
**Serum methanol concentrations in rats and in men after a single dose of aspartame.**

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Serum methanol concentrations were measured in rats and in humans given oral aspartame. The dose given to rats was the FDA's projected 99th percentile daily intake for humans, assuming aspartame were to replace all sucrose sweeteners in the diet (34 mg/kg). Four male adult volunteers each received 500 mg, equivalent to 6-8.7 mg/kg, which is approximately the FDA's estimate of mean daily human consumption. Both treatments caused a rise in serum methanol. In rats the mean peak value was 3.1 mg/litre 1 hr after administration; serum methanol returned to endogenous values 4 hr after treatment. In the men, the mean rise over endogenous values was 1.06 mg/litre after 45 min. Two hours after treatment, serum methanol had returned to basal levels. The temporary serum methanol increase showed peak values within the range of individual basal levels.

Publication Types:

- Research Support, Non-U.S. Gov't

MeSH Terms:

- Adult
- Animals
- Aspartame/administration & dosage
- Aspartame/metabolism*
- Dipeptides/metabolism*
- Humans
- Methanol/blood*
- Rats
- Rats, Inbred Strains
- Time Factors
Substances:

- Dipeptides
- Aspartame
- Methanol

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