

Nutritional Potentials of Two Nigerian Green Leafy Vegetables

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Abstract : The carotenoid content, vitamins (ascorbic acid, riboflavin, thiamin, niacin and vitamin K) and mineral contents (K, Ca, Mg, Zn and Fe) of raw, cooked (moist heat treatment) and stored *Gnetum africanum* and *Pterocarpus mildbraedii* leaves were investigated in the present research. Raw *G. africanum* contained higher total carotenoids (246.93µg/g edible portion) than *P. mildbraedii* (83.53µg/g edible portion). However, moist heat treatment significantly improved the total carotenoid content of *P. mildbraedii*. The carotenoid profiles of *P. mildbraedii* and *G. africanum* showed improved contents of beta cryptoxanthin, 9-cis, 11-cis and 13 cis beta carotenes due to moist heat treatment. Lutein contents of the two green leafy vegetables were quite high in raw, heat treated and stored samples. The two green leafy vegetables were good sources of vitamin K (118-120 µg). Moist heat treatment significantly ($p < 0.05$) increased the mineral contents of *P. mildbraedii* and *G. africanum*. The vitamin contents were reduced. Storage at ambient temperature (30°C) in the dark led to good retention of the minerals but not the vitamins.

Keywords : *Gnetum africanum*, *Pterocarpus mildbraedii*, carotenoid profile, vitamins, minerals

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