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Potential of endogenous formation of volatile nitrosamines from Nigerian vegetables and spices

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Abstract

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Nitrosatability of dried Nigerian vegetables and spices was investigated under simulated gastric conditions. N-Nitroso-dimethylamine (NDMA) was the only volatile nitrosamine found above the preformed level except in ugwu where N-nitroso-piperidine (2.3 ppb) was also detected. The lowest NDMA value of 0.4 ppb was found in bitterleaf while onions had the highest level (14.7 ppb) of nitrosation. The results suggest that, under endogenous conditions, nitrosation of these foodstuffs could be an important contributory factor in cancer aetiology.

Keywords

- o *N*-Nitrosamine;
- o simulated nitrosation;
- o foodstuff;
- o cancer aetiology

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