



Letter to the editor

## Letter to the editor: Coffee consumption and bone health: A risk assessment

To the editor,

I read the study by Coronado-Zarco et al. [1] with great interest. The authors conducted a systematic review on nonpharmacologic recommendations for osteoporosis treatment. Calcium and vitamin D intake, and exercise were mainly recommended. In addition, maintaining adequate protein intake, identification and treatment of risk factors for falls were also considered important. Furthermore, limiting the consumption of coffee, alcohol, and tobacco were presented. I have a concern about their review with special reference to coffee consumption in the older adults.

As the authors pointed out, there were inconsistent results of the association. There is a lack of associations in women between coffee consumption and fracture [2] or bone information [3,4]. In addition, habitual coffee consumption is associated with lower risk of falling in older adults in Europe [5]. Furthermore, World Health Organization's predictive scale for fracture (FRAX) does not include coffee consumption as a risk factor of fracture [6]. Taken together, risk of coffee consumption for osteoporosis should be handled with caution.

Recently, Machado-Fragua et al. [7] investigated the association between coffee consumption and physical function impairment, frailty and disability in older women by considering obesity, hypertension or type 2 diabetes. Adjusted hazard ratio (HR) (95% confidence interval [CI]) of consumption of  $\geq 2$  cups of coffee/day for impaired agility was 0.71 (0.51–0.97), which was 0.60 (0.40–0.90) in women with obesity. In addition, adjusted HR (95% CI) of consumption of  $\geq 2$  cups of coffee/day for impaired mobility was 0.66 (0.46–0.95), which was 0.70 (0.48–1.00) in women with hypertension. Furthermore, adjusted HR (95% CI) of consumption of  $\geq 2$  cups of coffee/day for disability in activities of daily living among women with diabetes was 0.30 (0.11–0.76). Habitual coffee consumption seems beneficial in older women, especially having comorbid metabolic disorders.

### Declaration of competing interest

No potential conflict of interest relevant to this article was reported.

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