Research Paper

Effect of garden cress seeds and amla intervention on the haemoglobin status of non-pregnant women

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ABSTRACT

Correspondence to: CHHAVI GUPTA Department of Foods and Nutrition, Ginni Devi Modi Girls (P.G.) College, Modinagar, GHAZIABAD (U.P.) INDIA g.chhavi7@gmail.com Iron deficiency and iron deficiency anemia in women of reproductive age can seriously affect their health. The study was conducted to assess the effect of garden cress seeds and Amla intervention on haemoglobin level of non pregnant women (18 – 25 years). Total 45 respondents were taken from GD.M Girls hostel, Modinagar and divided into three group I, group II and group III. General profile, medical history, dietary habits, general awareness, physical activity, antheropometric measurement, biochemical analysis, clinical assessment, and dietary assessment with three day food recall and nutrient intake was done of all the respondents before intervention. 10g garden cress seeds were provided per day to experimental group I for 3 months which provided 10 mg iron per day, while 10 g garden cress seeds with 10g amla chutney were provided to experimental group II for 3 months. Anthropometry measurement, clinical analysis and biochemical assessment were done after intervention. The study concluded that inclusion of garden cress seeds alone and with vitamin C, which have high content of iron, on a daily basis effectively increased haemoglobin level in those respondents who have low initial haemoglobin level. While a little effect was also seen on anthropometric measurement and clinical assessment also.

KEY WORDS : Garden cress seed, Haemoglobin status, Intervention, Amla

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Micronutrient deficiencies takes a major toll on the health and wellbeing of our population. Among the several essential micronutrients that have severe damaging effects on physical, cognitive, socio-economic performance, anemia particularly due to iron deficiency ranks the most prevalent. The groups that are more vulnerable to iron deficiency and anemia are in the pregnant women, women of reproductive age and young children (Seshadri, 2009).

Micronutrient deficiency especially iron deficiency in young females of reproductive age can seriously affect their health. During this age, iron deficiency not only reduces work productivity but also leads to complications of pregnancy to the later years. (Acc.to NFHS III, 2008) 56 per cent women aged 15–44 years are suffering from anemia in India.

Garden cress seeds, known as *Halim* in Hindi are loaded with nutrition. It is an important source of iron, folic acid, calcium, vitamins C, E and A. It is a rich source of iron 'containing 100 mg iron/100g garden cress seeds. It is useful is leprosy, skin disease, dysentery, dsyspepsia, eye diseases, leucorrhoea, scurvy, asthma, cough cold and seminal weakness. Vitamin C greatly increases iron absorption. Amla is an excellent source of vitamin-C.

RESEARCH METHODS

Sample size and selection:

The study was conducted on representative group of 45 respondents (18-25 yrs), selected from G.D.M. Girls Hostel, Modinagar. Random sampling was used to select the sample.

- Total 45 respondents were divided into 3 groups:
- 15 Respondents in experimental group I
- 15 Respondents in experimental group II and rest
- 15 Respondents in control group.

Tools of data collection:

For the present study, survey method was used for data collection, in which a self prepared questionnaire was given to respondents, containing the detailed information about their name, age, sex, type of activity, health status, dietary habits and eating pattern like-meals per day, skipping meal habits etc. Anthropometric measurement was also done in which height, weight and