

[Available Issues](#) | [Japanese](#)
[>> Publisher Site](#)

 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. 7 (2001) , No. 1 pp.94-98

[\[PDF \(93K\)\]](#) [\[References\]](#)

Effect of Dehydrated Nystose Addition on the Reduction of Water Activity

[Hitoshi MATSUMOTO](#)¹⁾, [Takahisa TOKUNAGA](#)¹⁾ and [Masao HIRAYAMA](#)¹⁾
1) Bio Science Laboratories, Meiji Seika Kaisha, Ltd.

(Received: August 30, 2000)

(Accepted: August 30, 2000)

Dehydrated nystose was prepared by thermal dehydration of nystose trihydrate, recrystallized from a commercially available syrup of fructooligosaccharides. Dehydrated nystose was found to have the ability to absorb moisture and the ability to maintain water activity (A_w) at a low level during its rehydration. These characteristics remained evident until an 8% (w/w) increase in weight had occurred, corresponding to the restoration of three molecules of crystallization water. As an application of these characteristics, we found that by addition of dehydrated nystose to sucrose powder the A_w is reduced to an appropriate value and the survival of lyophilized *Bifidobacterium* in the mixture is thereby maintained.

Keywords: [nystose](#), [dehydration](#), [Aw](#), [probiotics](#), [Bifidobacterium](#)
[\[PDF \(93K\)\]](#) [\[References\]](#)
Download Meta of Article [\[Help\]](#)
[RIS](#)
[BibTeX](#)

To cite this article:

Effect of Dehydrated Nystose Addition on the Reduction of Water Activity Hitoshi MATSUMOTO, Takahisa TOKUNAGA and Masao HIRAYAMA, *FSTR*. Vol. 7, 94-98. (2001) .

doi:10.3136/fstr.7.94

JOI JST.JSTAGE/fstr/7.94

Copyright (c) 2007 by Japanese Society for Food Science and Technology



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

