

Aspartame & Susceptibility To Headache

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We performed a double-blind cross over trial of challenges with 30 mg of aspartame per kilogram of body weight or placebo in 40 subjects who reported having headaches repeatedly after consuming products containing aspartame. The incidence rate of headache after aspartame (35 percent) was not significantly different from that after placebo (45 percent) ($P < 0.50$). No serious reactions were observed, and the incidence of symptoms other than headache following aspartame was also equivalent to that after placebo. No treatment related effects were detected in vital signs, blood pressure, or plasma concentrations of cortisol, insulin, glucagon, histamine, epinephrine, or norepinephrine. Most of the subjects were well educated and overweight and had a family or personal history of allergic reactions. The subjects who had headaches had lower plasma concentrations of norepinephrine ($P < 0.0002$) and epinephrine ($P < 0.02$) just before the development of headache. We conclude that in this population, aspartame is no more likely to produce headache than placebo.

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