

Background:

Amino acids as the building blocks of proteins are presumed to have an importance in food selection and species with a low protein diet need to be able to maintain their protein requirements.

Aim:

The aim of this project was to assess the sensitivity of the sense of taste in spider monkeys for L-amino acids by determining taste preference thresholds. A comparison between the threshold values among different species should allow for the assessment of possible correlations between dietary habits and taste sensitivity

**Method:**

Using a two bottle preference test, four spider monkeys were tested for their ability to discriminate various concentrations of six L-amino acids from plain water until they reach their taste detection thresholds.

Results:

With these four individuals the threshold concentrations are as low as 20 mM for L-Valine, 10 mM for L-Aspartic acid, 2 mM for L-Alanine, L-Glutamic acid and L-Serine and 0.02 mM for L-Lysine.



Discussion

The spider monkeys' taste preference thresholds for the amino acids are mostly in the range of humans, rats and mice with an exception for L-Aspartic acid which had an higher threshold value for spider monkeys.



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Taste Preference
Thresholds for L-Amino
Acids in Spider Monkeys
(*Ateles geoffroyi*)



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