

[Available Issues](#) | [Japanese](#)

Author: [ADVANCED](#) | Volume Page
Keyword:



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

Food Science and Technology International, Tokyo

Vol. 3 (1997) , No. 1 pp.74-76

[\[PDF \(242K\)\]](#) [\[I\]](#)

Suppression of Hydrogen Peroxide-Induced Cytotoxicity in Chinese Hamster Lung Fibroblasts by Chemically Modified Curcumin

[Tsutomu NAKAYAMA](#)¹⁾, [Itsuko HARAGUCHI](#)¹⁾, [Kei HASHIMOTO](#)¹⁾, [SUGIYAMA](#)²⁾ and [Toshihiko OSAWA](#)²⁾

1) School of Food and Nutritional Sciences, University of Shizuoka

2) Department of Applied Biological Sciences, Nagoya University

(Received: August 29, 1996)

We assessed the inhibitory effects of curcumin and its chemically modified derivatives against H₂O₂-induced cytotoxicity toward Chinese hamster lung fibroblasts in a colony formation assay. Among 4 curcuminoids, dihydroxycurcumin and dihydroxytetrahydrocurcumin suppressed H₂O₂-induced cytotoxicity, whereas neither curcumin nor tetrahydrocurcumin showed any suppressive effects.

support our empirical rule that the *o*-dihydroxy (catechol) moiety is inhibitory effects.

Keywords: [curcumin](#), [turmeric](#), [hydrogen peroxide](#), [V79](#), [cytotoxic cultured cell](#)

[\[PDF \(242K\)\]](#) [\[References\]](#)



Downlo

To cite this article:

Tsutomu NAKAYAMA, Itsuko HARAGUCHI, Kei HASHIMOTO and Toshihiko OSAWA, **Suppression of Hydrogen Peroxide-Induced Cytotoxicity toward Chinese Hamster Lung Fibroblasts by Chemically Modified Curcumin**, *J. Pharm. Med.* Vol. **3**, 74-76. (1997) .

doi:10.3136/fsti9596t9798.3.74