

Contents

Molecular Nutrition & Food Research

Special: Maillard Reaction and Health Aspects

Guest Editor: Chi-Tang Ho

Editorial

Maillard Reaction and Health Aspects

Chi-Tang Ho 1099

Review Article

Methylglyoxal in food and living organisms

Ina Nemet, Lidija Varga-Defterdarović and Zdenka Turk 1105



Research Article

Trapping reactions of reactive carbonyl species with tea polyphenols in simulated physiological conditions

Chih-Yu Lo, Shiming Li, Di Tan, Min-Hsiung Pan, Shengmin Sang and Chi-Tang Ho 1118

Research Article

Effects of flavonoids on the expression of the pro-inflammatory response in human monocytes induced by ligation of the receptor for AGEs

Shang-Ming Huang, Chi-Hao Wu and Gow-Chin Yen 1129



Review Article

Toxicity of the AGEs generated from the Maillard reaction: On the relationship of food-AGEs and biological-AGEs

Chuyen Van Nguyen 1140

Review Article

Heterocyclic amines: Chemistry and health

Ka-Wing Cheng, Feng Chen and Mingfu Wang 1150

Research Article

Chemistry and some biological effects of model melanoidins and pigments as Maillard intermediates

Fumitaka Hayase, Teruyuki Usui and Hirohito Watanabe 1171

Research Article**Chemistry and genotoxicity of caramelized sucrose**

David D. Kitts, C. H. Wu, A. Kopec and T. Nagasawa 1180

Regular

Research Article**Intervention with polyphenol-rich fruit juices results in an elevation of glutathione S-transferase P1 (hGSTP1) protein expression in human leucocytes of healthy volunteers**

Thomas Hofmann, Ute Liegibel, Peter Winterhalter, Achim Bub, Gerhard Rechkemmer and Beatrice Louise Pool-Zobel 1191

Research Article**Analysis of sphingolipids in potatoes (*Solanum tuberosum* L.) and sweet potatoes (*Ipomoea batatas* (L.) Lam.) by reversed phase high-performance liquid chromatography electrospray ionization tandem mass spectrometry (HPLC-ESI-MS/MS)**

Nana Bartke, Anne Fischbeck and Hans-Ulrich Humpf 1201

**Research Article****Effect of lupeol and lupeol linoleate on lipemic – hepatocellular aberrations in rats fed a high cholesterol diet**

Varatharajan Sudhahar, Sekar Ashokkumar and Palaninathan Varalakshmi 1212

Research Article***In vitro* fermentability of differently digested resistant starch preparations**

Caroline Fässler, Eva Arrigoni, Koen Venema, Fred Brouns and Renato Amadò 1220

Research Article**Single nucleotide polymorphism analysis of the enterocin P structural gene of *Enterococcus faecium* strains isolated from nonfermented animal foods**

Samuel Arlindo, Pilar Calo, Carlos Franco, Marta Prado, Alberto Cepeda and Jorge Barros-Velázquez 1229

MNF Report 1239

MNF Meetings Diary 1244

Instructions to authors 1246

Autor Index I–VI