

Abstract

This study shows micronutrients malnutrition and its devastating effects taking toll of the world, affecting over two billion of its population. Measures have been put in place that includes supplementation, fortification and bio fortification among others. Utilization of indigenous crops are known to be nutritious and are acceptable among the communities mainly, developing countries favours the later method. The micronutrient levels in pumpkin seeds of six varieties, cultivated in four districts within the Lake Victoria Basin, East Africa were determined. This was with a view to establish if any significant differences existed between the varieties as well as set the background upon which the better varieties should be improved. The results showed levels of moisture (11.62-26.23 mg /100 g), β carotene (0.02-0.42 mg /100 g), thiamine (0.19-0.54 mg /100 g), niacin (0.43-1.03 mg /100 g) and pyridoxine (0.13-0.26 mg /100 g), zinc (3.73-9.70 mg /100 g) and selenium (5.43-11.07 μ g /100 g) significantly differed ($p < 0.05$). The varieties evaluated did not show significant differences in vitamin C, α -tocopherol and iron. The carnival squash (*C. maxima*) seeds, generally exhibited better levels of most micronutrients among the varieties sampled. Specifically however, bottle gourd (*Lagenaria siceraria*) samples showed higher levels of selenium, while butternut (*C. moschata*) seeds had high levels of zinc (9.70 mg /100 g) and green kabacha (*Cucurbita pepo*) the B complex vitamins. With sufficient nutritional education and purposefull improvement of the better varieties through breeding, pumpkin seeds can go along way as an alternative path for bio fortification as a method of fighting micronutrients malnutrition.