Accepted Manuscript

Influence of power ultrasound on the main quality properties and cell viability of osmotic dehydrated cranberries

Malgorzata Nowacka, Aleksandra Fijalkowska, Artur Wiktor, Magdalena Dadan, Urszula Tylewicz, Marco Dalla Rosa, Dorota Witrowa-Rajchert

PII: S0041-624X(17)30159-2

DOI: http://dx.doi.org/10.1016/j.ultras.2017.07.014

Reference: ULTRAS 5587

To appear in: *Ultrasonics*

Received Date: 16 February 2017

Revised Date: 2 July 2017 Accepted Date: 18 July 2017



Please cite this article as: M. Nowacka, A. Fijalkowska, A. Wiktor, M. Dadan, U. Tylewicz, M. Dalla Rosa, D. Witrowa-Rajchert, Influence of power ultrasound on the main quality properties and cell viability of osmotic dehydrated cranberries, *Ultrasonics* (2017), doi: http://dx.doi.org/10.1016/j.ultras.2017.07.014

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.

CCEPTED MANUSCRIPT

Influence of power ultrasound on the main quality properties and cell

viability of osmotic dehydrated cranberries

Malgorzata Nowacka¹, Aleksandra Fijalkowska¹, Artur Wiktor¹, Magdalena Dadan¹

Urszula Tylewicz², Marco Dalla Rosa^{2,3}, Dorota Witrowa-Rajchert¹

¹Department of Food Engineering and Process Management, Faculty of Food Sciences, Warsaw University of

Life Sciences - SGGW, Nowoursynowska 159c, 02-776 Warsaw, Poland

²Department of Agricultural and Food Sciences, Alma Mater Studiorum Università di Bologna, Campus of Food

Science, Cesena, Italy

³Interdepartmental Centre for Agri-Food Industrial Research, Alma Mater Studiorum Università di Bologna,

Campus of Food Science, Cesena, Italy

Corresponding author: Malgorzata Nowacka, Present address: Department of Food

Engineering and Process Management, Faculty of Food Sciences - SGGW, Warsaw

University of Life Sciences, Nowoursynowska st. 159c, 02-776 Warsaw, Poland

Tel. +48 22 593 75 79 Fax +48 22 593 75 76

e-mail: malgorzata nowacka@sggw.pl

Abstract

The aim of the study was to investigate the effect of ultrasound treatment in two osmotic

solutions, carried out at different time, on some physical properties, antioxidant activity and

cell survival of cranberries. Ultrasound treatment was conducted at 21 kHz for 30 and 60 min

in liquid medium: 61.5% sucrose solution and 30% sucrose solution with 0.1% steviol

glycosides addition. Some samples before the ultrasound treatment were subjected to cutting

or blanching. The results showed that dry matter content and concentration of the dissolved

substances increased during ultrasound treatment in osmotic solution, however higher value

1

Download English Version:

https://daneshyari.com/en/article/8130043

Download Persian Version:

https://daneshyari.com/article/8130043

<u>Daneshyari.com</u>