



Selección de Resúmenes de Menopausia

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Vitamin D intake, blood vitamin D levels, and the risk of breast cancer: a dose-response meta-analysis of observational studies.

Song D^{1,2}, Deng Y^{1,2}, Liu K³, Zhou L^{1,2}, Li N^{1,2}, Zheng Y², Hao Q², Yang S², Wu Y², Zhai Z², Li H⁴, Dai Z^{1,2}. Epidemiological studies have indicated that blood vitamin D levels are linked to cancer. Here we conducted a dose-response meta-analysis based on published observational studies to evaluate the association of vitamin D intake and blood vitamin D levels with breast cancer susceptibility. PubMed, EMBASE, and Web of Science databases were searched up to January 2019. The pooled odds ratio (OR) and 95% confidence intervals (CIs) were extracted to estimate the risk. We identified 70 relevant studies on blood vitamin D levels (50 studies) and vitamin D intake (20 studies), respectively. Linear and nonlinear trend analyses were performed and showed that an increase in blood vitamin D levels by 5 nmol/l was associated with a 6% decrease in breast cancer risk (OR = 0.94, 95% CI = 0.93-0.96). Similar results were obtained for premenopausal (OR = 0.96, 95% CI = 0.93-0.99) and postmenopausal women (OR = 0.96, 95% CI = 0.94-0.98). The pooled OR of breast cancer risk for a 400IU/day increase in vitamin D intake was 0.97 (95% CI = 0.92-1.02). In conclusion, we found that breast cancer risk was inversely related to blood vitamin D levels; however, no significant association was observed in vitamin D intake.

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Menopause and risk of hip fracture in middle-aged Chinese women: a 10-year follow-up of China Kadoorie Biobank.

Peng K^{1,2,3}, Yao P³, Kartsonaki C³, Yang L³, Bennett D³, Tian M^{2,4}, Li L⁵, Guo Y⁶, Bian Z⁶, Chen Y³, et al. OBJECTIVE: Bone loss is accelerated after menopause in women, as is the risk of hip fracture, but little is known about the importance of age at menopause, time since menopause, and total reproductive years for risk of hip fracture. METHODS: Between 2004 and 2008, the China Kadoorie Biobank recruited 125,336 postmenopausal women who had a natural menopause and recorded 1,327 incident cases of hip fracture during the first 10 years of follow-up. Multivariable Cox regression was used to estimate hazard ratios and 95% CIs for incident hip fracture for age at menopause, time since menopause, and total reproductive years. RESULTS: The mean (SD) age at menopause was 48.8 (4.0) years. Compared with women who reached menopause before age 53 years, women with a later age at menopause had a 22% (95% CI, 11%-35%) lower risk of hip fracture. Compared with women who were <5 years since menopause, those who were 5 to 9, 10 to 14, 15 to 19, and ≥20 years since menopause had hazard ratios of hip fracture of 1.43 (95% CI, 1.01-2.04), 2.10 (95% CI, 1.71-2.57), 2.50 (95% CI, 2.21-2.83), and 2.33 (95% CI, 1.97-2.75), respectively. Women with a longer (≥36 y) versus shorter (<30 y) duration of total reproductive years had a 19% (95% CI, 9-28) lower risk of hip fracture. CONCLUSIONS: Women with younger age at menopause, longer interval since menopause, or shorter duration of total reproductive years had the highest risks of hip fracture.

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The association between DXA-derived body fat measures and breast cancer risk among postmenopausal women in the Women's Health Initiative.

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BACKGROUND: Most studies demonstrating an association between excess adiposity and postmenopausal breast cancer have used anthropometric measures, particularly body mass index (BMI). However, more direct body fat measures may more accurately determine the relationship between body fat distribution and breast cancer risk.

METHODS: Cox proportional hazards regression models were created to examine the associations of dual-energy x-ray absorptiometry (DXA) body fat measures (at baseline and during follow-up) with breast cancer risk among 10 931 postmenopausal women from the Women's Health Initiative cohort. A total of 639 incident invasive breast cancer cases (including 484 estrogen receptor positive (ER+) cases) were ascertained after a median follow-up of 15.0 years.

RESULTS: Excess whole body fat mass and trunk fat mass were positively associated with risk invasive breast cancer

risk. These associations persisted even after additional adjustment for standard anthropometric measures. In time-dependent analyses, we observed that both whole body fat mass and trunk fat mass, in the highest versus lowest category, were associated with a doubling of risk of invasive breast cancer overall (HR: 2.17; 95% CI: 1.54-3.05 and 2.20; 1.55-3.14, respectively) and of ER+ breast cancer (2.05; 1.37-3.05 and 2.03; 1.34-3.07, respectively). The remaining DXA measures were also positively associated with breast cancer risk in baseline and time-dependent analyses. CONCLUSION: These findings suggest that DXA-derived body fat measures are positively associated with breast cancer risk after adjustment for BMI and other conventional breast cancer risk factors.

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Efficacy and Safety of Gabapentin and Pregabalin in Patients with Vasomotor Symptoms: a Systematic Review and Meta-Analysis.

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OBJECTIVE: Vasomotor symptoms are common among postmenopausal women and patients receiving hormone deprivation therapies, and emerging studies are exploring gabapentin's and pregabalin's effects as non-hormonal treatment options. We aimed to assess the efficacy and safety of these two drugs. **DATA SOURCES:** Based on a pre-registered protocol (PROSPERO-CRD42019133650), we searched 10 databases (PubMed, Embase, Web of Science, PsycINFO, Cochrane Central Register of Controlled Trials, ClinicalTrials.gov, CBM, CNKI, VIP and Wanfang) as well as the WHO international clinical trials registry platform and reference lists of related literatures. **STUDY ELIGIBILITY CRITERIA:** Randomized controlled trials (RCT) and randomized crossover studies exploring gabapentin and pregabalin among women patients with vasomotor symptoms were included. **STUDY APPRAISAL AND SYNTHESIS METHODS:** The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) statement was followed. Two reviewers independently selected studies, assessed bias, and extracted data. Mean difference (MD), standardized mean difference (SMD) with 95% confidence intervals (CI) were assessed by random effects models. Heterogeneities were assessed by I² statistics, and the quality of evidence was evaluated by the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach. **RESULTS:** Nineteen RCTs and two randomized crossover trials reporting results from 3519 participants were included. Gabapentin could reduce hot flash frequency (MD -1.62, 95%CI -1.98 to -1.26 after four weeks; MD -2.77, 95%CI -4.29 to -1.24 after 12 weeks) and composite score (SMD -0.47, 95%CI -0.71 to -0.23 after four weeks; SMD -0.77, 95%CI -1.15 to -0.40 after 12 weeks) compared with placebo. Both menopausal participants and patients with breast cancer benefited from treatment. Higher risks of dizziness and somnolence were found in the gabapentin group than in the control group (RR 4.45, 95%CI 2.50 to 7.94; RR 3.29, 95%CI 1.97 to 5.48; respectively). Estrogen was more effective in reducing hot flash frequency than gabapentin. No statistically significant difference in reduction of hot flash severity score was found between gabapentin and antidepressants. The trials comparing gabapentin or pregabalin to the other interventions were too limited to make a conclusion. **CONCLUSIONS:** Favorable effects of gabapentin in relieving vasomotor symptoms were observed, compared to controls, but were less effective than those of estrogen. Evidence supporting the therapeutic effect of pregabalin is still lacking.

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Effects of menopause on sleep quality and sleep disorders: Canadian Longitudinal Study on Aging.

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OBJECTIVES: Sleep complaints are common during the menopause transition. However, it is difficult to disentangle changes in sleep related to aging from those directly due to menopause. We compared sleep disorders in 45 to 60-year-old women in a large population-based study, according to menopausal status. **METHODS:** Women aged between 45 and 60 years who self-reported menopausal status were selected from the Canadian Longitudinal Study of Aging, excluding those with prior hysterectomy. Participants completed assessments for overall sleep satisfaction, hours of daily sleep, sleep-onset insomnia, sleep-maintenance insomnia, daytime somnolence, rapid eye movement sleep behavior disorder (RBD), restless leg syndrome (RLS), and obstructive sleep apnea (OSA). Each sleep variable was compared between postmenopausal and pre/perimenopausal women using multivariate regression, adjusting for potential confounders. **RESULTS:** Among 6,179 women included, 3,713 (60.1%; age 55.7 ± 3.3 years) were postmenopausal and 2,466 (39.9%) were pre/perimenopausal (age 49.80 ± 3.1 years). Compared with pre/perimenopausal women, postmenopausal women were more often reported requiring ≥ 30 minutes to fall asleep

(20.4% vs 15.5%; adjusted odds ratio [AOR] 1.24, 95% confidence interval [CI] 1.00-1.53) and were more likely to meet criteria for possible sleep-onset insomnia disorder (10.8% vs 7.3%; AOR 1.51, 95% CI 1.07-2.12). Postmenopausal women were also more likely to screen positive for OSA (14.6% vs 10.4%; AOR 1.48, 95% CI 1.14-1.92). The two groups did not differ on sleep dissatisfaction (32.4% vs 29%), daytime somnolence disorder (1.6% vs 1.3%), sleep-maintenance insomnia disorder (17% vs 14.5%), RLS (23.5% vs 20.9%), or RBD (3.9% vs 4.0%). CONCLUSIONS: Menopause is associated with increased sleep-onset insomnia. Postmenopausal women also are more likely to screen positive for OSA. However, menopausal status is not associated with sleep maintenance, somnolence, or RLS, and RBD.

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Postmenopausal women with osteoporosis consume high amounts of vegetables but insufficient dairy products and calcium to benefit from their virtues: the CoLaus/OsteoLaus cohort.

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We evaluated the associations between nutrients, dietary patterns or compliance to dietary guidelines and bone health among postmenopausal women from the CoLaus/OsteoLaus cohort. Postmenopausal women with osteoporosis consume a high amount of vegetables but insufficient amount of dairy products and calcium to benefit from their adherence to dietary guidelines. INTRODUCTION: Diet plays a significant role in the prevention of osteoporosis (OP). We evaluated the associations between nutrients, dietary patterns or compliance (expressed in odds of meeting) to dietary Swiss guidelines and bone health (T score < -2.5 SD, TBS < 1230) among postmenopausal women.

METHODS: One thousand two hundred fifteen women (64.3 ± 7.5 years) from the CoLaus/OsteoLaus cohort (Lausanne, Switzerland) had their dietary intake assessed using a validated food frequency questionnaire. Bone mineral density (BMD), trabecular bone score (TBS) and vertebral fractures were evaluated with DXA. OP risk factors, calcium supplements (> 500 mg) and prevalent major OP fractures were assessed by questionnaire. RESULTS: One hundred eighty of 1195 women had OP according to BMD, 87/1185 a low TBS and 141/1215 prevalent major OP fractures. In multivariate analysis (adjusted for total energy intake, age, antiosteoporotic treatment, educational level, BMI, sedentary status and diabetes), OP women consumed more vegetable proteins (21.3 ± 0.4 vs 19.6 ± 0.2 g/day), more fibres (18.2 ± 0.5 vs 16.5 ± 0.2 g/day), less animal proteins (40.0 ± 1.1 vs 42.8 ± 0.4 g/day), less calcium (928 ± 30 vs 1010 ± 12 mg/day) and less dairy products (175 ± 12 vs 215 ± 5 g/day), all $p \leq 0.02$. According to guidelines, OP women had a tendency to higher compliance for vegetables (OR (95% CI) 1.50 (0.99-2.26)) and a lower compliance for dairy (OR (95% CI) 0.44 (0.22-0.86)) than those without OP. Women taking calcium supplements consumed significantly higher amounts of dairy products. No association was found between TBS values or prevalent OP fractures and any dietary components. CONCLUSION: Postmenopausal women with OP consume a high amount of vegetables but insufficient amount of dairy products and calcium. TBS does not seem to be influenced by diet.

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The Microbiome-Estrogen Connection and Breast Cancer Risk.

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The microbiome is undoubtedly the second genome of the human body and has diverse roles in health and disease. However, translational progress is limited due to the vastness of the microbiome, which accounts for over 3.3 million genes, whose functions are still unclear. Numerous studies in the past decade have demonstrated how microbiome impacts various organ-specific cancers by altering the energy balance of the body, increasing adiposity, synthesizing genotoxins and small signaling molecules, and priming and regulating immune response and metabolism of indigestible dietary components, xenobiotics, and pharmaceuticals. In relation to breast cancer, one of the most prominent roles of the human microbiome is the regulation of steroid hormone metabolism since endogenous estrogens are the most important risk factor in breast cancer development especially in postmenopausal women. Intestinal microbes encode enzymes capable of deconjugating conjugated estrogen metabolites marked for excretion, pushing them back into the enterohepatic circulation in a biologically active form. In addition, the intestinal microbes also break down otherwise indigestible dietary polyphenols to synthesize estrogen-like compounds or estrogen mimics that exhibit varied estrogenic potency. The present account discusses the potential role of gastrointestinal microbiome in breast cancer development by mediating metabolism of steroid hormones and synthesis of biologically active estrogen mimics.

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Sustained weight loss and risk of breast cancer in women ≥ 50 years: a pooled analysis of prospective data.

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BACKGROUND: Excess body weight is an established cause of postmenopausal breast cancer, but it is unknown if weight loss reduces risk. **METHODS:** Associations between weight change and risk of breast cancer were examined among women aged ≥ 50 years in the Pooling Project of Prospective Studies of Diet and Cancer. In 10 cohorts, weight assessed on three surveys was used to examine weight change patterns over approximately 10 years (Interval 1 median= 5.2 years; Interval 2 median = 4.0 years). Sustained weight loss was defined as ≥ 2 kg lost in Interval 1 that was not regained in Interval 2. Among 180,885 women, 6,930 invasive breast cancers were identified during follow-up. **RESULTS:** Compared with women with stable weight (± 2 kg), women with sustained weight loss had a lower risk of breast cancer. This risk reduction was linear and specific to women not using postmenopausal hormones (>2 -4.5kg lost: Hazard Ratio (HR)= 0.82, 95% confidence interval (CI): 0.70-0.96; >4.5 -<9kg lost: HR = 0.75, 95% CI: 0.63-0.90; ≥ 9 kg lost: HR = 0.68, 95% CI: 0.50-0.93). Women who lost ≥ 9 kg and gained some (but not all) of it back were also at a lower risk of breast cancer. Other patterns of weight loss and gain over the two intervals had a similar risk of breast cancer to women with stable weight. **CONCLUSIONS:** These results suggest that sustained weight loss, even modest amounts, is associated with lower breast cancer risk for women aged ≥ 50 years. Breast cancer prevention may be a strong weight loss motivator for the two-thirds of American women who are overweight or obese.