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GUEST EDITORIAL

Establishing the new Recommended Nutrient Intakes (RNI) of Malaysia

Recommended Nutrient Intakes (RNI) are defined as *the levels of intake of essential nutrients that, on the basis of scientific knowledge, are judged to be adequate to meet the known nutrient needs of practically all healthy persons.*

The current recommended dietary intakes (RDI) were compiled in 1975 based on numerous WHO Technical report series published between 1962 and 1973. New scientific knowledge in nutritional sciences generated over the past three decades has prompted the Technical Working Group (TWG) on Nutritional Guidelines under the auspices of the National Coordinating Committee on Food and Nutrition (NCCFN), Ministry of Health Malaysia, to revise the RDI. At the first meeting of the TWG held on 20 September 2002, three sub-committees were established for Energy and Protein Requirements, Vitamin Requirements and Mineral Requirements. The main tasks of the sub-committees were to review the “state of art” of current dietary recommendations and to update the current RDI. Several recent publications namely, FAO (2004) for energy requirements, FAO/WHO (2002) and IOM-FNB (1997-2002) Reports for vitamin and mineral requirements served as key sources of reference. Besides these publications, data from several local studies were also used in the revised edition.

After two years, the TWG produced a draft recommendation that was presented in a 2-day Consensus Workshop held in December 2004. Some 60 participants representing the academia, research institutes, several related Ministries, professional organizations and the food industry provided inputs to improve further the draft recommendation. The revised draft has been reviewed by external assessors and distributed to some 40 stakeholders for approval prior to its publication.

What’s new?

The revised recommendations differ in several major ways from the 1975 RDI as summarized below:

1. A new nomenclature has been adopted and the recommendations will be known as “Recommended Nutrient Intakes (RNI) of Malaysia”
2. Age-categories – Infants are classified into two age groups namely, 0-5.9 months and 6.0-11.9 months. Adults are also categorized into two groups 19-29 years and 30-59 years (instead of four groups previously), while elderly are persons above 60 years old.
3. There is a major revision in the reference body weights used
4. Additional nutrients are included
 - Besides energy and protein recommendations, the new RNI also provides dietary recommendations for fat and carbohydrates including dietary fiber. For energy

requirements, body weights were obtained from local studies and the physical activity level values for moderate physical activity were adopted from FAO (2004). All basal metabolic rate values were derived from FAO (2004) with the exception of adolescents and adults for whom local data were used.

- The new RNI maintains seven of the eight vitamins reported in the 1975 recommendation. Vitamin E is included while vitamin B₁₂ is removed. There are some changes between the old and new recommendations, e.g. in general, increases are recommended for thiamin, folate and vitamin C and decreases for riboflavin and niacin.
 - Besides calcium and iron, the new RNI provides recommendations for three other minerals namely, iodine, zinc and selenium. In general, the recommendation for calcium requirement has increased markedly. As for iron, the new RNI provides two recommendation levels based on bioavailability of 10% (diets of the poor or vegetarian) and 15% (western diets).
5. The new RNI also provides for tolerable upper intake levels (UL), which were not included previously.

A comprehensive compilation on the new RNI has been prepared, which we hope will enable the government, organizations and industries to better plan, monitor and evaluate nutrition programmes and policies in the future.

Prof Dr Mohd Ismail Noor

Chairman,

Technical Working Group on Nutritional Guidelines

National Coordinating Committee for Food and Nutrition, Malaysia

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