

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. 14 (2008) , No. 4 pp.351

[\[PDF \(572K\)\]](#) [\[References\]](#)

A Subchronic Toxicity Study of *Spirulina platensis*

[Nongporn HUTADILOK-TOWATANA](#)¹⁾²⁾, [Wantana REANMONGKOL](#)³⁾, [Siva SATITIT](#)²⁾, [Pharkphoom PANICHAYUPAKARANANT](#)⁴⁾ and [Pratum RITTHISUNTHORN](#)²⁾

1) *Natural Products Research Center, Faculty of Science, Prince of Songkla University*

2) *Department of Biochemistry, Faculty of Science, Prince of Songkla University*

3) *Department of Clinical Pharmacy, Faculty of Pharmaceutical Sciences, Prince of Songkla University*

4) *Department of Pharmacognosy and Pharmaceutical Botany, Faculty of Pharmaceutical Sciences, Prince of Songkla University*

(Received: July 27, 2007)

(Accepted: March 10, 2008)

In this study, we examined the effects of *Spirulina platensis*, a multicellular filamentous blue-green algae currently used world-wide as a food supplement, upon acute and subchronic treatments to rodents. For short-term treatment, no signs of toxicity were observed within 7 days after feeding male Swiss mice at the high dose of 30 and 10 g/kg body weight of fresh and dried *S. platensis*, respectively. For the subchronic toxicity study, two separate experiments were also performed to evaluate both forms of *S. platensis*. In each experiment, four groups of six Sprague-Dawley male and female rats were given fresh or dried alga at various doses by feeding daily for 12 weeks. In all instances, the consumption of algae showed no effect on behavior, food and water intake, growth or health status of these animals during the course of this investigation. The values in clinical chemistry monitored throughout the study period did not reveal significant differences between the control and treated groups. In addition, post-mortem examination found no abnormalities in the gross findings. Our results thus demonstrate for the first time that short-term and long-term consumptions of *S. platensis*, up to high feeding levels, did not produce any adverse effects in experimental animals.

Keywords: [acute toxicity](#), [subchronic toxicity](#), [blue-green algae](#), [Spirulina platensis](#)

[\[PDF \(572K\)\]](#) [\[References\]](#)

Download Meta of Article [\[Help\]](#)

[RIS](#)

[BibTeX](#)

To cite this article:

A Subchronic Toxicity Study of *Spirulina platensis* Nongporn HUTADILOK-TOWATANA, Wantana REANMONGKOL, Siva SATITIT, Pharkphoom PANICHAYUPAKARANANT and Pratum RITTHISUNTHORN, *FSTR*. Vol. **14**, 351. (2008) .

doi:10.3136/fstr.14.351

JOI JST.JSTAGE/fstr/14.351

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



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

