NUTRITIONAL PROPERTIES AND THE IMPORTANCE OF UNDERUTILIZED VEGETABLES IN SRI LANKA

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Abstract: Sri Lanka faces the dual challenge of food insecurity and malnutrition. In this context, the nutritional importance of underutilized vegetables (UUVs) cannot be understated. Present study addresses the question on nutritional profiles of UUVs commonly found in Sri Lanka and their potential to eradicate nutrient deficiencies and improve overall dietary quality. A survey was conducted representing randomly selected 50 families as sample population, in Harispattuwa Divisional Secretariat (DS) of Kandy District via a questionnaire to collect information on UUVs, and their awareness on nutritional properties. Above DS was chosen for research due to its emphasis on suburban UUVs, contrasting with the numerous studies conducted in rural areas. Five vegetables; "Maila" [Bauhinia racemosa (L.)], "Kaluala kola" [Colocasia esculenta(L.)], "Karan Koku" [Acrostichum aureum (L.)], "Kara" [Canthium coromandelicum (Burm.f.)] and "Mella" [Olax zevlanica (L.)] were reported as the rarely consumed vegetables indicated by 2-6% of lower responses. Protein, carbohydrate and crude fire contents were determined using Bradford assay, Phenol-sulphuric acid and Weende methods, respectively. Elemental analysis was done using AAS method. The protein content was highest in "Kaluala kola" (8%) compared to the commonly consuming vegetables like pumpkin (1%), leeks (2%) and green beans (2%) as per literature. Carbohydrate contents were significantly high in "Karan koku" (19%) in contrast with carbohydrate amounts in commonly consuming vegetables like "Gotukola" (7.03%), "Katuru murunga" (9.81%) and "Mugkunuwanna" (10.76%). Higher crude fiber was recorded for "Malla" (69%) relative to the availability of it in common vegetables like carrot (3%) and drumstick (3%). "Maila" (488 mg/100g), "Kaluala kola" (295 mg/100g) and "Karan koku" (192 mg/100g) respectively showed high content of Ca, Fe and K. Integrating UUVs into the Sri Lankan diet augments nutrient intake.

Keywords: Carbohydrate; Crude fibre; Mineral; Protein