

Brain acetylcholine: Increase after systematic choline administration

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Abstract

Administration of **choline chloride** i.p. to rats causes a dose-dependent increase in the brain concentration of the neurotransmitter, acetylcholine (ACh). This increase is maximal (22% after a 60-mg/kg dose) 40 minutes after injection. These observations suggest that precursor availability may influence brain ACh synthesis, just as brain tryptophan and tyrosine levels have previously been shown to control the synthesis of brain serotonin and catecholamines