



ISSN 2501-0190

**Latvia University of Agriculture  
Faculty of Food Technology**

**FOODBALT 2017**



**11th Baltic Conference on  
Food Science and Technology**

**“Food science and technology  
in a changing world”**

**Abstract Book**

**April 27–28, 2017  
Jelgava, Latvia**



ISSN 2501-0190

**Latvia University of Agriculture  
Faculty of Food Technology**

**11th Baltic Conference on  
Food Science and Technology**

**“Food science and technology  
in a changing world”**

**FOODBALT 2017**

**Abstract Book**

**Jelgava  
April 27–28, 2017**

# FOODBALT 2017

Abstract Book of 11th Baltic Conference on Food Science and Technology “Food science and technology in a changing world” FOODBALT 2017 Conference. Jelgava, LLU, 2017, 140 pages  
ISSN 2501-0190

## Conference Organizers

**Conference Chair** Inga Ciprova, Latvia University of Agriculture, LV

## Editorial Board

**Evita Straumite**, Latvia University of Agriculture, LV

**Tatjana Kinca**, Latvia University of Agriculture, LV

**Viktor Nedovic**, University of Belgrade, RS

**Joerg Hampshire**, Fulda University of Applied Sciences, DE

**Grazina Juodekiene**, University of Technology, LT

**Daina Karklina**, Latvia University of Agriculture, LV

**Ruta Galoburda**, Latvia University of Agriculture, LV

**Raquela Guine**, Polytechnic Institute of Viseu, POR

**Aleksandr Shleikin**, Saint-Peterburg National Research University of Information Technologies, Mechanics and Optics, RUS

**Ievina Sturite**, Norwegian Institute of Bioeconomy Research, NOR

**Thierry Talou**, National Polytechnic Institute of Toulouse, FR

**Rimantas Venskutonis**, Kaunas University of Technology, LT

**Raivo Vokk**, Tallinn University of Technology, EE

**Erkan Yalcin**, Abant Izzet Baysal University, TR

## Organising Committee

**Zanda Kruma**, Latvia University of Agriculture, LV

**Dace Klava**, Latvia University of Agriculture, LV

**Sandra Muizniece-Brasava**, Latvia University of Agriculture, LV

**Martins Sabovics**, Latvia University of Agriculture, LV

Editor-in-chief and responsible

compiler of abstract book – **leader researcher Evita Straumite**

Printed and bound in Riga by „Drukatava”

© LLU, Faculty of Food Technology, 2017

## FACTOR AND CLUSTER ANALYSIS TO KNOWLEDGE ABOUT DIETARY FIBRE

**Raquel P. F. Guine<sup>1</sup>, Paula Correia<sup>1</sup>, Dace Klava<sup>2</sup>, Evita Straumite<sup>2</sup>, Viktoria Szucs<sup>3</sup>, Julia Harangozo<sup>3</sup>, Monica Tarcea<sup>4</sup>, Zita Fazakas<sup>4</sup>, Ivana Rumbak<sup>5</sup>, Irena C. Baric<sup>5</sup>, Drazenka Komes<sup>5</sup>, Zvonimir Satalic<sup>5</sup>, Marijana M. Saric<sup>6</sup>, Erkan Yalcin<sup>7</sup>, Cem Kosemeci<sup>7</sup>, Marcela Leal<sup>8</sup>, Dijana Jovanoska<sup>9</sup>, Dragoljub Vanevski<sup>9</sup>, Elena Vittadini<sup>10</sup>, Nicoletta Pellegrini<sup>10</sup>, Ayman EL-Kenawy<sup>11</sup>, Omnia EL-Shenawy<sup>12</sup>**

<sup>1</sup> CI&DETS, Polytechnic Institute of Viseu, Portugal

<sup>2</sup> Faculty of Food Technology, Latvia University of Agriculture, Latvia

<sup>3</sup> National Agricultural R&I Centre - Food Science Research Institute, Budapest, Hungary

<sup>4</sup> University of Medicine and Pharmacy from Tirgu-Mures, Romania

<sup>5</sup> Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia

<sup>6</sup> Department of Health Studies, University of Zadar, Croatia

<sup>7</sup> Department of Food Engineering, Abant İzzet Baysal University, Turkey

<sup>8</sup> Faculty of Health Sciences, Maimonides University, Argentina

<sup>9</sup> Public Health Institute, Centre for Public Health, Tetovo, Macedonia

<sup>10</sup> Department of Food Science, University of Parma, Italy

<sup>11</sup> Genetic Engineering Institute, University of Sadat City, Egypt

<sup>12</sup> Department of Psychology, Faculty of Arts, Menofiya University, Shebin Elkom, Egypt

The present study was aimed at investigating what are the people's levels of information about dietary fibre (DF) and how they relate to some factors that result from the people's perceptions associated with the knowledge about DF. The study consisted of a descriptive cross-sectional survey undertaken on a sample of over 6 thousand participants, original from 10 countries. Statistical techniques like factor analysis and cluster analysis were applied to the data. Factor analysis showed that 10 out of the 12 variables used to measure the knowledge about DF could be grouped into 2 factors: one associated with health effects of DF and the other with its natural sources. The internal consistency of both factors was evaluated by the Cronbach's alfa (0.854 and 0.644, respectively). Cluster analysis revealed that the participants could be divided into 3 groups: Cluster 1 – good knowledge both about sources and health effects of DF; Cluster 2 – good knowledge about the sources of DF but poor knowledge about its health effects; Cluster 3 – poor knowledge both about sources and health effects of DF. The results were subject to analysis of stability by splitting the data set in 2 halves. The cluster membership was found associated with living environment and level of education, but not with age, gender or country.

**Keywords:** dietary fibre, knowledge, sources of fibre, survey

For further information please contact: raquelguine@esav.ipv.pt