

Stevia extracts are obtained from *Stevia rebaudiana* commonly used as natural sweeteners. It is ~250-300 times sweeter than sucrose. Common use of stevia prompted us to investigate its genotoxicity in human peripheral blood lymphocytes. Stevia (active ingredient steviol glycoside) was dissolved in pure water. Dose selection was done using ADI (acceptable daily intake) value. Negative control (pure water), 1, 2, 4, 8 and 16 µg/ml concentrations which were equivalent to ADI/4, ADI/2, ADI, ADI × 2 and ADI × 4 of Stevia were added to whole-blood culture. Two repetitive experiments were conducted. Our results showed that there was no significant difference in the induction of chromosomal aberrations and micronuclei between the groups treated with the concentrations of Stevia and the negative control at 24 and 48 h treatment periods. The data showed that stevia (active ingredient steviol glycosides) has no genotoxic activity in both test systems. Our results clearly supports previous findings.

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