

## Effect of Supplementation with Iron Fortified Biscuits on the Hemoglobin Status of Children in Rural Areas of Shimoga, Karnataka: Author's Reply

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*To the Editor:* We thank Sareen et al. for their queries on our paper published in March' 15 issue of Indian Journal of Pediatrics [1]. As per the WHO anemia classification [2], the hemoglobin cut-off levels for 5–11 y old children is 11.5 g/dl and 12 g/dl for children aged 12–14 y. As five children were in the age group of 11 to 11.5 y, we have indicated the age range as 6–12 y and also as the number was very small they could not be grouped separately.

This study was conceptualized and executed in the year 2010–11 and the Recommended Dietary Allowances (RDA) for iron was 26 mg for 7–9 y old children as per the 1989 National Institute of Nutrition (NIN), India RDA [3]. Since all the children examined were anemic, we wanted to understand the impact of monitored iron fortified biscuits with high and low levels of iron on hemoglobin levels over a period of 120 d (as specified in the study objective).

Responding to the query on supervised administration of biscuits on holidays, in the materials and methods it has been explained that the biscuits were given to children for consumption in school on school working days. On Sundays and school holidays the children assembled at the volunteer's home, where they were given the biscuits.

The mean weight gain of 1.7 kg in the group I has been explained in the discussion. An increased appetite because of iron supplementation might have probably led to an increased food intake which may be attributed to weight gain in the high dosage (1.7 kg) and low iron fortification group (0.9 kg). The

appetite is seen to decrease in iron deficiency anemia independently of plasma leptin levels but improves with iron supplementation [4].

In response to the query on increase in hemoglobin levels amongst children with 7, 8, 9, 10 and 11 g of Hb/dl, it has been mentioned in the inclusion criteria that the children with Hb  $\geq$  8.0 g/dl and  $\leq$  11.5 g/dl were enrolled in the intervention. Hence children with 7 and 8 g/dl Hb were not a part of the intervention. The change in degree of anemia from moderate to mild and normal has been elucidated in Table 4 of the article.

### Compliance with Ethical Standards

**Conflict of Interest** None.

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