

## CONTENTS

### Food Technology

#### Ancuța Elena Prisacaru

- Effect of antioxidants on polyunsaturated fatty acids – review ..... 121

#### Reza Amiri Chayjan, Behnam Alaei

- New model for colour kinetics of plum under infrared vacuum condition and microwave drying ..... 131

#### Elena Vasylyshyna

- Influence of freezing and storing cherry fruit on its nutritional value ..... 145

#### Guowei Shu, Chunju Bao, He Chen, Changfeng Wang, Hui Yang

- Fermentation optimization of goat milk with *Lactobacillus acidophilus* and *Bifidobacterium bifidum* by Box-Behnken design ..... 151

#### Patrycja Komolka, Danuta Górecka, Krystyna Szymandera-Buszka, Anna Jędrusek-Golińska, Krzysztof Dziedzic, Katarzyna Waszkowiak

- Sensory qualities of pastry products enriched with dietary fiber and polyphenolic substances ..... 161

#### Mahfouz Al-Bachir

- Evaluation the effect of gamma irradiation on microbial, chemical and sensorial properties of peanut (*Arachis hypogaea* L.) seeds ..... 171

#### Le Pham Tan Quoc, Nguyen Van Muoi

- Microwave-assisted extraction of phenolic compounds from *Polygonum multiflorum* Thunb. roots ..... 181

#### Karolina M. Wójciak, Elżbieta Solska

- Evolution of free amino acids, biogenic amines and *N*-nitrosoamines throughout ageing in organic fermented beef ..... 191

### Human Nutrition

#### Iwona Węgielska, Joanna Suliburska

- The role of intestinal microbiota in the pathogenesis of metabolic diseases ..... 201

#### Ewelina Swora-Cwynar, Magdalena Kujawska-Luczak, Joanna Suliburska, Julita Reguła, Angelika Kargulewicz, Matylda Kręgielska-Narożna, Emilia Marcinkowska, Alina Kanikowska, Marzena Bielas, Marian Grzymisławski, Paweł Bogdański

- The effects of a low-calorie diet or an isocaloric diet combined with metformin on sex hormones in obese women of child-bearing age ..... 213

#### Renata Mozrzymas, Monika Duś-Żuchowska, Łukasz Kalužny, Ewa Wenska-Chyży, Jarosław Walkowiak

- Phenylketonuria is not a risk factor for changes of inflammation status as assessed by interleukin 6 and interleukin 8 concentrations ..... 221