

Assessment of Micronutrient Status in Children Under Five in Java Indonesia

Malnutrition and poor diets are the main causes of the global burden of disease. This could lead to reduce immunity and productivity. It is known that micronutrient deficiency is a major causes of growth faltering. In Indonesia, double burden has received major concern. More than one out of every three children (37%) are stunted (the fifth-highest number in the world). West Java and Banten Provinces reach more than 30%. Therefore, the assessment of micronutrient status of children under five is needed to carry out to assess their daily intake. Food samples were taken by duplicate diet method of 70 children in Bandung West Java and Lebak Banten district. The samples were analyzed using nuclear techniques neutron activation analysis of Se, Fe and Zn. Quality control of data analysis was assessed using SRM NIST 1548a Typical Diet. It is generally concluded that these children are still lack of micronutrient intake, and many of them are under the recommended dietary allowance. The results are expected to be used as reference to encourage governments and relevant agencies to make policies for improving public health and malnutrition solutions as well.

Keywords: micronutrient, neutron activation analysis, daily intake, recommended dietary allowance

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