

Efficacy of iron from vegetable sources to treat iron deficiency anemia in Indian women

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Introduction:Iron deficiency anaemia (IDA) is most prevalent among Indian women in reproductive age from lower socio economic strata (95% of women with anaemia suffer from IDA). This study was done with the intention of finding efficient substitutes in the form of non haem iron of vegetable origin i.e. moringa oleifera leaves(drumstick) and jaggery to treat anaemia.

Methods

Setting- Women belonging to lower socio-economic strata in suburban/rural Bangalore aged 15-45. A simple random sampling of 60 women suffering from IDA was taken where 30 women were put in the control group and 30 in the intervention group. Diagnosis of anaemia was done using Tallqvist's haemoglobin scale. The intervention group was then given a therapy which consisted of 100gm of moringa oleifera and jaggery (dry weight) in a ratio of 80:20 for ten days. . The inhibitors

of iron absorption (milk, phytates, and tannins) were not taken along with the supplements. After ten days the haemoglobin levels were analysed again and recorded. The results were analysed based on percentages and proportions. Student's t test was used to find out any significant difference between intervention and the control group.

Results

At the end of the supplementation period (10 days), the women in intervention group showed an increase in haemoglobin level. By the Student's t test, the post intervention data is highly significant. $t=2.6$ ($P < 0.02$).

Conclusion

This study shows that Moringa oleifera with jaggery has significantly improved haemoglobin levels of anaemic women. This can be promoted in the community for women with iron deficiency anaemia. Further studies with larger samples maybe performed to corroborate the above data.