudinal and bidirectional associations between obesity and depressive symptoms highlight the importance of addressing both diseases among postmenopausal women in the U.S.

**Int J Womens Health. 2025 Dec 25;17:5609-5622. doi: 10.2147/IJWH.S568174. eCollection 2025.**

### **Association Between Reproductive Lifespan and All-Cause and Cardiovascular Mortality in Women Aged 65 Years and Older: A Cohort Study Using NHANES 1999-2018 Data**

Xiaohui Chen 1, Chunxue Li 1, Yue Bai 1, Lin Li 1

Purpose: The association between reproductive lifespan and all-cause and cardiovascular mortality in women aged  $\geq 65$  years remains unclear. We examined this association in a nationally representative sample of older US women using NHANES data. Patients and methods: The study included postmenopausal women aged 65 years and older from the NHANES database as our study cohort. Throughout the analyses, NHANES sampling weights were applied to account for the complex survey design, and multiple imputation were used to deal with missing values. Multivariable Cox regression, restricted cubic splines, Kaplan-Meier survival curves, and subgroup analyses were used to estimate the associations between reproductive lifespan and both all-cause and cardiovascular mortality. Additionally, sensitivity analyses were performed to verify the robustness of the results. Results: Among 4514 participants followed for a median of 101 months, all-cause mortality occurred in 1843 (38.67%) and cardiovascular mortality in 512 (10.74%). A linear relationship was observed between reproductive lifespan and all-cause mortality; in the fully adjusted model, for each additional year of reproductive lifespan, the risk of all-cause mortality decreased by 1% (HR = 0.99, 95% CI 0.98-0.99,  $p < 0.001$ ). Conversely, the relationship between reproductive lifespan and cardiovascular mortality followed an L-shaped curve. Further threshold-effect analysis identified an inflection point at 36 years: for reproductive lifespan  $< 36$  years, each additional year conferred a 2% reduction in cardiovascular mortality risk (HR = 0.98, 95% CI 0.95-1.00,  $p = 0.033$ ), whereas the protective effect plateaued when reproductive lifespan  $\geq 36$  years. Conclusion: Short reproductive lifespan may be associated with an increased risk of all-cause and cardiovascular mortality. Greater attention should be given to women with a short reproductive lifespan.

**Nutrients. 2025 Dec 8;17(24):3837. doi: 10.3390/nu17243837.**

## **Eggs as a Nutrient-Rich Food with Potential Relevance to Sleep Metabolic Health, and Well-Being During the Menopausal Transition: A Narrative Review**

Lilia Convit 1, Christa-Marie Nicola 2, Charles S Urwin 1, Spencer S H Roberts 1, Sze-Yen Tan 1, et al.

Perimenopause and the menopausal transition are characterised by hormonal fluctuations that disrupt thermoregulation, metabolism, and sleep, contributing to adverse changes in body composition and increased cardiometabolic risk. Despite these challenges, food-based strategies to support sleep, appetite regulation, and metabolic health remain underexplored. This narrative review synthesised current evidence on the nutritional factors influencing these outcomes, with emphasis on the potential role of eggs as a nutrient-dense, accessible dietary option for midlife women. Literature searches identified studies examining hormonal mechanisms and the effects of nutrients abundant in eggs, including high-quality protein, choline, tryptophan, melatonin, vitamin D, and antioxidants. Evidence suggests that adequate protein and choline intake may enhance sleep duration, satiety, and preserve lean mass, while vitamin D and antioxidant compounds may support muscle function and mitigate oxidative stress associated with hormonal decline. Collectively, eggs represent a practical whole-food source of nutrients that may play a role in supporting sleep, appetite regulation, and body-composition maintenance during the menopausal transition; however, further high-quality intervention studies are needed to confirm these effects.

**Nutrients. 2025 Dec 8;17(24):3833. doi: 10.3390/nu17243833.**

## **Sex-Specific Diet-Microbiota Interactions in Ageing: Implications for Healthy Longevity**

Julietta Hernandez-Acosta 1, Armando R Tovar 1, Nimbe Torres 1

**Background/Objectives:** Diet-microbiota interactions shape ageing; however, their sex-specific dimensions remain poorly defined. Human studies rarely stratify analyses by sex, while most evidence of sex-dependent microbial and metabolic responses comes from preclinical models. This review synthesizes current findings on the sex-specific pathways linking diet, microbiota, and healthy ageing. **Methods:** A narrative review was conducted by integrating human observational studies, randomized controlled trials, and mechanistic animal research. Evidence was organized into four domains: (1) age-related changes in gut microbial composition; (2) microbiota-derived metabolites; (3) dietary patterns and functional nutrients; and (4) sex-specific endocrine and immunometabolism interactions influenced by the gut microbiota. **Results:** Ageing is characterized by dysbiosis, loss of short-chain fatty acid (SCFA)-producing taxa, expansion of Proteobacteria, and reduced production of key metabolites including butyrate, indoles, and polyamines. Dietary fiber, polyphenols, omega-3 fatty acids, and plant-based proteins help restore these pathways and mitigate inflammaging. Sex differences persist into later life: women show reduced estrobolome activity and SCFA decline after menopause, whereas men display higher levels of pro-atherogenic metabolites such as trimethylamine N-oxide (TMAO). Nutritional interventions, probiotics, and microbial metabolites exhibit sex-dependent responses in both human and animal studies. **Conclusions:** Diet-microbiota interactions shape ageing outcomes through sex-specific metabolic, hormonal, and immunological pathways. Incorporating sex as a biological variable is essential for developing personalized, nutrition-based strategies to support healthy ageing.

**BMC Endocr Disord. 2025 Dec 29;25(1):286. doi: 10.1186/s12902-025-02105-w.**

## **Management for prolactinomas of postmenopausal female patients: a retrospective single-center study**

Xiaoxue Chen 1, Yixin Lu 1, Jiayu Liu 1, Xiaolan Ke 1, Hui Miao, Lian Duan, Fengying Gong, Hongbo Yang, et al.

**Purpose:** To evaluate outcomes of prolactinoma management in postmenopausal women, focusing on treatment withdrawal strategies in premenopausal-diagnosed patients and treatment response in postmenopausal-diagnosed patients. **Methods:** This retrospective study analyzed postmenopausal patients with prolactinomas treated at Peking Union Medical College Hospital from 2014 to 2024. Patients were stratified by diagnosis timing (premenopausal vs. postmenopausal), with premenopausal-diagnosed cases further divided by treatment status. **Results:** Among premenopausal-diagnosed patients (n = 53), 35 attempted to discontinue the medication, and 16 of them experienced recurrence, with median time to recurrence of six months (IQR 4.25–9.75). All recurrent cases regained remission upon retreatment. History of unguided withdrawal attempts before menopause were identified in over half (n = 9, 56.25%) of recurrent cases. Subsequent prolactin measurement revealed statistically higher in the recurrence group than in the remission group in last follow-up before withdrawal, 1–6 months (p = 0.000136) and 6–12 months (p = 0.006717) after

withdrawal. The postmenopausal-diagnosed subgroup ( $n = 6$ ) consisted primarily of microadenomas ( $n = 5$ ) and most showed excellent dopamine agonist response. Conclusions: This study represents the largest retrospective analysis to date to explore the management of prolactinoma in postmenopausal women. The current evidence indicates that dopamine agonist withdrawal represents a promising therapeutic strategy for postmenopausal patients, and further research is warranted to confirm.

**BMC Med. 2025 Dec 30. doi: 10.1186/s12916-025-04595-w. Online ahead of print.**

## **Prevalence of hysterectomy in urban China and associations between metabolic disorders and hysterectomy: a multicenter population-based study involving over 9 million women**

Yanrui Bi # 1, Yuan Ma # 2 3, Jun Zhang 4, Shuchen Wang 1, Qiuyi Zhang 1, Yongxiang Gao 2, Ruomei Hu 2, et al. Background: Hysterectomy prevalence varies from 4 to 41% across populations, but the rates in China and the risk factors remain unclear. The study aimed to estimate the prevalence of hysterectomy in Chinese and explore the potential risk factors. Methods: A multicenter cross-sectional study was conducted with Meinian health screening center chain across 31 provinces of China between January 2017 and December 2018. Data from 9,013,462 participants aged  $\geq 18$  years were extracted for the current study. The geographic variation of hysterectomy prevalence was illustrated with different colors on the national map of China. Relative risk (RR) and 95% confidence intervals (CIs) from log-binomial regression were used to estimate the associations between hysterectomy and metabolic disorders. Results: The age-standardized prevalence of hysterectomy in China was 2.36% (95% CIs, 2.35-2.37), with the highest in the Jiangsu Province (3.26%) and Northeast region (2.67%). Women aged 55-59 years had the highest prevalence of hysterectomy (7.61%). Hysterectomy was positively associated with obesity [RR, 1.31 (95% CIs, 1.29-1.32)]; hypertension [1.22 (1.21-1.23)]; diabetes [1.26 (1.24-1.28)]; hyperglycemia [1.22 (1.20-1.23)]; dyslipidemia [1.18 (1.16-1.19)]; metabolic associated fatty liver disease [1.25 (1.24-1.26)]; and metabolic syndrome [1.18 (1.16-1.21)]. In the 18-34 years age group, the positive associations of hysterectomy with diabetes and hypertension were 6.09 (4.48-8.26) and 6.08 (5.18-7.14). Conclusions: In this large-scale study, the prevalence of hysterectomy was higher among menopausal women or those living in the East and Northeast regions. Hysterectomy was strongly associated with metabolic disorders, especially in women of childbearing age. Further studies were warranted to elucidate the underlying mechanisms and develop public health policies.

**BMC Public Health. 2025 Dec 24;25(1):4304. doi: 10.1186/s12889-025-25612-w.**

## **Social determinants of health and menopausal symptoms: path analysis using the WHO framework**

Fatemeh Vakili 1 2, Malihe Nasiri 3, Shayesteh Jahanfar 4, Sara Shishehgar 5, Zohreh Mahmoodi 6, et al. Introduction: Menopausal symptoms frequently occur in middle-aged women and severely reduce their quality of life worldwide. Considering the potential influences of social determinants of health on menopausal symptoms, this study investigated the relationship between social determinants of health, as outlined by the World Health Organization framework, and menopausal symptoms among Iranian women. Method: This cross-sectional study was conducted on 465 women aged 45 to 55 attending health centers in Kashan, Iran, between March and September 2024. Participants were selected via convenience sampling from a pool of women attending routine check-ups. Data were collected using six validated questionnaires: (1) a demographic and obstetric information survey (age, parity, etc.) (2), a socioeconomic status assessment (income, education) (3), the Multidimensional Scale of Perceived Social Support (MSPSS) (4), the WHO Intimate Partner Violence Questionnaire (WHO-IPV) (5), Sharkey Physical Activity Questionnaire, and (6) the Menopause Rating Scale (MRS) for symptom severity. Data were analyzed using SPSS 27 for descriptive statistics and LISREL 8.8 for path analysis, which modeled direct and indirect effects. Results: Path analysis identified several social determinants directly influencing menopausal symptom severity. Domestic violence ( $B = 0.073$ ,  $p < 0.05$ ) and parity ( $B = 0.84$ ,  $p < 0.01$ ) were positively associated with symptom severity, indicating that higher exposure to violence or more childbirths worsened symptoms. In contrast, perceived social support ( $B = -0.15$ ,  $p < 0.05$ ) and physical activity ( $B = -0.25$ ,  $p < 0.01$ ) showed negative associations, suggesting protective effects. Indirect effects emerged from socioeconomic status ( $B = -0.29$ ,  $p < 0.05$ ), age ( $B = 0.11$ ,  $p < 0.05$ ), and spouse's education ( $B = -0.25$ ,  $p < 0.05$ ), mediated through variables like support and activity levels. BMI uniquely influenced symptoms via direct and indirect paths ( $B = 0.38$ ,  $p < 0.01$ ), with higher BMI linked to greater severity. The model demonstrated excellent fit: RMSEA = 0.027 ( $< 0.06$ ), GFI = 0.99 ( $> 0.90$ ), CFI = 0.97 ( $> 0.90$ ), and  $\chi^2/df = 2.24$  ( $< 3$ ), confirming its robustness. Conclusion: Social

determinants of health significantly influence menopausal symptom severity. Domestic violence and higher parity worsened symptoms, while social support and physical activity had protective effects. Socioeconomic status, spouse's education, and BMI also contributed through direct and indirect pathways. These findings could help healthcare providers identify menopausal and perimenopausal women at risk for severe symptoms and provide women with strategies to reduce symptoms, such as weight loss and physical activity.