

Original Article

Iron, zinc, copper and phytate content of standardized Nigerian dishes

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Abstract

Representative samples of 20 standardized Nigerian dishes were analyzed for Iron, Copper and Zinc using the automated method of flame atomic absorption spectrophotometry (AAS) and for phytate using a colorimetric method. Iron contents ranged from 2.28 mg/100 g for cowpeas and yam pottage to 22.10 mg/100 g for Apapafufu with tuwon shinkafa. The zinc contents ranged from 0.43 mg/100 g for stewed beans and fried plantain to 4.20 mg/100 g for Eberipo. Copper contents ranged from 0.38 mg/100 g for Ikokore to 1.88 mg/100 g for Amala and Alapa with ewedu stew. Phytate contents expressed on a dry weight basis ranged from 0.6 mg/100 g in Burabisko to 6.40 mg/100 g in melon seed and vegetable soup. The phytate: zinc molar ratios calculated for all dishes analyzed ranged from 0 in Burabisko to 1.4 for stewed beans and fried plantain.

Keywords: Nigerian dishes; Iron; Zinc; Copper; Phytate; Micro-minerals