Foreword

Preface to the English Version of the Dietary Reference Intakes for Japanese (DRIs-J) 2010

In order to prevent nutritional deficiencies, the Ministry of Health and Welfare, Japan first launched the Recommended Dietary Allowances for the Japanese in 1970 and has made periodic revisions every 5 years up to its 6th edition in 1999. The 7th version was issued in 2004 as the Dietary Reference Intakes for Japanese (DRIs-J) 2005. The current DRIs-J 2010 (for April 2010–March 2014) were established in 2009 by the Ministry of Health, Labour and Welfare (MHLW) on the basis of the Health Promotion Law.

The project to revise DRIs-J 2010 began in 2008. More than 50 scientists in Japan with proven expertise in the field of nutrition and physical activity were asked to participate in this program by the MHLW. In order to update the DRIs-J 2010 on a scientific basis, more than 1,300 articles were reviewed.

To avoid adverse effects of deficient/insufficient and excess and/or imbalanced consumption of energy and nutrients, the newly-edited DRIs-J 2010 incorporate 6 reference values based on sex, age group (life stage), and physical activity level—1 value for energy and 5 values for 34 nutrients—for healthy individuals and groups, including those with certain mild illnesses, such as hypertension, diabetes, or hyperlipidemia. However, the DRIs-J do not incorporate any dietary instructions/restrictions or prescribed diets.

The reference value for energy is the estimated energy requirement (EER), and the 5 reference values for the 34 nutrients include 3 for deficiencies—estimated average requirement (EAR), recommended dietary allowance (RDA), and adequate intake (AI), 1 for adverse effects—tolerable upper intake level (UL), and 1 for primary prevention of lifestyle-related diseases—tentative dietary goal for preventing lifestyle-related diseases (DG).

The 34 nutrients include major nutrients (protein, fat [total fats, saturated fatty acids, n-6 and n-3 polyunsaturated fatty acids, and cholesterol], carbohydrates [carbohydrate, dietary fiber], vitamins [fat-soluble vitamins: A, D, E, and K; water-soluble vitamins: B₁, B₂, niacin, B₆, B₁₂, folate, pantothenic acid, biotin and C]), and minerals (macrominerals: sodium, potassium, calcium, magnesium and phosphorus; microminerals: iron, zinc, copper, manganese, iodine, selenium, chromium and molybdenum).

The National Institute of Health and Nutrition proposed publication of the English version of the DRIs-J 2010 and all edited articles, which were prepared by the members involved in the research group for Research on the Application and Revision of the DRIs for Japanese as part of Comprehensive Research on Lifestyle-related Diseases including Cardiovascular Diseases and Diabetes Mellitus with Health and Labour Sciences Research Grants under the auspices of the MHLW. The articles provide compact descriptions of the DRIs-J 2010, including information on the historical overview of the establishment of the DRIs, basic theories for the development, basic concepts for their application, the DRI values for energy, protein, fat, carbohydrates, water-soluble vitamins, fat-soluble vitamins, macrominerals, microminerals, and the DRIs-J according to the life stage.

We sincerely hope this publication will be informative and useful for health professionals/staff engaged, particularly, in developing, planning, and implementing DRIs for the assessment of diet/nutrition and for the management of food services to individuals and groups. May it serve to promote/maintain health, prevent lifestyle-related diseases, including non-communicable diseases, and enhance the quality of life or well-being through diet, nutrition, and physical activity among the people of Asian Pacific areas/countries and worldwide.

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