

Intervention Trials with Pearl Millet Based Iron Rich *Ladoo* and Iron Folic Acid (IFA) Tablets on Hemoglobin Status of Adolescent Females in Bikaner City

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ABSTRACT Anemia in adolescent girls has far reaching implications, as they may grow anemic with probable complications during pregnancy and child birth. Several investigators have reported rise in mortality in the women of reproductive age due to anemia. Food based approach against anemia has been now gaining popularity over the world. Pearl millet being the staple food of Rajasthan with potentially better amount of dietary iron is therefore explored for improving the hemoglobin [Hb] status of adolescent girls. The present study aim to develop and standardize pearl millet based iron rich *ladoo*, to assess the impact of pearl millet based iron rich product on anemic subjects in comparison to Iron Folic Acid [IFA] tablets. A randomized clinical trial was undertaken in which three groups viz. A, B and C were selected wherein group A received iron rich *ladoo* (15mg) along with lemon water; group B received IFA tablets providing 60 mg of elemental iron and group C remained as the control group. Results: Intervention program showed significant rise in mean Hb levels by 2.24g/dl, 2.28 g/dl and 0.54 g/dl for Group A, B and C respectively. Conclusion: Food based approach using pearl millet *ladoo* may be effectively used for improving the Hb status of adolescent girls at par with elemental iron supplementation.