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A comparative study of liver mixed function oxidases in camels (Camelus dromedarius), guinea pigs (Cavia porcellus) and rats (Rattus norvegicus).

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## **Abstract**

1. The activities of the drug-metabolizing enzymes, benzphetamine N-demethylase, 7-ethoxycoumarin O-deethylase and dicoumarol oxidation have been measured in vitro in the liver of camels, guinea pigs and rats. 2. In these species, levels of hepatic microsomal parameters namely microsomal protein, cytochrome P450, cytochrome b5 and NADPH-cytochrome c reductase have also been determined. 3. In general, camels seemed to have the lowest enzyme activity when compared to rats and guinea pigs. 4. Some sex differences were observed in the levels of enzymes studied. In rats and guinea pigs, males had higher benzphetamine N-demethylase than females. However, in camels and guinea pigs, females had higher 7-ethoxycoumarin O-deethylase when compared to males