

Author: [ADVANCED](#) | Volume Page
Keyword: | [TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1881-3984

PRINT ISSN : 1344-6606

Food Science and Technology Research

Vol. 11 (2005) , No. 2 pp.202-206

[\[PDF \(755K\)\]](#) [\[References\]](#)**Cytostatic Activity of Hot Water Extracts from the Sea Cucumber in Caco-2**[Mariko OGUSHI](#)¹⁾²⁾, [Yumiko YOSHIE-STARK](#)¹⁾ and [Takeshi SUZUKI](#)¹⁾*1) Department of Food Science and Technology, Faculty of Marine Science, Tokyo University of Marine Science and Technology**2) Department of Food Science, Sagami Women's University*

(Received: October 26, 2004)

(Accepted: April 20, 2005)

Sea cucumber is a traditional food item in Asia and has been reported to exhibit antifungal, antitumor, and antioxidant bioactivity as well as other properties. In this study, sea cucumbers were treated with hot water at 98°C for 60min to prepare extracts that were then used to assess their effect on the proliferation and H₂O₂ susceptibility of human colon adenocarcinoma Caco-2 cells. The growth of Caco-2 cells was significantly inhibited by sea cucumber extracts in a dose dependent manner. Cell proliferation was inhibited by high molecular weight sea cucumber extract at a concentration of 0.108mg/mL. No growth was observed at 1.04mg/mL of the hot water extract after 96h incubation. Cell damage by sea cucumber extract was evident above 1mg/mL. H₂O₂ showed concentration dependent cytotoxicity to Caco-2 cells. In addition, coadministration of sea cucumber extracts intensified the H₂O₂ cytotoxicity.

Keywords: [Sea cucumber](#), [Caco-2 cells](#), [Cytostatic activity](#), [Hot water extract](#)[\[PDF \(755K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)[RIS](#)[BibTeX](#)

To cite this article:

Cytostatic Activity of Hot Water Extracts from the Sea Cucumber in Caco-2 Mariko OGUSHI, Yumiko YOSHIE-STARK and Takeshi SUZUKI, *FSTR*. Vol. **11**, 202-206. (2005) .

doi:10.3136/fstr.11.202

JOI JST.JSTAGE/fstr/11.202

Copyright (c) 2006 by Japanese Society for Food Science and Technology



[Japan Science and Technology Information Aggregator, Electronic](#)

