Proximate composition and calorie content of selected Sri Lankan traditional rice (Oryza sativa L.) based porridges

PAN Thushara, PI Godakumbura[#] and MAB Prashantha

Department of Chemistry, University of Sri Jayewardenepura, Nugegoda 10250, Sri Lanka *pahanig@gmail.com

Herbal porridges are popular in Sri Lanka. Even though the chemical parameters of traditional rice varieties have been evaluated, their porridges are yet to be assessed in that regard. Therefore, uncovering the nutritional values of the rice-based porridges remains important. Standard methods of AOAC were used to obtain the proximate composition of four types of rice porridges, Madathawalu porridge (MWP), Kalu heenati porridge (KHP), Mixed porridge with Sudu heenati, Goda heenati, Masuran, Dik wee (1:1:1:1) (MXP), and Special porridge made with spices (Ayurvedic formula) (ASP). The moisture content of selected porridges ranged from 93.3±0.2% to 96.9±0.2%. The crude protein content was in the range of 9.9±0.1% - 11.9±0.2 %. MWP had the highest crude protein content whereas ASP had the least. Crude fiber content of porridges ranged from 1.0±0.1% to 1.4±0.2%. MXP had the highest crude fiber content while ASP and KHP similarly had the least. ASP had the highest percentage of crude fat (2.8±0.2%), while the lowest (1.9±0.2 %) was recorded for KHP. MWP had the highest ash content of 2.0±0.1% and the least ash content of 1.6±0.2% was shown by MXP. Carbohydrate content of the porridges ranged from 82.8±0.2% to 84.4±0.2%. Calorie contents of MWP, KHP, MXP and ASP were 397.7, 398.5, 400.5 and 402.4 Kcal/100 g, respectively. The Sri Lankan traditional rice-based porridge used in the study would be nutrient-rich breakfast meals.

Keywords: traditional rice, porridges, proximate composition, nutritional value