Association between the modified DASH diet and metabolic syndrome in postmenopausal women without diabetes

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Objectives: The aim of our study was to evaluate the association between the Dietary Approaches to Stop Hypertension (DASH) diet and metabolic syndrome, in postmenopausal Korean women without diabetes.

Methods: Our study enrolled postmenopausal women without diabetes (n = 6,826). We used the DASH-Korean quartile (KQ) model using 6 nutrients. For protein, fiber, calcium, and potassium, we scored 1 for the first quartile (1Q), 2 for the second quartile (2Q), 3 for the third quartile (3Q), and 4 for the fourth quartile. For fat and sodium, we scored 4 for the 1Q, 3 for the 2Q, 2 for the 3Q, and 1 for the 4Q. We defined the sum of the 6 scores as the DASH-KQ score. Participants were divided into 4 quartiles (DASH-1Q, DASH-2Q, DASH-3Q, and DASH-4Q), according to the sum of the 6 DASH-KQ scores.

Results: The numbers of participants with metabolic syndrome in DASH-1Q, DASH-2Q, DASH-3Q, or DASH-4Q were 601 (37.4%), 671 (31.1%), 440 (30.5%), and 492 (30.3%), respectively. The proportion of participants with metabolic syndrome was greatest in DASH-1Q (P < 0.001). Multivariate logistic regression analyses showed that every increase in the DASH-KQ score by 1 exhibited a 0.977-fold odds for metabolic syndrome. DASH-1Q, by DASH-KQ score, had higher odds for metabolic syndrome than the other groups.

Conclusions:
The lowest quartile of the DASH-KQ score was associated with a higher prevalence of metabolic syndrome in postmenopausal Korean women without diabetes.