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## Nutritional profile of some selected pulses of Sindh Pakistan

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**Statement of the Problem:** Pulses are one of healthiest foods due to its nutritional properties and protein quality which is strongly influenced by its amino acids composition. The pulses which are underutilized have tremendous potential for commercial exploitation and their frequent consumption has been associated with lower risk of cardiovascular and coronary heart diseases. Therefore, this study was carried out to evaluate the nutritional profile of selected pulses at Institute of Food Sciences and Technology, Sindh Agriculture University Tandojam.

**Methodology:** Different pulses such as chickpea white, chickpea brown, split chickpea; red lentil, yellow lentil, white lentil, red kidney bean and black eyed bean were analyzed for the proximate composition, fat soluble vitamins (A, E &  $\beta$ -carotene) and amino acid profile.

**Findings:** The results of proximate analysis showed that these pulses contains high protein content ranged from 18.11% to 23.79%, ash content ranged from 2.33% to

3.90%, pulses has very low lipid content ranged from 0.74% to 4.84%, but pulses are high in carbohydrate ranged from 59.75% to 65.75%. Due to low fat content, fat soluble vitamins also lack in pulses, vitamin A was not found in all the samples, vitamin E was present in chickpea white, chickpea brown and split chickpea in a very minute quantity of 1.86, 1.56 and 0.65 mg/100g, respectively,  $\beta$ -carotene precursor of vitamin A was found in all samples ranged from 0.083 to 0.545 mg/100g. The amino acids include essential amino acids leucine found in chickpea white 3.40g/100g and lysine 4.29g/100g in kidney bean. Non-essential amino acids aspartic and glutamic acid was higher in black eyed bean 2.667 and 5.168 g/100g, respectively, while the arginine was found 4.330 g/100g in white lentil. Sulphur containing amino acid cysteine found in excellent quantity in yellow lentil 8.427 g/100 and in black eyed bean 4.543 g/100g.

**Conclusion & Significance:** It is concluded that, pulses are excellent protein sources and could be used to decrease the protein deficiency prevailing in the country.

### Biography

Aijaz Hussain Soomro has completed his PhD from University of Arid Agriculture Rawalpindi, Pakistan and post-doctorate from the University of Queensland, Australia. He is the director of the Institute of Food Sciences and Technology Sindh Agriculture University Tandojam, Pakistan. Recently, He has organized 3rd International Conference on Agriculture, Food and Animal Sciences ICAFAS 2017 as organizing secretary. He is an elected member Executive Council, SUN Academia and Research Network, Pakistan. He has published more than 70 peer reviewed papers in reputed journals and has been serving as an editorial board member of EC Nutrition.

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