Jestage				My J-STAGE Sign in
Food Scie	nce and Technology FSTI	International, '	Tokyo Japa Science	mese Society for Food and Technology
Available Issues Ja	ipanese		>>	Publisher Site
Author: Keyword:	ADVAN Searc	CED Volume h	Page	Go
	Add to Favorite/Citation Articles Alerts	Add to Favorite Publications	Register Alerts	? My J-STAGE HELP
<u>TOP</u> > <u>Available Issues</u> > <u>Table of Contents</u> > Abstract				

ONLINE ISSN : 1881-3976 PRINT ISSN : 1341-7592

Food Science and Technology International, Tokyo

Vol. 4 (1998), No. 1 pp.77-79

[PDF (411K)] [References]

Suppressive Effects of Polysaccharide Produced by *Bacillus circulans* on Chemical Mutagens-Induced SOS Response in *Salmonella typhimurium*

Yuka ISOBE¹⁾, Kumio YOKOIGAWA¹⁾ and Hiroyasu KAWAI¹⁾

1) Department of Food Science and Nutrition, Nara Women's University

(Received: August 4, 1997) (Accepted: November 14, 1997)

The suppressing effects of polysaccharide produced by *Bacillus circulans* on the SOS response of *Salmonella typhimurium* TA 1535/pSK1002 induced by AF-2, MNNG, 4NQO, Trp-P-2, IQ and MeIQx were compared with those of commercial polysaccharides to find a new physiological value as an additive to processed foodstuffs. The native polysaccharide produced by *B. circulans* strongly suppressed SOS response induced by IQ and MeIQx, and the suppression was increased with increasing polysaccharide concentration. Xanthan gum, which is an acidic polysaccharide produced by *Xanthomonas campestris*, and carboxymethyl cellulose (CMC) did not suppress SOS response induced by mutagens.

Keywords: SOS response, polysaccharide, Bacillus circulans

[PDF (411K)] [References]

Download Meta of Article[<u>Help</u>] <u>RIS</u> BibTeX

To cite this article:

Yuka ISOBE, Kumio YOKOIGAWA and Hiroyasu KAWAI, **Suppressive Effects of Polysaccharide Produced by** *Bacillus circulans* **on Chemical Mutagens-Induced SOS** Response in Salmonella typhimurium FSTI. Vol. 4, 77-79. (1998).

doi:10.3136/fsti9596t9798.4.77 JOI JST.JSTAGE/fsti9596t9798/4.77

Copyright (c) 2009 by the Japanese Society for Food Science and Technology



Japan Science and Technology Information Aggregator, Electronic JSTAGE