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Erratum

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The following abstract (number 61) was omitted on page R16 of the above mentioned supplement.

61

EFFECT OF DDT AND DIELDRIN ON INTESTINAL GLUCOSE TRANSPORT AND HYDROLASE ACTIVITY

W. Braun and A. Reymann

Oral doses of DDT or dieldrin enhance monkey intestinal glucose uptake and hydrolase activity (A. Mahmood et al., Chem Biol Interactions 37:165, 1981). In a three compartment model of mouse intestine in vitro (R.J. Naftalin, P.F. Curran, J Memb Biol 16:257, 1974) we demonstrated increased mucosal to serosal glucose transfer (umoles/h · cm^2) from 3.90±0.35 to 5.92±0.61 (72 h after 250 mg/kg DDT, orally) or to 5.13±0.27 (24 h after 40 mg/kg dieldrin, n = 10 each) which is due to a rise in uphill glucose transport at the brush border pole by 67 % or 54 % resp.; effects on countertransport and basolateral fluxes can be accounted for by raised intracellular glucose concentrations. Disaccharidase activities were enhanced with DDT and dieldrin, but also with phenobarbital and methylcholanthrene, the latter two having no effect on glucose transport. We conclude that pesticide action on glucose transport and induction of disaccharidase activities are independent from each other.

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