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# Nitrosamine metabolism in kwashiorkor rats

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## Abstract

The *in vitro* metabolism of nitrosodimethylamine (NDMA) was studied in liver tissue obtained from male weanling kwashiorkor wistar rats. The elimination of this compound and that of nitrosomorpholine (NMOR) from the blood, after a single intravenous dose, was also investigated. *N*-demethylase activity in liver microsomes of the test animals was not significantly different from that of the controls although the activity of this enzyme per gram wet liver tissue was considerably reduced in the model animals. On the other hand, the glutathione (GSH) content in liver cytosol of the kwashiorkor animals was much higher than that of the controls. The elimination of NDMA and NMOR from the blood of the experimental animals over 8 hr following i.v. administration of the carcinogens, showed that the clearance rate of each nitrosamine was significantly lower in the kwashiorkor rats.

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