

- [Europe PMC](#)

Search worldwide, life-sciences literature

Comparative in vitro metabolisms of dimethylnitrosamine in animals of six different species.

(PMID:7217848)

•

[Maduagwu EN](#),

[Bassir O](#)

[Journal of Environmental Pathology and Toxicology](#) [1980, 4(5-6):229-235]

Type:

Abstract

The in vitro metabolisms of dimethylnitrosamine (DMN) by liver slices and microsomal + soluble fractions, respectively, were studied in the rat, guinea pig, cat, duck, lizard and monkey using disappearance of DMN and the formation of formaldehyde, in situ, as indices of the decomposition of the compound. All the animal species investigated metabolised DMN, and the rate of metabolism of the compound was highest in media containing cat tissue and lowest in that containing duck tissue. The rat and guinea pig however appeared to metabolise DMN at comparable rates. Our results would suggest that DMN demethylase activity in the liver is a linear function of time. These results are discussed in relation to the toxicity of possible DMN metabolites.

Europe PMC is a service of the [Europe PMC Funders' Group](#), in partnership with the [European Bioinformatics Institute](#); and in cooperation with the [National Center for Biotechnology Information](#) at the [U.S. National Library of Medicine \(NCBI/NLM\)](#). It includes content provided to the [PMC International archive](#) by participating publishers.

[Contact the Helpdesk](#) [Visit the blog](#) [Follow EuropePMC news on Twitter](#) [Leave feedback](#)

[Contact Us](#) | [Terms of Use](#) | [Copyright](#) | [Accessibility](#) | [Cookies](#)