NUTRITIONAL STUDIES ON SIX LEGUMES COMMONLY CONSUMED BY SRI LANKANS

N. S. Hettiarachchy and S. S. Sri Kantha
(Department of Biochemistry, University of Peradeniya)

Six commonly consumed legumes, Green gram (*Phaseolus aureus*), Black gram (*Phaseolus mungo*), Red gram (*Cajanus cajan*), Bengal gram (*Cicer arietinum*), Cow pea (*Vigna catiang*) and Soy bean (*Glycine max*), grown in Sri Lanka, were analysed for their nutrient content. Five of these legumes have a protein content ranging from 22%–31%. The soy bean is the richest source in protein (40%) and lipid (23%). The values obtained in this study falls in line with the values reported by earlier workers (Bamber, 1921; Joachim & Panditteseker a, 1938).

The levels of anti-nutritional factors, trypsin inhibitor and phytohaemagglutinin, which have yet to be quantified in these legume varieties of Sri Lanka, were determined by the modifications of the methods of Kakade *et al* (1969) and Liener & Hill (1953) respectively. Trypsin inhibitor activity was present in soy bean and red gram extracts to a considerable extent; i.e. 33.5 mg trypsin inhibitor/g. sample and 20.7 mg trypsin inhibitor/g. sample respectivly. Other four legumes were devoid of trypsin inhibitor activity. Phytohaemagglutinin activity, though detected in all the legume extracts tested were in low profile, ranging from 100 to 800 haemagglutination units/g. sample. These anti-nutritional factors were found to be heat-liable.

References:

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