 **Selección de Resúmenes de Menopausia**

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[**Clin Interv Aging.**](http://www.ncbi.nlm.nih.gov/pubmed/25258526) **2014 Sep 16;9:1573-1579. eCollection 2014.**

**The relationship between health-related fitness and quality of life in postmenopausal women from Southern Taiwan.**

[Hsu WH](http://www.ncbi.nlm.nih.gov/pubmed?term=Hsu%20WH%5BAuthor%5D&cauthor=true&cauthor_uid=25258526)1, [Chen CL](http://www.ncbi.nlm.nih.gov/pubmed?term=Chen%20CL%5BAuthor%5D&cauthor=true&cauthor_uid=25258526)2, [Kuo LT](http://www.ncbi.nlm.nih.gov/pubmed?term=Kuo%20LT%5BAuthor%5D&cauthor=true&cauthor_uid=25258526)2, [Fan CH](http://www.ncbi.nlm.nih.gov/pubmed?term=Fan%20CH%5BAuthor%5D&cauthor=true&cauthor_uid=25258526)3, [Lee MS](http://www.ncbi.nlm.nih.gov/pubmed?term=Lee%20MS%5BAuthor%5D&cauthor=true&cauthor_uid=25258526)2, [Hsu RW](http://www.ncbi.nlm.nih.gov/pubmed?term=Hsu%20RW%5BAuthor%5D&cauthor=true&cauthor_uid=25258526)2.

**BACKGROUND:** Health-related fitness has been reported to be associated with improved quality of life (QoL) in the elderly. Health-related fitness is comprised of several dimensions that could be enhanced by specific training regimens. It has remained unclear how various dimensions of health-related fitness interact with QoL in postmenopausal women. **OBJECTIVE:** The purpose of the current study was to investigate the relationship between the dimensions of health-related fitness and QoL in elderly women. **METHODS:** A cohort of 408 postmenopausal women in a rural area of Taiwan was prospectively collected. Dimensions of health-related fitness, consisting of muscular strength, balance, cardiorespiratory endurance, flexibility, muscle endurance, and agility, were assessed. QoL was determined using the Short Form Health Survey (SF-36). Differences between age groups (stratified by decades) were calculated using a one-way analysis of variance (ANOVA) and multiple comparisons using a Scheffé test. A Spearman's correlation analysis was performed to examine differences between QoL and each dimension of fitness. Multiple linear regression with forced-entry procedure was performed to evaluate the effects of health-related fitness. A *P*-value of <0.05 was considered statistically significant. **RESULTS:** Age-related decreases in health-related fitness were shown for sit-ups, back strength, grip strength, side steps, trunk extension, and agility (*P*<0.05). An age-related decrease in QoL, specifically in physical functioning, role limitation due to physical problems, and physical component score, was also demonstrated (*P*<0.05). Multiple linear regression analyses demonstrated that back strength significantly contributed to the physical component of QoL (adjusted beta of 0.268 [*P*<0.05]). **CONCLUSION:** Back strength was positively correlated with the physical component of QoL among the examined dimensions of health-related fitness. Health-related fitness, as well as the physical component of QoL, declined with increasing age.

[**Cancer Epidemiol Biomarkers Prev.**](http://www.ncbi.nlm.nih.gov/pubmed/25258014) **2014 Sep 25. pii: cebp.0922.2014. [Epub ahead of print]**

**Cancer Incidence and Mortality during the intervention and post intervention periods of the Women's Health Initiative Dietary Modification Trial.**

[Thomson CA](http://www.ncbi.nlm.nih.gov/pubmed?term=Thomson%20CA%5BAuthor%5D&cauthor=true&cauthor_uid=25258014), [Van Horn L](http://www.ncbi.nlm.nih.gov/pubmed?term=Van%20Horn%20L%5BAuthor%5D&cauthor=true&cauthor_uid=25258014), [Caan BJ](http://www.ncbi.nlm.nih.gov/pubmed?term=Caan%20BJ%5BAuthor%5D&cauthor=true&cauthor_uid=25258014), [Aragaki AK](http://www.ncbi.nlm.nih.gov/pubmed?term=Aragaki%20AK%5BAuthor%5D&cauthor=true&cauthor_uid=25258014), [Chlebowski RT](http://www.ncbi.nlm.nih.gov/pubmed?term=Chlebowski%20RT%5BAuthor%5D&cauthor=true&cauthor_uid=25258014), [Manson JE](http://www.ncbi.nlm.nih.gov/pubmed?term=Manson%20JE%5BAuthor%5D&cauthor=true&cauthor_uid=25258014), [Rohan TE](http://www.ncbi.nlm.nih.gov/pubmed?term=Rohan%20TE%5BAuthor%5D&cauthor=true&cauthor_uid=25258014), [Tinker LF](http://www.ncbi.nlm.nih.gov/pubmed?term=Tinker%20LF%5BAuthor%5D&cauthor=true&cauthor_uid=25258014)4, [Kuller LH](http://www.ncbi.nlm.nih.gov/pubmed?term=Kuller%20LH%5BAuthor%5D&cauthor=true&cauthor_uid=25258014)8, et al.

Background: The Women's Health Initiative (WHI) low fat (20% kcal) diet modification (DM) trial (1993-2005) demonstrated a non-significant reduction in breast cancer, a nominally significant reduction in ovarian cancer and no effect on other cancers (mean 8.3 years intervention). Consent to non-intervention follow-up was 83% (n=37,858). This analysis was designed to assess post-intervention cancer risk in women randomized to the low-fat diet (40%) versus usual diet comparison (60%). Methods: Randomized, controlled low fat diet intervention for prevention of breast and colorectal cancers conducted in 48,835 postmenopausal U.S. women, aged 50-79 years at 40 U.S. sites. Outcomes included total invasive cancer, breast and colorectal cancer, cancer-specific and overall mortality. Results: There were no intervention effects on invasive breast 1.08 (0.94, 1.24) or colorectal cancer, other cancers, cancer-specific or overall mortality during the post-intervention period or the combined intervention and follow-up periods. For invasive breast cancer, the HRs were 0.92 (0.84, 1.01) during intervention, during the post-intervention period, and 0.97 (0.89, 1.05) during cumulative follow up. A reduced risk for estrogen receptor positive/progesterone receptor negative tumors was demonstrated during follow-up. Women with higher baseline fat intake (quartile), point estimates of breast cancer risk were HR-0.76; 0.62, 0.92 during intervention versus HR-1.11; 0.84, 1.4 during post-intervention follow-up (p-diff=.03). Conclusions: Dietary fat intake rose post-intervention in intervention women; no long-term reduction in cancer risk or mortality was shown in the WHI DM trial. Impact: Dietary advisement to reduce fat for cancer prevention after menopause generally was not supported by the WHI DM trial.

[**Fertil Steril.**](http://www.ncbi.nlm.nih.gov/pubmed/25256933) **2014 Sep 23. pii: S0015-0282(14)02075-5. doi: 10.1016/j.fertnstert.2014.08.016. [Epub ahead of print]**

**Magnitude of the impact of hot flashes on sleep in perimenopausal women.**

[de Zambotti M](http://www.ncbi.nlm.nih.gov/pubmed?term=de%20Zambotti%20M%5BAuthor%5D&cauthor=true&cauthor_uid=25256933)1, [Colrain IM](http://www.ncbi.nlm.nih.gov/pubmed?term=Colrain%20IM%5BAuthor%5D&cauthor=true&cauthor_uid=25256933)2, [Javitz HS](http://www.ncbi.nlm.nih.gov/pubmed?term=Javitz%20HS%5BAuthor%5D&cauthor=true&cauthor_uid=25256933)1, [Baker FC](http://www.ncbi.nlm.nih.gov/pubmed?term=Baker%20FC%5BAuthor%5D&cauthor=true&cauthor_uid=25256933)3.

OBJECTIVE: To quantify the impact of objectively recorded hot flashes on objective sleep in perimenopausal women. DESIGN: Cross-sectional study. Participants underwent 1-5 laboratory-based polysomnographic recordings for a total of 63 nights, including sternal skin-conductance measures, from which 222 hot flashes were identified according to established criteria. Data were analyzed with hierarchical mixed-effect models and Spearman's rank correlations. SETTING: Sleep laboratory. PATIENT(S): Thirty-four perimenopausal women (age ± SD: 50.4 ± 2.7 years). INTERVENTION(S): None. MAIN OUTCOME MEASURE(S): Perceived and polysomnographic sleep measures (sleep quality, amount of time spent awake after sleep onset, and number of awakenings). Subjective (frequency and level of bother) and objective (frequency and amount of hot flash-associated awake time) hot-flash measures. RESULT(S): Women had an average of 3.5 (95% confidence interval: 2.8-4.2, range = 1-9) objective hot flashes per night. A total of 69.4% of hot flashes were associated with an awakening. Hot flash-associated time awake per night was, on average, 16.6 minutes (95% confidence interval: 10.8-22.4 minutes), which accounted for 27.2% (SD 27.1) of total awake time per night. Hot flash-associated time awake, but not hot flash frequency, was negatively associated with sleep efficiency and positively associated with waking after sleep onset. In addition, self-reported wakefulness correlated with hot flash-associated waking, suggesting that women's estimates of wakefulness are influenced by the amount of time spent awake in association with hot flashes during the night. Having more perceived and bothersome hot flashes was correlated with more perceived wakefulness and awakenings and more objective hot flash-associated time awake and hot-flash frequency. CONCLUSION(S): The presence of physiological hot flashes accounts for a significant proportion of total objective time awake during the night in perimenopausal women.

[**J Bone Metab.**](http://www.ncbi.nlm.nih.gov/pubmed/25247156) **2014 Aug;21(3):189-94. doi: 10.11005/jbm.2014.21.3.189. Epub 2014 Aug 31.**

**High Dietary Sodium Intake Assessed by 24-hour Urine Specimen Increase Urinary Calcium Excretion and Bone Resorption Marker.**

[Park SM](http://www.ncbi.nlm.nih.gov/pubmed?term=Park%20SM%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Jee J](http://www.ncbi.nlm.nih.gov/pubmed?term=Jee%20J%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)2, [Joung JY](http://www.ncbi.nlm.nih.gov/pubmed?term=Joung%20JY%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Cho YY](http://www.ncbi.nlm.nih.gov/pubmed?term=Cho%20YY%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Sohn SY](http://www.ncbi.nlm.nih.gov/pubmed?term=Sohn%20SY%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Jin SM](http://www.ncbi.nlm.nih.gov/pubmed?term=Jin%20SM%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Hur KY](http://www.ncbi.nlm.nih.gov/pubmed?term=Hur%20KY%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Kim JH](http://www.ncbi.nlm.nih.gov/pubmed?term=Kim%20JH%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Kim SW](http://www.ncbi.nlm.nih.gov/pubmed?term=Kim%20SW%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Chung JH](http://www.ncbi.nlm.nih.gov/pubmed?term=Chung%20JH%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Lee MK](http://www.ncbi.nlm.nih.gov/pubmed?term=Lee%20MK%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1, [Min YK](http://www.ncbi.nlm.nih.gov/pubmed?term=Min%20YK%5BAuthor%5D&cauthor=true&cauthor_uid=25247156)1.

BACKGROUND: The average dietary sodium intake of Koreans is 2.6 times higher than the World Health Organization's recommended amount. The effect of a diet high in sodium on the skeletal system, especially osteoporosis, has not previously been examined in Korean postmenopausal women with low bone mass. We assessed the daily sodium intake, and determined the impact of sodium intake on urinary calcium excretion and bone resorption marker. METHODS: A retrospective review of medical records was performed for 86 postmenopausal subjects who were initially diagnosed with osteopenia or osteoporosis at the health promotion center. They were subsequently referred to the Division of Endocrinology and Metabolism between 2010 and 2013. All subjects completed a modified food frequency questionnaire. Twenty-four hour urine collection for sodium, calcium and creatinine excretion, and serum C-terminal telopeptides of type I collagen (CTX-I) were also obtained. RESULTS: The average amount of daily sodium and calcium intake were 3,466 mg and 813 mg, respectively. Average dietary sodium intake and 24-hour urinary sodium excretion showed significant positive linear correlation (r=0.29, P=0.006). There was also a significant positive linear correlation between 24-hour urine sodium and calcium excretion (r=0.42, P<0.001); CTX-I and 24-hour urinary calcium excretion (r=0.29, P=0.007). CONCLUSIONS: Excessive sodium intake assessed by 24-hour urine specimen is associated with high calcium excretion in urine. High calcium excretion is also related to increasing bone resorption marker.

[**Climacteric.**](http://www.ncbi.nlm.nih.gov/pubmed?term=Tansupswatdikul%20P%5BAuthor%5D&cauthor=true&cauthor_uid=25242569) **2014 Sep 20:1-20. [Epub ahead of print]**

**Effects of estrogen therapy on postmenopausal sleep quality regardless of vasomotor symptoms: a randomized trial.**

[Tansupswatdikul P](http://www.ncbi.nlm.nih.gov/pubmed?term=Tansupswatdikul%20P%5BAuthor%5D&cauthor=true&cauthor_uid=25242569), [Chatkittisilpa S](http://www.ncbi.nlm.nih.gov/pubmed?term=Chatkittisilpa%20S%5BAuthor%5D&cauthor=true&cauthor_uid=25242569), [Jaimchariyatam N](http://www.ncbi.nlm.nih.gov/pubmed?term=Jaimchariyatam%20N%5BAuthor%5D&cauthor=true&cauthor_uid=25242569), [Panyakhamlerd K](http://www.ncbi.nlm.nih.gov/pubmed?term=Panyakhamlerd%20K%5BAuthor%5D&cauthor=true&cauthor_uid=25242569), [Jaisamrarn U](http://www.ncbi.nlm.nih.gov/pubmed?term=Jaisamrarn%20U%5BAuthor%5D&cauthor=true&cauthor_uid=25242569), [Taechakraichana N](http://www.ncbi.nlm.nih.gov/pubmed?term=Taechakraichana%20N%5BAuthor%5D&cauthor=true&cauthor_uid=25242569).

ABSTRACT Objective: To determine the effects of estrogen therapy over objective sleep quality in insomniac postmenopausal women without severe vasomotor symptoms (VMS) and/or recognized hot flushes during sleep. Study design: Randomized double-blinded, placebo-controlled trial, parallel design (ClinicalTrials.gov Identifier: NCT01501422). Methods: Forty insomniac postmenopausal women with no severe VMS and/or recognized hot flushes during sleep were randomized into 2 months' treatment with 50 micrograms of transdermal estradiol patch or placebo. Sleep quality was determined objectively with wrist actigraphy. Sleep efficiency (SE), total sleep time (TST), wake up after sleep onset (WASO) and numbers of awakening (NWAK) were compared before and after treatment. Insomnia Severity Index (ISI) and Epworth Sleepiness Scale (ESS) questionnaires were used as subjective sleep quality assessment before and after treatment. Results: The study showed no significantly difference over sleep efficiency improvement between women having estrogen alone or placebo (median 85.9 VS 85.2, respectively, P-value=0.71). Similarly, sleep quality scores assessed by ISI and ESS were not significantly different. Conclusion: Estrogen therapy in insomniac postmenopausal women without severe vasomotor symptoms and/or recognized hot flushes during sleep was not found to improve sleep efficiency during the study period.

[**Endocr J.**](http://www.ncbi.nlm.nih.gov/pubmed/25242259) **2014 Sep 20. [Epub ahead of print]**

**Effect of high parathyroid hormone level on bone mineral density in a vitamin D-sufficient population: Korea National Health and Nutrition Examination Survey 2008-2010.**

[Kim SH](http://www.ncbi.nlm.nih.gov/pubmed?term=Kim%20SH%5BAuthor%5D&cauthor=true&cauthor_uid=25242259)1, [Kim TH](http://www.ncbi.nlm.nih.gov/pubmed?term=Kim%20TH%5BAuthor%5D&cauthor=true&cauthor_uid=25242259), [Kim SK](http://www.ncbi.nlm.nih.gov/pubmed?term=Kim%20SK%5BAuthor%5D&cauthor=true&cauthor_uid=25242259).

The detrimental effect of high parathyroid hormone (PTH) on bone has not been adequately evaluated in vitamin D-sufficient Koreans. The aim of this study was to investigate the effect of high PTH on bone mineral density (BMD) in such a population. A total of 5,403 subjects (2,644 men and 2,759 postmenopausal women; ≥50 years old) were selected from the 2008-2010 Korea National Health and Nutrition Examination Survey (KNHANES). Subjects were divided into four groups according to vitamin D status (<20 and ≥20 ng/mL) and PTH levels (≤65 and >65 pg/mL). Total hip and spine BMD were evaluated in each group. High PTH level was found in 50% of vitamin D-deficient subjects and 35% of vitamin D-sufficient subjects. In the vitamin D-deficient group, subjects with normal PTH level had higher total hip and spine BMD than those with high PTH after adjusting for multiple confounding factors, regardless of gender. In the vitamin D-sufficient group, only women with high PTH showed lower total hip and spine BMD than those with normal PTH. Multivariable linear regression analysis found that PTH level was independently associated with total hip BMD in vitamin D-sufficient women as well as vitamin D-insufficient women, but no association was found in men. In conclusion, high serum PTH level has an additive detrimental effect on BMD in postmenopausal women even though they had sufficient vitamin D levels.

[**Cancer Epidemiol Biomarkers Prev.**](http://www.ncbi.nlm.nih.gov/pubmed/25242052) **2014 Sep 21. pii: cebp.0675.2014. [Epub ahead of print]**

**An Epidemiologic Investigation of Physical Activity and Breast Cancer Risk in Africa.**

[Hou N](http://www.ncbi.nlm.nih.gov/pubmed?term=Hou%20N%5BAuthor%5D&cauthor=true&cauthor_uid=25242052)1, [Ndom P](http://www.ncbi.nlm.nih.gov/pubmed?term=Ndom%20P%5BAuthor%5D&cauthor=true&cauthor_uid=25242052)2, [Jombwe J](http://www.ncbi.nlm.nih.gov/pubmed?term=Jombwe%20J%5BAuthor%5D&cauthor=true&cauthor_uid=25242052)3, [Ogundiran TO](http://www.ncbi.nlm.nih.gov/pubmed?term=Ogundiran%20TO%5BAuthor%5D&cauthor=true&cauthor_uid=25242052)4, [Ademola A](http://www.ncbi.nlm.nih.gov/pubmed?term=Ademola%20A%5BAuthor%5D&cauthor=true&cauthor_uid=25242052)4, [Morhason-Bello I](http://www.ncbi.nlm.nih.gov/pubmed?term=Morhason-Bello%20I%5BAuthor%5D&cauthor=true&cauthor_uid=25242052)5, [Ojengbede O](http://www.ncbi.nlm.nih.gov/pubmed?term=Ojengbede%20O%5BAuthor%5D&cauthor=true&cauthor_uid=25242052)5, [Gakwaya A](http://www.ncbi.nlm.nih.gov/pubmed?term=Gakwaya%20A%5BAuthor%5D&cauthor=true&cauthor_uid=25242052)3, [Huo D](http://www.ncbi.nlm.nih.gov/pubmed?term=Huo%20D%5BAuthor%5D&cauthor=true&cauthor_uid=25242052)6.

Background: Physical activity (PA) is modifiable and linked to decreased breast cancer risk but its impact has not been investigated among indigenous African populations. Methods: From 2011 to 2013, 558 cases and 1,014 controls were recruited into African Breast Cancer Study in Nigeria, Cameroon, and Uganda, and completed a culturally tailored PA questionnaire that assesses habitual PA the year before diagnosis/interview. PA sub-scores (housework, occupational, and leisure PA), and a total PA score were calculated (metabolic equivalent of task, MET-hours/day). Multiple logistic regressions were performed, adjusting for age, body mass index (BMI), study sites, and menopausal status. The models were then stratified by BMI and study site, respectively. Results: The overall PA score among controls (17.8 MET-hours/day on average) was mainly composed by housework PA and occupational PA with little leisure PA (7.0, 10.3, and 0.5 MET-hours/day, respectively). Multivariable analyses showed that PA was significantly associated with reduced breast cancer risk in both pre- and postmenopausal women (up to 60% risk reduction), with a dose-responsive relationship (Ptrend <0.001). The inverse association was strong among lean women, less strong but still significant among overweight women, but not existing among obese women. The inverse association held for all intensity-level and domains of PA. Conclusions: Physical activity of African women mainly consists of housework and work-related activities. The preliminary data show PA may be significantly associated with reduced breast cancer risk. Impact: An inverse association between PA and breast cancer risk was observed among indigenous African women, a unique and understudied population.

[**Climacteric.**](http://www.ncbi.nlm.nih.gov/pubmed/25236970) **2014 Sep 19:1-25. [Epub ahead of print]**

**Estrogen plus progestin increase SOD and total antioxidant capacity in postmenopausal women.**

[Unfera TC](http://www.ncbi.nlm.nih.gov/pubmed?term=Unfera%20TC%5BAuthor%5D&cauthor=true&cauthor_uid=25236970), [Figueiredob CG](http://www.ncbi.nlm.nih.gov/pubmed?term=Figueiredob%20CG%5BAuthor%5D&cauthor=true&cauthor_uid=25236970), [Zanchib MM](http://www.ncbi.nlm.nih.gov/pubmed?term=Zanchib%20MM%5BAuthor%5D&cauthor=true&cauthor_uid=25236970), [Maurerb LH](http://www.ncbi.nlm.nih.gov/pubmed?term=Maurerb%20LH%5BAuthor%5D&cauthor=true&cauthor_uid=25236970), [Kemerichb DM](http://www.ncbi.nlm.nih.gov/pubmed?term=Kemerichb%20DM%5BAuthor%5D&cauthor=true&cauthor_uid=25236970), [Duartec MM](http://www.ncbi.nlm.nih.gov/pubmed?term=Duartec%20MM%5BAuthor%5D&cauthor=true&cauthor_uid=25236970), [Konopkaa CK](http://www.ncbi.nlm.nih.gov/pubmed?term=Konopkaa%20CK%5BAuthor%5D&cauthor=true&cauthor_uid=25236970), [Emanuellib T](http://www.ncbi.nlm.nih.gov/pubmed?term=Emanuellib%20T%5BAuthor%5D&cauthor=true&cauthor_uid=25236970).

ABSTRACT Objective: This cross-sectional study was aimed to evaluate the behavior of blood antioxidant enzymes (superoxide dismutase-SOD, catalase and glutathione peroxidase), plasma total antioxidant capacity and oxidative damage (lipid oxidation and protein carbonyl levels) and their relationship with the serum levels of steroid hormones in premenopausal and postmenopausal women without and with estrogen alone (ET) or estrogen plus progestin therapy (EPT). Methods: Blood was collected from 4 groups of subjects: premenopausal women (n=24), postmenopausal women without hormone therapy (n=31), postmenopausal women with ET (n=12) and postmenopausal women with EPT (n=16). Results: The CuZn and MnSOD activities and the plasma total antioxidant power were significantly higher in the postmenopausal women under EPT than in the postmenopausal women without hormone replacement therapy (HRT). The ET increased only CuZnSOD activity compared to the postmenopausal women without HRT. However, no differences were observed in the levels of lipid or protein oxidation or in the non-enzymatic plasma antioxidants (uric acid and albumin) among the groups. The duration of HRT and serum estrogen levels were positively correlated to the blood CuZnSOD activity and to plasma total antioxidant power, whereas the serum progesterone levels were positively correlated to the CuZnSOD activity and negatively correlated to carbonyl groups. Interestingly, the total antioxidant power of plasma was positively correlated to the CuZnSOD and glutathione peroxidase activities. Conclusion: We conclude that EPT increases blood MnSOD and CuZnSOD activity in postmenopausal women, leading to an increased plasma total antioxidant capacity. This finding may be relevant to the prevention of oxidative stress-related disorders in postmenopausal women.

[**Climacteric.**](http://www.ncbi.nlm.nih.gov/pubmed/25233795) **2014 Sep 19:1-20. [Epub ahead of print]**

**Association of metabolic syndrome with coronary atherosclerosis in non-diabetic postmenopausal women.**

[Yun BH](http://www.ncbi.nlm.nih.gov/pubmed?term=Yun%20BH%5BAuthor%5D&cauthor=true&cauthor_uid=25233795), [Chon SJ](http://www.ncbi.nlm.nih.gov/pubmed?term=Chon%20SJ%5BAuthor%5D&cauthor=true&cauthor_uid=25233795), [Lee YJ](http://www.ncbi.nlm.nih.gov/pubmed?term=Lee%20YJ%5BAuthor%5D&cauthor=true&cauthor_uid=25233795), [Han EJ](http://www.ncbi.nlm.nih.gov/pubmed?term=Han%20EJ%5BAuthor%5D&cauthor=true&cauthor_uid=25233795), [Cho S](http://www.ncbi.nlm.nih.gov/pubmed?term=Cho%20S%5BAuthor%5D&cauthor=true&cauthor_uid=25233795), [Choi YS](http://www.ncbi.nlm.nih.gov/pubmed?term=Choi%20YS%5BAuthor%5D&cauthor=true&cauthor_uid=25233795), [Lee BS](http://www.ncbi.nlm.nih.gov/pubmed?term=Lee%20BS%5BAuthor%5D&cauthor=true&cauthor_uid=25233795), [Seo SK](http://www.ncbi.nlm.nih.gov/pubmed?term=Seo%20SK%5BAuthor%5D&cauthor=true&cauthor_uid=25233795).

Abstract Objective: We investigated the possible association of metabolic syndrome with arterial stiffness and coronary atherosclerosis in nondiabetic postmenopausal women. Methods: 293 nondiabetic postmenopausal women who visited the health promotion center for a routine health checkup were included in a cross-sectional study. Arterial stiffness was measured by brachial-ankle pulse wave velocity, and coronary atherosclerosis was detected using 64-row multi-detector computed tomography. Results: Women with coronary atherosclerosis had a significantly higher proportion of metabolic syndrome than those without coronary atherosclerosis. The brachial-ankle pulse wave velocity was significantly higher in women who had metabolic syndrome compared to those who had no metabolic syndrome (1567.71 ± 211.81 vs 1336.75 ± 159.62 cm/s, P < 0.001). In addition, the brachial-ankle pulse wave velocity was shown to increase with increasing number of metabolic syndrome components (P for trend < 0.001). Metabolic syndrome was associated with increased risk of coronary atherosclerosis (adjusted odds ratio, 2.38; 95% confidence interval, 1.01-5.06), after adjusting for confounding factors. Conclusions: Metabolic syndrome increases the risk of coronary atherosclerosis in postmenopausal women. Increased arterial stiffness may partly explain an increased risk of coronary atherosclerosis in postmenopausal women with metabolic syndrome.