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Abstract








[RIBEIRO, Daniel Araki](#); [SCOLASTICI, Clarissa](#); [MARQUES, Mariângela Esther Alencar](#) and [SALVADORI, Daisy Maria Feres](#). Fluoride does not induce DNA breakage in Chinese hamster ovary cells *in vitro*. *Braz. oral res.* [online]. 2004, vol.18, n.3, pp. 192-196. ISSN 1806-8324. doi: 10.1590/S1806-83242004000300003.

Fluoride has been widely used in dentistry because it is a specific and effective caries prophylactic agent. However, excess fluoride may represent a hazard to human health, especially by causing injury to genetic material. Genotoxicity tests represent an important part of cancer research to assess the risk of potential carcinogens. In the current study, the potential DNA damage associated with exposure to fluoride was assessed by the single cell gel (comet) assay *in vitro*. Chinese hamster ovary cells were exposed to sodium fluoride (NaF) at final concentration ranging from 7 to 100 µg/ml for 3 h, at 37°C. The results pointed out that NaF in all concentrations tested did not contribute to DNA damage as depicted by the mean tail moment and tail intensity. These findings are clinically important since they represent an important contribution to a correct evaluation of the potential health risk associated with the exposure to dental agents.

Keywords : Sodium fluoride; Comet assay; Mutagenicity tests.

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