## Effect of settlement on nutrition and health status of pastoral Gabra women of reproductive age in Kalacha Location, Marsabit County, Kenya

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## Abstract

The objective of the present study was to evaluate the effect of settlement on the nutrition and health status of pastoral women of reproductive age.

A cross-sectional survey that included a 24 h dietary recall was administered to 224 randomly selected Gabra women. Height and weight were used to compute BMI. Whole capillary blood was used to measure Hb. Additional capillary blood was collected on filter paper and dried blood spots were analysed for transferritin receptor, C-reactive protein and  $\alpha$ 1-acid glycoprotein. Descriptive statistics were used to analyse population characteristics. The t test and the  $\chi$ 2 test were used to determine population differences. Multiple criteria models were used to determine the prevalence of Fe deficiency, anaemia and inflammation.

Settled and semi-settled women in Kalacha Location in Marsabit County, Kenya.

Non-pregnant women aged 15-49 years.

Fe repletion was observed in 43 % of settled and 40 % of semi-settled women. Fe-deficiency erythropoiesis in was found in 18 % of settled and 20 % of semi-settled women, whereas 15 % of settled compared with 25 % of semi-settled women were suffering from Fe-deficiency anaemia. Anaemia due to chronic diseases was more prevalent in semi-settled women than in settled women, and more common than Fe-deficiency anaemia.

Settled women were significantly less anaemic than semi-settled women, but had similarly high levels of chronic energy deficiency. While anaemia and Fe deficiency were more pronounced in semi-settled than settled women, anaemia of chronic disease and chronic infection were highly prevalent in both communities. Policies should be put in place to improve overall nutrition among pastoral women.