

20th International Conference on
NUTRITION, FOOD SCIENCE AND TECHNOLOGY
April 16-17, 2018 Dubai, UAE

Nutritional profile of some selected pulses

Aijaz Hussain Soomro¹, H Soomro¹, M S Haider², S Khaskheli¹ and S A Sheikh¹

¹Sindh Agriculture University, Pakistan

²Pakistan Council of Scientific and Industrial Research Laboratories Complex Karachi, Pakistan

The present study was carried to evaluate the nutritional profile of selected pulses at Institute of Food Sciences and Technology, Sindh Agriculture University Tandojam and Food and Marine Resources Research Centre, Pakistan Council of Scientific and Industrial Research Laboratories Complex Karachi. Pulses are one of healthiest foods due to its nutritional properties and protein quality in pulses is strongly influenced by its amino acids composition. In the present research different pulses include 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 & β -carotene) and amino acid profile. 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/100 g, respectively, β -carotene precursor of vitamin A was found in all samples ranged from 0.083 to 0.545 mg/100 g. The amino acids include essential amino acids leucine found in chickpea white 3.40 g/100 g and lysine 4.29 g/100 g in kidney bean. Non-essential amino acids aspartic and glutamic acid was higher in black eyed bean 2.667 and 5.168 g/100 g, respectively, while the arginine was found 4.330 g/100 g in white lentil. Sulfur containing amino acid cysteine found in excellent quantity in yellow lentil 8.427 g/100 and in black eyed bean 4.543 g/100 g. It is concluded that, pulses are excellent protein sources and could be used to decrease the protein deficiency prevailing in the country.

asoomrosau15@gmail.com

Notes: