



Letter to the Editor



Ohta and his colleagues recently published a review of calcium and vitamin D in Asians, especially in Japan, which seems to be very timely [1]. In this paper, they showed that calcium intake in Japanese gradually increased from 1943 to 2007, and then while the intake in men did not show much of a decrease, calcium intake of women has been decreasing down to 500 mg/day or less since 2007, when the concern about the metabolic syndrome began. The authors also related these phenomena with a significant decline of body weight in women.

In addition, the authors cited a paper published by Korean researchers [2] pointing out that calcium deficiency was greatly associated with secondary hyperparathyroidism and low bone mineral density. Based on this research and others [3] the authors claim that efforts should be made to increase calcium intake. I strongly agree that an effort to increase calcium intake is very urgent in Asian population, but I think that applying the study results [2] to the whole female population is a bit premature, as it is the result of study using only population over 50 years of age.

Additional concerns for Japanese women as well as other Asian women are mentioned by authors that the calcium intake of Asian women never reached the recommended intake, and most of the calcium consumed is from vegetable source with lower bioavailability. Therefore, the authors suggested calcium supplementation.

Vitamin D intake, a nutrient important for bone health as much as calcium, has always been difficult to investigate because of the lack of sufficient nutrient database and because vitamin D can be synthesized within the body. Nutritional status of vitamin D is therefore mainly estimated by using 25-hydroxyvitamin D concentration in blood. It is unfortunate that the authors could not provide national data of vitamin D

level in this manuscript and therefore they could only speculate that sufficient calcium to be essential to prevent the loss of vitamin D action and protect bone loss.

Nevertheless, the author clearly showed that Asian population are calcium deficient and encouragement to increase calcium, especially from dairy source is essential. Also increasing vitamin D intake, participation in outdoor activities for increase synthesis and even strategic management of vitamin D in the food supply may be needed for measurable benefits.

References

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