E2-28 : PRELIMINARY STUDIES ON THE NUTRIENT CONTENT OF SOME SRI LANKAN PULSES AND CEREALS

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The food tables used in Sri Lanka contain only about 10% of the data on Sri Lankan food varieties; the rest are from Indian publications. In our continuing effort to compile data on the macronutrient and micronutrient content of Sri Lankan food varieties we wish to report our results on the total available carbohydrate, protein and mineral (K, Na, Mg, Ca, Fe, Mn, Zn, Cu) content of some pulses (dhal (red), dhal(yellow), dhal (green) kadala, winged-bean, soya-bean, mung, ulundu and cowpea and cereals (maize, kurakkan, rice BW100, BW351, BG94-1). The results were obtained by analysing five samples of each food item.

The crude protein content was determined by Kjeldahl method and the total available carbohydrate by the Manual Clegg Anthrone method. The minerals were analysed by atomic absorption spectroscopy and flame photometry after suitable digestion of the sample.

The protein content of pulses was found to be 3-4 times greater than that of the cereals with soya-bean and winged-bean appearing at the top of the list. The cereals were rich in available carbohydrate, rice being its best source. The available carbohydrate content of winged-bean and soya-bean was depleted compared to that of other pulses. Of the minerals investigated potassium was the most abundant mineral in pulses and cereals, with soya-bean heading the list. The sodium content of the same foods was verly low. Magnesium was the next most abundant mineral; winged-bean and soya-bean being comparatively rich sources. The highest calcium content was found in winged-bean. The same was true of iron. Manganese, zinc and copper were found to a much lesser extent.