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Carcinogenic activity of endogenously synthesized N-nitrosobis(2-hydroxypropyl)amine(BHP) in rats administered bis(2-hydroxypropyl)-amine (BHPA) and sodium nitrite(SN).

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When male Wistar rats were administered BHPA mixed in diet and SN dissolved in distilled water for 94 weeks, BHP was detected in the urine of rats given 1% BHPA and 0.3% SN. Nasal cavity, lung, esophagus, liver and urinary bladder tumors were found in animals treated with combination of 1% BHPA and 0.15% or 0.3% SN. The present results provide further suggestive evidence that endogenous nitrosamines of environmental nitrosatable amines can be a potential risk factor in human cancer development.