

## **Nutritional status, energy and protein consumption among primary schoolchildren in Pulau Mantanani, Kota Belud, Sabah**

### **ABSTRACT**

This study was conducted in April 2007 in Pulau Mantanani, an isolated island northwest of Kota Belud, 80 km north of Kota Kinabalu. Forty-six schoolchildren, boys and girls aged 10, 11 and 12 were included in the study. Anthropometric measurements were taken and compared with the growth charts of the National Centre for Health Statistics. Food consumption based on the 24- hours dietary recall was recorded and calculated using the NutriCal software. It was interesting to know that despite the acceptable protein consumption, the growth indicators showed otherwise. Results showed that 50.0% of the children were stunted ( $<-2$  standard deviation of height for age), 52.2% were underweight ( $<-2$  standard deviation of weight for age) and 17.4% were wasted ( $<-2$  standard deviation of weight for height). 2.2% had a energy consumption of less than 1/3 of the Recommended Nutrient Intake (RNI) for Malaysia, 43.5% consumed energy between 1/3-2/3 of the RNI whereas 41.3% consumed between 2/3 to 100% of the RNI while 13% consumed energy more than the RNI. As for protein intake, 39.1% children had protein intake below the RNI. However, there was no significant correlation between growth indicators and energy consumption. In conclusion, this study showed poor nutritional status of the children as shown by the growth indicators. Energy intake was also inadequate among the majority of the children although protein consumption was higher than the RNI by 2/3 of the subjects.