

International Conference on

Nutritional Science and Food Technology

July 02-03, 2018 Rome, Italy

Iron fortified fruit bars: A novel intervention to combat anemia in child bearing aged group females

Syeda Mahvish Zahra^{*1}, Sarfraz Hussain¹, Shahid Mahmood¹, Muhammad Nadeem¹, Muhammad Yousaf Quddoos¹, Muhammad Naeem Safdar², Mehboob ur Rehman³, Shan e Zahra⁴, Nagina Altaf¹, Wajiha Saeed¹, Ayesha Rafique¹, Komal Masood¹, Anam Mukhtar⁵, Itrat Fatima¹, Madiha Balooch¹, Harmain Rasool¹, Muhammad Qamrosh Alam¹, Muhammad Mudassar Ali Nawaz¹, Abdullah bin Masood¹, Mehvish Fatima Zaidi⁶, Syed Muhammad Adnan Rizvi¹, Syed Mujtaba Haider⁷ and Syed Muhammad Askari⁸

¹University of Sargodha, Pakistan,

²National Agricultural Research Centre, Pakistan,

³Civil Hospital (DHQ), Pakistan,

⁴University of Agriculture Faisalabad, Pakistan,

⁵University of Sargodha, Pakistan,

⁶Baqai Medical College, Pakistan, ⁷Air University, Pakistan, ⁸University of Engineering and Technology, Pakistan

Abstract

Reduction in blood transport of O₂ due to deficiency in red blood cells and iron is known as Anemia. Pakistan NNS- 2011 indicated that 51 % non-pregnant women were anemic on the basis of Hb concentration. Child bearing aged females are more affected because of menstrual losses, iron malabsorption, basal losses and growth requirements. Risk factors in females could be pregnancy, and nutritional inadequacy. PhD thesis research was conducted at Institute of Food Science and Nutrition, University of Sargodha to do efficacy study of iron fortified fruit bars in anemic University girls. Hostel availing females were approached from different departments of University, after DRCE approval, the research work was discussed with them in detail and information, education and communication (IEC) material were provided and informed consent was taken from agreed ones. Selected the anemic girls on basis of hematological identification of anemia iron at baseline, fortified fruit bars (with natural as well as synthetic salt based) were intervened along with placebo bars for 90 days, results were collected after 2nd hematological analyses at end line, interpreted the data through statistical analyses, then it was concluded that placebo had negating effect, though synthetic salt FeSO₄.7H₂O fortified fruit bars showed positive results but naturally iron fortified bars (powdered *Mentha spicata L.* and ground apricot kernel of *Prunus armeniaca L.*) had improved hemoglobin (11.58 g/dL to 12.29 g/dL), hematocrit (36.01 % to 37.31 %), serum iron (25.54 µg/dL to 40.42 µg/dL and serum ferritin levels (19.46 µg/dL to 30.97 µg/dL) significantly.

Biography

Dr. Syeda Mahvish Zahra is currently working at Institute of Food Science and Nutrition, University of Sargodha, Sargodha-Pakistan. He is also working as Managing Editor at International Journal Of Scientific Innovations. He is also a reviewer for African Journal of Food, Agriculture, Nutrition and Development. He published many articles in reputed journals and attended many international conferences.

email: syedamahvish514@yahoo.com