

How to Estimate Vitamin Insufficiency/Sufficiency: Who Needs the Aid of Vitamin Supplement ?

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In Japan, dietary reference intakes (DRIs) for 9 water-soluble vitamins and 4 fat-soluble vitamins are set as the measures indicating optimal dietary intake amounts. Former recommended dietary allowances (RDAs) were basically used for the prevention of vitamin deficiency/insufficiency, however, it is now possible to choose adequate intake amounts of vitamins for the individuals with different physiological conditions, different life-styles, different regional environment, and different family histories. Using RDA, adequate intake (AI), tentative-dietary goal for preventing life-style related diseases (DG), and tolerable upper intake level (UL), assessment and planning for the nutrient intakes can be reasonably made, however, it has become much more complex compared with before and more in-depth knowledge and understanding are required. For example, RDAs were set only for the hexavitamins including vitamins B₁, B₂, C, A, D and niacin among 13 vitamins. Now, all 13 vitamins are equally important for the assessment of vitamin nutrition status. From such a background, a variety of vitamin supplement have appeared on the market and the consumers cannot help accepting these supplements without enough knowledge's there. The Ministry of Health, Labour and Welfare has notified DRIs and annual reports concerning the average intakes of vitamins for Japanese.

In this symposium, we would like to introduce recent studies for the assessment of vitamin insufficiency/sufficiency and discuss on the current issues related to vitamin intake in Japanese. In addition, we would like to discuss on the significance of vitamin supplements for the prevention of life-style related diseases.