### **Accepted Manuscript**

*In situ* fortification of vitamin B12 in wheat flour and wheat bran by fermentation with *Propionibacterium freudenreichii* 



Chong Xie, Rossana Coda, Bhawani Chamlagain, Minnamari Edelmann, Paulina Deptula, Pekka Varmanen, Vieno Piironen, Kati Katina

PII: S0733-5210(18)30123-1

DOI: 10.1016/j.jcs.2018.05.002

Reference: YJCRS 2567

To appear in: Journal of Cereal Science

Received Date: 06 February 2018

Revised Date: 30 April 2018

Accepted Date: 03 May 2018

Please cite this article as: Chong Xie, Rossana Coda, Bhawani Chamlagain, Minnamari Edelmann, Paulina Deptula, Pekka Varmanen, Vieno Piironen, Kati Katina, *In situ* fortification of vitamin B12 in wheat flour and wheat bran by fermentation with *Propionibacterium freudenreichii*, *Journal of Cereal Science* (2018), doi: 10.1016/j.jcs.2018.05.002

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

### **ACCEPTED MANUSCRIPT**

## In situ fortification of vitamin B12 in wheat flour and wheat bran by fermentation with Propionibacterium freudenreichii Chong Xie\*, Rossana Coda, Bhawani Chamlagain, Minnamari Edelmann, Paulina Deptula, Pekka Varmanen, Vieno Piironen, Kati Katina Department of Food and Environmental Sciences, University of Helsinki, PO Box 66 FI-00014, Finland \*Corresponding author. Tel.: + 358 44 912 0811 E-mail address: chong.xie@helsinki.fi Keywords: Propionibacterium freudenreichii; In situ fortification; Vitamin B12; Wheat bran

<sup>1</sup> **Abbreviation:** AA, Acetic Acid; CFU, Colony Forming Unit; DMBI, 5,6 - dimethylbenzimidazole; dw, dry weight; HPLC, High-Performance Liquid Chromatography; LA, Lactic Acid; LAB, Lactic Acid Bacteria; MRS, de Man, Rogosa and Sharpe; PA, Propionic Acid; PCA, Plate Count Agar; TTA, Total Titratable Acid; VRBGA, Violet Red Bile Glucose Agar; YEL, Yeast Extract Lactate; YM, Yeast Mold.

#### Download English Version:

# https://daneshyari.com/en/article/8881366

Download Persian Version:

https://daneshyari.com/article/8881366

<u>Daneshyari.com</u>