A compositional study of moringa stenopetala leaves

C., Abuye; K., Urga; H, Knapp; D, Selmar; A.M, Omwega; J.K, Imungi; P, Winterhalter

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Abstract

Objective: To investigate nutrient composition in moringa leaves and compare with those of kale (Brassica carinata) and Swiss chard (Beta vulgaris). Design: Laboratory based study, nutrient composition of fresh and cooked leaves of M. stenopetala were analyzed. Setting: Gama-Gofa, south-western Ethiopia. Results: Raw M. stenopetala leaves contain 9% dry matter as crude protein, about 3- fold lower than in kale and swiss chard. M. stenopetala leaves contain higher percentage of carbohydrate, crude fiber and calcium compared to both raw and cooked kale and swiss chard. Vitamins are present at nutritionally significant levels averaging 28mg/l00g of vitamin C and 160 J..lg/lOOgof II-car-otenc. Minerals such as potassium, iron, zinc, phosphorus and calcium also exist in significant concentrations with the average values of 3.08 mg/l00g iron and 792.8 mg/lOOg calcium. Conclusion: Although the nutrient composition of M. stenopetala leaves in most cases is lower compared to kale and swiss chard they can be a good source of nutrients in dry season potentially when other vegetables are scarce. However, the presence of small amount of cyanogenic glucosides in M. steuopetala leaves may have a health risk in areas of high incidence of endemic goitre as an exacerbating factor if consumed more for a long period of time.