

# Food Chemistry

## Papers Published in Volume 81

### Volume 81 Number 1 May 2003

- 1 Improvement of emulsifying properties of soybean protein isolate by conjugation with carboxymethyl cellulose  
N. DIFTIS, V. KIOSSEOGLOU (Greece)
- 7 Chemical characterization of *Achyranthes bidentata* seed  
M.F. MARCONE, F. JAHANIAVAL, H. ALIEE, Y. KAKUDA (Canada)
- 13 The use of fatty-acid profiles of the lipids of the rainbow trout (*Oncorhynchus mykiss*) to differentiate tissue and dietary feed  
E. BARRADO, F. JIMÉNEZ (Spain), F. PRIETO (Mexico), C. NUEVO (Spain)
- 21 Total mercury in wild-grown higher mushrooms and underlying soil from Wdzydze Landscape Park, Northern Poland  
J. FALANDYSZ (Poland), M. KAWANO (Japan), A. ŚWIECZKOWSKI, A. BRZOSTOWSKI, M. DADEJ (Poland)
- 27 Effects of temperature and relative humidity on growth and enzyme production by *Actinomyces elegans* and *Rhizopus oligosporus* during sufu pehtze preparation  
B.-Z. HAN (The Netherlands), Y. MA (China), F.M. ROMBOUTS, M.J.R. NOUT (The Netherlands)
- 35 Inhibitory effect of unheated and heated D-glucose, D-fructose and L-cysteine solutions and Maillard reaction product model systems on polyphenoloxidase from apple.  
I. Enzymatic browning and enzyme activity inhibition using spectrophotometric and polarographic methods  
C. BILLAUD, E. ROUX, S. BRUN-MÉRIMÉE, C. MARASCHIN, J. NICOLAS (France)
- 51 Inhibitory effect of unheated and heated D-glucose, D-fructose and L-cysteine solutions and Maillard reaction product model systems on polyphenoloxidase from apple.  
II. Kinetic study and mechanism of inhibition  
E. ROUX, C. BILLAUD, C. MARASCHIN, S. BRUN-MÉRIMÉE, J. NICOLAS (France)
- 61 Phytochemical components of beach pea (*Lathyrus maritimus* L.)  
U.D. CHAVAN, D.B. MCKENZIE (Canada), R. AMAROWICZ (Poland), F. SHAHIDI (Canada)
- 73 Distribution and relationships of mercury, lead, cadmium, copper and zinc in perch (*Perca fluviatilis*) from the Pomeranian Bay and Szczecin Lagoon, southern Baltic  
P. SZEFER, M. DOMAGALA-WIELOSZEWSKA, J. WARZOCHA, A. GARBACIK-WESOŁOWSKA, T. CIESIELSKI (Poland)
- 85 Influence of storage conditions on some physical and chemical properties of smoked salmon (*Salmo salar*) processed by vacuum impregnation techniques  
G. BUGUEÑO (Chile), I. ESCRICHE, N. MARTÍNEZ-NAVARRETE, M. DEL MAR CAMACHO, A. CHIRALT (Spain)
- 91 Optimized enzymatic synthesis of propylene glycol monolaurate by direct esterification  
J.-F. SHAW, H.-Z. WU, C.-J. SHIEH (Taiwan)
- 97 Prooxidant activity of lutein and its dimyristate esters in corn triacylglyceride  
A. SUBAGIO (Indonesia), N. MORITA (Japan)
- 103 Dietary fibre in cocoa shell: characterisation of component polysaccharides  
R. REDGWELL, V. TROVATO, S. MERINAT, D. CURTI, S. HEDIGER, A. MANEZ (Switzerland)
- 113 Resistant starch and  $\beta$ -glucan levels in grain sorghum (*Sorghum bicolor* M.) are influenced by soaking and autoclaving  
L.L. NIBA, J. HOFFMAN (USA)
- 119 Cholesterol-lowering properties of amaranth flakes, crude and refined oils in hamsters  
A. BERGER (Canada), I. MONNARD, F. DIONISI, D. GUMY (Switzerland), K.C. HAYES (USA), P. LAMBELET (Switzerland)

**ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION**

- 125 Precipitation of inulins and oligoglucoses by ethanol and other solvents  
Y. KU, O. JANSEN, C.J. OLES, E.Z. LAZAR, J.I. RADER (USA)
- 133 Iron binding characteristics of phenolic compounds: some tentative structure–activity relations  
S. KHOKHAR, R.K.O. APENTEN (UK)
- 141 Development of a sequential injection analysis system for the simultaneous biosensing of glucose and ethanol in bioreactor fermentation  
R.A.S. LAPA, J.L.F.C. LIMA, I.V.O.S. PINTO (Portugal)
- 147 A rapid Fourier transform infrared spectroscopic method for the determination of 2-TBARS in palm olein  
G. SETIOWATY, Y.B.C. MAN (Malaysia)
- 155 ANCM Bibliography  
I Calendar

**Volume 81 Number 2 August 2002**

- 159 Flavonoids, phenolic acids and abscisic acid in Australian and New Zealand *Leptospermum* honeys  
L. YAO, N. DATTA (Australia), F.A. TOMÁS-BARBERÁN, F. FERRERES, I. MARTOS (Spain),  
R. SINGANUSONG (Thailand)
- 169 Effect of storage time and conditions on the cotyledon cell wall of the adzuki bean (*Vigna angularis*)  
A.M. YOUSIF, H.C. DEETH (Australia)
- 175 The effects of natural antioxidants on oxidative processes and metmyoglobin reducing activity in beef patties  
A.E.D. BEKHIT (New Zealand), G.H. GEESINK (The Netherlands), M.A. ILIAN, J.D. MORTON,  
R. BICKERSTAFFE (New Zealand)
- 189 Antioxidant activity and mechanism of action of some phenolic acids at ambient and high temperatures  
E.M. MARINOVA, N.V. YANISHLIEVA (Bulgaria)
- 199 Evolution of fatty acids from intramuscular lipid fractions during ripening of Iberian hams as affected  
by  $\alpha$ -tocopheryl acetate supplementation in diet  
R. CAVA, M. ESTÉVEZ, D. MORCUENDE, T. ANTEQUERA (Spain)
- 209 Nitrogenous fractions during the manufacture of whey protein concentrates from Feta cheese whey  
G. MOATSOU, A. HATZINAKI, I. KANDARAKIS, E. ANIFANTAKIS (Greece)
- 219 Morphological, thermal and rheological properties of starches from different botanical sources  
N. SINGH, J. SINGH, L. KAUR, N.S. SODHI, B.S. GILL (India)
- 233 Inositol phosphate degradation by the action of phytase enzyme in legume seeds  
J. FRIAS, R. DOBLADO, J.R. ANTEZANA, C. VIDAL-VALVERDE (Spain)
- 241 Molecular design of antibrowning agents: antioxidative tyrosinase inhibitors  
I. KUBO, Q.-X. CHEN, K. NIHEI (USA)
- 249 Antioxidant activity and total phenolics of edible mushroom extracts  
L.M. CHEUNG, P.C.K. CHEUNG, V.E.C. OOI (China)
- 257 Isolation of collagen from the skins of Baltic cod (*Gadus morhua*)  
M. SADOWSKA, I. KOŁODZIEJSKA, C. NIECIKOWSKA (Poland)
- 263 Seasonal patterns of spoilage of ice-stored cultured gilthead sea bream (*Sparus aurata*)  
K. GRIGORAKIS (Greece), K.D.A. TAYLOR (UK), M.N. ALEXIS (Greece)
- 269 The effects of sugars and pectin on flavour release from a fruit pastille model system  
S. LUBBERS, E. GUICHARD (France)
- 275 Thermal inactivation of lipoxygenase and hydroperoxytrienoic acid lyase in tomatoes  
G.E. ANTHON, D.M. BARRETT (USA)
- 281 Effect of corn oil and vitamin E on the oxidative status of adipose tissues and liver in rat  
V. VALLS, M. GOICOECHEA, P. MUÑIZ, G.T. SAEZ, J.R. CABO (Spain)

**ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION**

- 287 Levels of phytoestrogens, inorganic trace-elements, natural toxicants and nitrate in vegetarian duplicate diets  
D.B. CLARKE, K.A. BARNES, L. CASTLE, M. ROSE, L.A. WILSON, M.J. BAXTER, K.R. PRICE,  
M.S. DUPONT (UK)
- 301 Application of absorbance values used in wineries for estimating CIELAB parameters in red wines  
S. PÉREZ-MAGARIÑO, M.L. GONZÁLEZ-SANJOSÉ (Spain)
- 307 HPLC determination of catechins in tea leaves and tea extracts using relative response factors  
H. WANG, G.J. PROVAN, K. HELLIWELL (UK)
- 313 ANCM Bibliography  
I Calendar

**Volume 81 Number 3 June 2003**

- 321 Antioxidant capacity of phenolic phytochemicals from various cultivars of plums  
D.-O. KIM (USA), S.W. JEONG (South Korea), C.Y. LEE (USA)
- 327 Preparation and functional properties of beverages made from sea algae  
T. NAGAI, T. YUKIMOTO (Japan)
- 333 Studies on aroma generation in lulo (*Solanum quitoense*): enzymatic hydrolysis of glycosides from leaves  
C. OSORIO, C. DUQUE (Colombia), F. BATISTA-VIERA (Uruguay)
- 341 Effect of skin contact on the aroma composition of the musts of *Vitis vinifera* L. cv. Muscat of Bornova and Narince grown in Turkey  
S. SELLI, T. CABAROGLU, A. CANBAS, H. ERTEN, C. NURGEL (Turkey)
- 349 The effects of heating, UV irradiation, and storage on stability of the anthocyanin–polyphenol copigment complex  
A. BĄKOWSKA, A.Z. KUCHARSKA, J. OSZMIANŃSKI (Poland)
- 357 Nitrogenous components of human milk: non-protein nitrogen, true protein and free amino acids  
B. CARRATÙ, C. BONIGLIA, F. SCALISE, A.M. AMBRUZZI, E. SANZINI (Italy)
- 363 Production of ace inhibitory peptides by digestion of chickpea legumin with alcalase  
M.M. YUST, J. PEDROCHE, J. GIRÓN-CALLE, M. ALAIZ, F. MILLÁN, J. VIOQUE (Spain)
- 371 Browning of white chocolate during storage  
A. VERCET (Spain)
- 379 Esterase activities of intracellular extracts of wild strains of lactic acid bacteria isolated from Serra da Estrela cheese  
A.C. MACEDO, T.G. TAVARES, F.X. MALCATA (Portugal)
- 383 Effect of the addition of bentonite to the *tirage solution* on the nitrogen composition and sensory quality of sparkling wines.  
A.J. MARTÍNEZ-RODRIGUEZ, M.C. POLO (Spain)
- 389 Studies on submerged fermentation of *Pleurotus tuber-regium* (Fr.) Singer—Part 1: physical and chemical factors affecting the rate of mycelial growth and bioconversion efficiency  
J.-Z. WU, P.C.K. CHEUNG, K.-H. WONG, N.-L. HUANG (China)
- 395 Determination and gustatory properties of taste-active compounds in tomato juice  
C. SALLES, S. NICKLAUS, C. SEPTIER (France)
- 403 Mechanism of imidazole and oxazole formation in [<sup>13</sup>C-2]-labelled glycine and alanine model systems  
V.A. YAYLAYAN, L.J.W. HAFFENDEN (Canada)
- 411 Raman spectroscopic study of globulin from *Phaseolus angularis* (red bean)  
G. MENG (Canada), C.-Y. MA, D.L. PHILLIPS (Hong Kong)
- 421 Cholesterol photooxidation as affected by combination of riboflavin and fatty acid methyl esters  
J.-T. CHIEN, Y.F. LU, P.C. HU, B.H. CHEN (Taiwan)
- 433 Anthocyanins from a Norwegian potato cultivar  
T. FOSSEN, D.O. ØVSTEDAL, R. SLIMESTAD, Ø.M. ANDERSEN (Norway)
- 439 Exposure of calf thymus DNA to autoxidized β-carotene results in the formation of 8-oxo-deoxyguanosine  
S.-L. YEH, T.-H. YANG, C.-H. HUANG, M.-L. HU (Taiwan, ROC)
- 447 Volatile compounds of bottled wines with Denomination of Origin from the Canary Islands (Spain)  
C. DÍAZ, J.E. CONDE, J.J. MÉNDEZ, J.P.P. TRUJILLO (Spain)
- ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION**
- 453 Determination of changes in some physical and chemical properties of soybean oil during hydrogenation  
İ. KARABULUT, M. KAYAHAN, S. YAPRAK (Turkey)
- 457 Prediction of tartrate stability of sherry wines by a conductimetric system with rapid response  
J.G. BENÍTEZ, V.M.P. MACÍAS, R.V. LÓPEZ, L.P. RODRÍGUEZ (Spain)
- 463 Chromium determination in foods by quadrupole inductively coupled plasma–mass spectrometry with ultrasonic nebulization  
F. CUBADDA, S. GIOVANNANGELI, F. IOSI, A. RAGGI, P. STACCHINI (Italy)
- 469 Determination of estragole, safrole and eugenol methyl ether in food products  
F. SIANO, C. GHIZZONI, F. GIONFRIDDO, E. COLOMBO, L. SERVILLO, D. CASTALDO (Italy)
- 477 ANCM Bibliography  
I Calendar

**Volume 81 Number 4 June 2003**

- 481 Studies on *Psathyrella atroumbonata* (Pegler), a Nigerian edible fungus  
S.G. JONATHAN, I.O. FASIDI (Nigeria)

- 485 Comparison of antioxidant activities of onion and garlic extracts by inhibition of lipid peroxidation and radical scavenging activity  
A.M. NUUTILA, R. PUUPPONEN-PIMIÄ, M. AARNI, K.-M. OKSMAN-CALDENTY (Finland)
- 495 Carotenoids and ascorbic acid from cashew apple (*Anacardium occidentale* L.): variety and geographic effects  
R.B. ASSUNÇÃO, A.Z. MERCADANTE (Brazil)
- 503 Study of carbohydrate influence on protein–tannin aggregation by nephelometry  
V. DE FREITAS, E. CARVALHO, N. MATEUS (Portugal)
- 511 Chickpea flour ingredient slows glycemic response to pasta in healthy volunteers  
I. GONI, C. VALENTÍN-GAMAZO (Spain)
- 517 In vitro proteolysis of myofibrillar and sarcoplasmic proteins of white muscle of sea bass (*Dicentrarchus labrax* L.): effects of cathepsins B, D and L  
C. LADRAT, V. VERREZ-BAGNIS, J. NOËL, J. FLEURENCE (France)
- 527 Comparison of collagen types of arm and mantle muscles of the common octopus (*Octopus vulgaris*)  
S. MIZUTA, T. TANAKA, R. YOSHINAKA (Japan)
- 533 The effect of mixing and wheat protein/gluten on the gelatinization of wheat starch  
A.A. MOHAMED, P. RAYAS-DUARTE (USA)
- 547 Effect of freeze injuries in olive fruit on virgin olive oil composition  
J.-R. MORELLÓ, M.-J. MOTILVA, T. RAMO, M.-P. ROMERO (Spain)
- 555 Modification of pectin in Japanese persimmon fruit during the sun-drying process  
M.A. ASGAR, R. YAMAUCHI, K. KATO (Japan)
- 561 Chelation of aqueous iron(III) by 2-acetyl-1,3-cyclohexanedione and beer ageing  
C.A. BLANCO, I. CABALLERO, A. ROJAS, M. GOMEZ, J. ALVAREZ (Spain)
- 569 Roasting of hazelnuts. Role of oil in colour development and hydroxymethylfurfural formation  
B. FALLICO, E. ARENA, M. ZAPPALÀ (Italy)
- 575 Antioxidative activity and total phenolic compounds of leaf, root and petiole of four accessions of *Centella asiatica* (L.) Urban  
M.K. ZAINOL, A. ABD-HAMID, S. YUSOF, R. MUSE (Malaysia)
- 583 Degradation kinetics of anthocyanins in blood orange juice and concentrate  
A. KIRCA, B. CEMEROĞLU (Turkey)
- 589 Data on sodium content of common edible mushrooms  
J. VETTER (Hungary)
- 595 Bioactive amines formation in milk by *Lactococcus* in the presence or not of rennet and NaCl at 20 and 32 °C  
W.C. SANTOS, M.R. SOUZA, M.M.O.P. CERQUEIRA, M.B.A. GLÓRIA (Brazil)
- ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION**
- 607 Sensitive determination of trace-metal elements in tea with capillary electrophoresis by using chelating agent 4-(2-pyridylazo) resorcinol (PAR)  
H. FENG, T. WANG, S.F.Y. LI (Singapore)
- 613 Spectrophotometric determination of total phosphorus in rape seeds and oils at various stages of technological process: calculation of phospholipids and non-hydratable phospholipids contents in rapeseed oil  
A. SZYDLOWSKA-CZERNIAK, E. SZLYK (Poland)
- 621 Statistical investigation of the differences in the distribution of metals in Nebbiolo-based wines  
E. MARENGO, M. ACETO (Italy)
- 631 Analysis of green tea catechins: comparative study between HPLC and HPCE  
M. BONOLI, M. PELILLO, T.G. TOSCHI, G. LERCKER (Italy)

I Papers published in Volume 81

V Calendar