International Conference on Contemporary Issues in Integrating Health and Nutrition with the Emerging Areas of Food Technology, Agriculture, Environment and Allied Sciences

Antioxidant Activity of Wheat and Dried Water Chestnut Composite Flour

Manisha and Dr. Darshan Punia

Department of Foods and Nutrition CCS Haryana Agricultural University, Hisar, Haryana E. mail- mnishasindhu95@gmail.com

Abstract—The present investigation was carried out to study the antioxidant activity of wheat and dried water chestnut composite flours. Composite flours were prepared by mixing wheat flour with water chestnut flour in ratios of 80:20 (type I), 60:40 (type II), 40:60 (type III) and 20:80 (type-IV). Antioxidant activity of wheat and dried water chestnut composite flours was assessed. Total phenolic content of wheat flour and water chestnut flour were 5.63 and 7.13 mg GAE/100g, respectively. Total flavonoids and antioxidant activity (DPPH) in wheat flour were 1.87 mg RE/100g and 2.05mg TE/100g, respectively and in water chestnut flour 1.63 mg RE/100g and 2.62mg TE/100g, respectively. An increasing trend in total phenols, total flavonoids and antioxidant activity (DPPH) of composite flours was observed with the increase in the level of water chestnut flour to the wheat flour i.e. type IV had the highest of these activities (6.96 mg ZGAE/100g,1.80 mg RE/100g and 2.73 mg TE/100g, respectively).

Keywords: Water chestnut flour, composite flour, antioxidant activity.

ISBN: 978-93-85822-87-2 Page No. 59-59