Preface

Preparing a Revised Version of the Dietary Reference Intakes

The 2010 version of Dietary Reference Intakes for Japanese (DRIs-J) has been prepared on the basis of the concept of DRIs in-line with the policy adopted for the DRIs-J 2005 version, which recommended that the criteria created be as evidence-based as possible.

The preparatory process accounted for as many as 40 working group-based conferences involving more than 50 researchers, who considered all studies of interest available to date, including domestic, international, and those studies and documents that served as the basis for the earlier version of DRIs. The 1,300 studies have been cited in the current DRIs-J 2010.

The following concept provided the basis for revising the existing DRIs. Generally, health disturbances associated with energy and nutritional intake are evaluated in terms of deficiency/insufficiency and excess, which may have implications for prophylaxis of lifestyle-related diseases. Therefore, the existing criteria for energy and nutritional intake, i.e., the DRIs, were re-formulated to address such issues. However, optimal energy and nutritional intake varies from individual to individual and within individuals and does not readily lend itself to calculation, thus calling for a probabilistic approach to its estimation.

In the current DRIs-J 2010, this approach allowed reference values to be estimated for energy as well as for 34 different nutrients. Beyond these estimates, the DRIs-J 2010 included recommendations on nutritional guidance, i.e., a description of the theoretical concept of the DRIs as a basis for “improvement of diet” and “management of food services,” as well as associated considerations and a description of the theoretical principle adopted for the DRIs-J 2010. Furthermore, while providing estimates, the nutritional needs of individuals at each stage of their life have been carefully considered, with emphasized focus on infants, children, pregnant and lactating women, and the elderly; these were the stages that were given special attention during developing DRIs and when recommending DRIs.

Our future tasks include accumulating relevant high-quality evidence from Japanese and DRI-based studies, while characterizing the nutritional needs of individuals at different stages of their life and sorting the health issues associated with each of these stages.

Finally, only if the rationale for the indices used, scientific basis for the estimated values, and the process that led to the revision of DRIs have been fully appreciated can the DRIs be used meaningfully. Thus, it is not intended that the estimated reference values compiled in the DRIs are to be blindly adhered to, but that they serve as flexible criteria.

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