

# Abstract

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## Plasma amino acid levels in children with autism and their families.

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**OBJECTIVE AND METHODS:** Plasma amino acid levels were measured in autistic and Asperger syndrome patients, their siblings, and parents. The results were compared with values from age-matched controls.

**RESULTS:** Patients with autism or Asperger syndrome and their siblings and parents all had raised glutamic acid, phenylalanine, asparagine, tyrosine, alanine, and lysine ( $p < .05$ ) than controls, with reduced plasma glutamine. Other amino acids were at normal levels.

**CONCLUSION:** These results show that children with autistic spectrum disorders come from a family background of dysregulated amino acid metabolism and provide further evidence for an underlying biochemical basis for the condition.

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