

Food Chemistry

Papers Published in Volumes 52–54

CONTENTS OF VOLUME 52

Number 1

- 1 Selenium concentration in milks
M. S. ALAEJOS & C. D. ROMERO (Spain)
- 19 Renaturation of metmyoglobin subjected to high isostatic pressure
A. B. DEFAYE, D. A. LEDWARD, D. B. MACDOUGALL & R. F. TESTER (UK)
- 23 Biochemical characteristics of two types of unripe Spanish cow's milk cheese (Cebreiro and Pasiego varieties)
M. LAFUENTE, J. CARBALLO, J. GONZÁLEZ-PRIETO & R. MARTÍN-SARMIENTO (Spain)
- 29 Development and evaluation of microscale apparatus for the generation of kinetic data at high temperatures, applied to the degradation of thiamine
U. VIBERG & R. ÖSTE (Sweden)
- 35 Effects of ultra-high hydrostatic pressure treatments on the quality of tomato juice
S. PORRETTA, A. BIRZI, C. GHIZZONI & E. VICINI (Italy)
- 43 A study of gossypol reduction by choline and ethanolamine using a model system
N. A. M. ESKIN (Canada), O. AKOMAS (Nigeria) & M. LATTA (Canada)
- 47 Iron speciation in intestinal contents of rats fed meals composed of meat and nonmeat sources of protein and fat
M. KAPSOKEFALOU & D. D. MILLER (USA)
- 57 Investigation into contamination of processed fruit products by carbendazim, methyl thiophanate and thiabendazole
A. SANNINO (Italy)
- 63 Physical and chemical changes in different zones of normal and PSE dry cured ham during processing
J. ARNAU, L. GUERRERO, G. CASADEMONT & P. GOU (Spain)
- 71 Extraction of harp seal gastric proteases and their immobilization on chitin
X.-Q. HAN & F. SHAHIDI (Canada)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 77 A microassay for the analysis of trypsin inhibitor activity in peas
J. R. BACON, S. C. D. R. WANIGATUNGA, J. AN & G. R. FENWICK (UK)
- 81 Determination of vitamin B6 in foods by HPLC—a collaborative study
M. BERGAENTZLÉ, F. ARELLA, J. B. BOURGUIGNON & C. HASSELMANN (France)
- 87 Determination of nonprotein tryptophan in yoghurts by selective fluorescence and HPLC
M. BIASIOLO, A. BERTAZZO, C. COSTA, A. BEGHETTO & G. ALLEGRI (Italy)
- 93 The validation of a solid phase clean-up procedure for the analysis of aflatoxins in groundnut cake using HPLC
O. G. ROCH, G. BLUNDEN, R. D. COKER & S. NAWAZ (UK)

Technical Note

- 99 Comparison of voltammetric and high performance liquid chromatographic methods for ascorbic acid determination in infant formulas
M. J. ESTEVE, R. FARRÉ, A. FRIGOLA, J. C. LÓPEZ, J. M. ROMERA, M. RAMÍREZ & A. GIL (Spain)
- 103 Bibliography of analytical, nutritional and clinical methods
- 111 Book reviews

Number 2

- 115 Milk composition of Majaheim, Wadah and Hamra camels in Saudi Arabia
M. A. MEHAIA, M. A. HABLAS, K. M. ABDEL-RAHMÁN & S. A. EL-MOUGY (Saudi Arabia)
- 123 Preliminary evaluation of the factors influencing the trace element content of milk and dairy products
E. CONI, A. BOCCA, D. IANNI & S. CAROLI (Italy)
- 131 A three-state heat-denaturation of bovine α -lactalbumin
R. K. OWUSU APENTEN (UK)
- 135 Thermal resistance of pectin methylesterase in tomato juice
F. DE SIO, G. DIPOLLINA, G. VILLARI, R. LOIUDICE, B. LARATTA & D. CASTALDO (Italy)
- 139 Nutritive value of a melon seed beverage
S. KARAKAYA, A. KAVAS, S. N. EL, N. GÜNDÜÇ & L. AKDOĞAN (Turkey)
- 143 Changes in chemical composition, nutritional quality, physico-chemical and functional properties of peach kernel meal during detoxification
T. A. EL-ADAWY & S. A. EL-KADOUSY (Egypt)
- 149 Possible hormonal activity of date pits and flesh fed to meat animals
E. A. ELGASIM, Y. A. ALYOUSEF & A. M. HUMEIDA (Saudi Arabia)
- 153 Structure and taste of 3,6:3',6'-dianhydro- α,α -trehalose monohydrate
C. K. LEE, L. L. KOH & Y. XU (Singapore)
- 157 Peroxidase in unripe and processing-ripe strawberries
M. LÓPEZ-SERRANO & A. ROS BARCELÓ (Spain)
- 161 Measurement of ion levels of spinach grown in different fertilizer regimes using ion chromatography
M. A. MURCIA, A. VERA, R. ORTIZ & F. GARCÍA-CARMONA (Spain)
- 167 Effect of physical changes on the rates of nonenzymatic browning and related reactions
M. P. BUERA & M. KAREL (USA)
- 175 Effect of antioxidants on losses of tocopherols during deep-fat frying
M. H. GORDON & L. KOURIMSKÁ (UK)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 179 A comparative study of solvent extraction efficiency and the performance of immunoaffinity and solid phase columns on the determination of aflatoxin B₁
N. BRADBURN, R. D. COKER & G. BLUNDEN (UK)
- 187 Simultaneous determination of maltose and glucose using a dual-electrode flow injection system
H.-B. QU, X.-E. ZHANG & S.-Z. ZHANG (People's Republic of China)
- 193 Influence of variation in methodology on the reliability of the isoelectric focusing method of fish species identification
H. REHBEIN (Germany), M. ETIENNE, M. JEROME (France), T. HATTULA (Finland), L. B. KNUDSEN, F. JESSEN (Denmark), J. B. LUTEN, W. BOUQUET (The Netherlands), I. M. MACKIE, A. H. RITCHIE (UK), R. MARTIN (Spain) & R. MENDES (Portugal)
- 199 Determination of biogenic amines in alcoholic and non-alcoholic beers by HPLC
S. BUIATTI, O. BOSCHELLE, M. MOZZON & F. BATTISTUTTA (Italy)

Technical Note

- 203 Comparison of spectrophotometric and chromatographic methods of determination of furanic aldehydes in the wine distillates
J. QUESADA GRANADOS, M. VILLALÓN MIR, H. LÓPEZ GARCÍA SERRANA & M. C. LÓPEZ MARTÍNEZ (Spain)
- 209 Bibliography of analytical, nutritional and clinical methods

Number 3

- 217 The effects of ions and non-electrolytes on equilibria involving sulphur(IV) oxospecies in solution
S. J. GODDARD & B. L. WEDZICHA (UK)
- 223 Kinetics of the sulphite-inhibited browning of fructose: effect of buffer
S. E. SWALES & B. L. WEDZICHA (UK)
- 227 Production of brined soft cheese from frozen ultrafiltered sheep's milk. Part 1. Physicochemical, microbiological and physical stability properties of concentrates
L. P. VOUTSINAS, M. C. KATSIARI, C. P. PAPPAS & H. MALLATOU (Greece)
- 235 Production of brined soft cheese from frozen ultrafiltered sheep's milk. Part 2. Compositional, physicochemical, microbiological and organoleptic properties of cheese
L. P. VOUTSINAS, M. C. KATSIARI, C. P. PAPPAS & H. MALLATOU (Greece)
- 249 Comparison of standard and NMR methodologies for assessment of oxidative stability of canola and soybean oils
U. N. WANASUNDARA, F. SHAHIDI & C. R. JABLONSKI (Canada)
- 255 A comparative study of the effect of sugars on the thermal and mechanical properties of concentrated waxy maize, wheat, potato and pea starch gels
D. J. PROKOPOWICH (Canada) & C. G. BILIADERIS (Greece)
- 263 Stability of the intense sweetener neohesperidine dihydrochalcone in blackcurrant jams
F. A. TOMÁS-BARBERÁN (Spain), F. BORREGO (Spain), F. FERRERES (Spain) & M. G. LINDLEY (UK)
- 267 The kinetics of the loss of *all-trans* retinol at low and intermediate water activity in air in the dark
F. MANAN, A. BAINES,* J. STONE & J. RYLEY (UK)
- 275 Chemical analysis and nutritional assessment of lesser known pulses of the genus, *Mucuna*
V. R. MOHAN & K. JANARDHANAN (India)
- 281 Effect of sucrose on starch–hydrocolloid interactions
V. SUDHAKAR, R. S. SINGHAL & P. R. KULKARNI (India)
- 285 Thiamin content and activity of antithiamin factor in vegetables of southern Thailand
A. K. TAUNGBODHITHAM (Thailand)
- 289 Contribution of α -tocopherol to olive oil stability
G. BLEKAS, M. TSIMIDOU & D. BOSKOU (Greece)
- 295 An attempt for producing low-sodium Feta-type cheese
M. E. ALY (Egypt)
- 301 Changes of dietary fiber and starch composition of processed potato products during domestic cooking
S. T. THED (Malaysia) & R. D. PHILLIPS (USA)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 305 Evaluation of the decay of malathion, dichlofluanid and fenitrothion pesticides in apple samples, using gas chromatography
C. SÁENZ BARRIO, J. SANZ ASENSIO, M. PLAZA MEDINA, M. PÉREZ-CLAVIJO & J. GALBÁN BERNAL (Spain)
- 311 Rapid extraction of aroma compounds in must and wine by means of ultrasound
C. COCITO, G. GAETANO & C. DELFINI (Italy)
- 321 Determination of phytate and lower inositol phosphates in Spanish legumes by HPLC methodology
C. BURBANO (Spain), M. MUZQUIZ (Spain), A. OSAGIE (Nigeria), G. AYET (Spain) & C. CUADRADO (Spain)

Technical Note

- 327 Protein quality of Asian beans and their wild progenitor, *Vigna sublobata* (Roxb)
I. A. KHALIL & S. KHAN (Pakistan)
- 331 Bibliography of analytical, nutritional and clinical methods
- 337 Erratum
- 339 Announcements

Number 4

343 Editorial Letter

REVIEWS

345 Applications for supercritical fluid technology in food processing
M. V. PALMER & S. S. T. TING (Australia)

353 Emulsifiers in bread making
L. STAMPFLI & B. NERSTEN (Norway)

GENERAL PAPERS

361 The effect of pH on the formation of volatile compounds in meat-related model systems
A. MEYNIER & D. S. MOTTRAM (UK)

367 Multidetector, semiquantitative method for determining biogenic amines in foods
A. R. SHALABY (Egypt)

373 Proximate composition and dietary fibre content of various foods/rations processed to suit the Indian palate
N. N. PRASAD, F. KHANUM, M. SIDDALINGASWAMY & K. SANTHANAM (India)

379 Binding of Ca by three starchy legumes in the presence of Ca alone or with Fe, Zn, Mg and Cu
S. B. ELHARDALLOU & A. F. WALKER (UK)

385 Oligosaccharide distribution in Brazilian soya bean cultivars
L. C. TRUGO, A. FARAH & L. CABRAL (Brazil)

389 Effect of water activity on the stability of bixin in an annatto extract–microcrystalline cellulose model system
M. B. A. GLÓRIA, S. R. VALE & P. A. BOBBIO (Brazil)

393 Characterisation of a heat-stable antioxidant co-purified with the superoxide dismutase activity from dried peas
D. J. NICE, D. S. ROBINSON & M. A. HOLDEN (UK)

399 Non-specific binding of lysine–glucose-derived Maillard products to macrophages outweighs specific receptor-mediated interactions
S. M. SHAW & M. J. C. CRABBE (UK)

405 Microscopic and chemical changes occurring during the ripening of two forms of jackfruit (*Artocarpus heterophyllus* L.)
A. K. M. M. RAHMAN, E. HUQ, A. J. MIAN (Bangladesh) & A. CHESSON (UK)

411 Prediction of clotting time for milk coagulation by mixtures of proteolytic enzymes
A. PICÓN, M. MEDINA & M. NUÑEZ (Spain)

415 Thermostability of three pectinesterase isoenzymes in tomato fruit
B. LARATTA, R. LOIUDICE, A. GIOVANE, L. QUAGLIUOLO, L. SERVILLO & D. CASTALDO (Italy)

419 Toxicological screening of seven Nigerian mushrooms
I. O. FASIDI & M. KADIRI (Nigeria)

423 Distribution of food reserves in *Dioscorea dumetorum* (Kunth) Pax tubers during sprouting
I. O. FASIDI & N. O. BAKARE (Nigeria)

427 Effect of germination on the ribonucleic acids (RNA) of some legume seeds (*Vicia faba*, *Cicer arietinum* and *Lupinus termis*)
O. M. ABDEL-FATAH (Egypt), V. A. ERDMANN, C. LIPPMANN (Germany), F. A.-R. AHMED & E. A.-M. ABDEL-RAHIM (Egypt)

433 The changes of protein patterns during one week of germination of some legume seeds and roots
F. A.-R. AHMED, E. A.-M. ABDEL-RAHIM, O. M. ABDEL-FATAH (Egypt), V. A. ERDMANN & C. LIPPMANN (Germany)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

439 Evaluation of beef aging by determination of hypoxanthine and xanthine contents: application of a xanthine sensor
Y. YANO, N. KATAHO, M. WATANABE, T. NAKAMURA & Y. ASANO (Japan)

447 Simultaneous determination of total chlorogenic acid, trigonelline and caffeine in green coffee samples by high performance gel filtration chromatography
C. A. B. DE MARIA, L. C. TRUGO, R. F. A. MOREIRA (Brazil) & M. PETRACCO (Italy)

- 451 Determining the authenticity of raw reformed breaded scampi (*Nephrops norvegicus*) by electrophoretic techniques
A. CRAIG, A. H. RITCHIE & I. M. MACKIE (UK)
- 455 Bibliography of analytical, nutritional and clinical methods
- 461 Contents of Volume 52

CONTENTS OF VOLUME 53

Number 1

- 1 Amino and fatty acids composition of African yam bean (*Sphenostylis stenocarpa*) flour
A. A. OSHODI, K. O. IPINMOROTI, E. I. ADEYEYE (Nigeria) & G. M. HALL (UK)
- 7 Fatty acid composition of Caribbean-grown peanuts (*Arachis hypogaea* L.) at three maturity stages
M. J. HINDS (USA)
- 15 Volatile compounds of rehydrated French beans, bell peppers and leeks. Part 1. Flavour release in the mouth and in three mouth model systems
S. M. VAN RUTH, J. P. ROOZEN & J. L. COZIJNSEN (The Netherlands)
- 23 Effect of germination of legume seeds on chemical composition and on protein and energy utilization in rats
C. M. DONANGELO, L. C. TRUGO, N. M. F. TRUGO (Brazil) & B. O. EGGUM (Denmark)
- 29 Critical stages in cyanogen removal during cassava processing in southern Tanzania
N. L. V. MLINGI (Tanzania), Z. A. BAINBRIDGE, N. H. POULTER (UK) & H. ROSLING (Sweden)
- 35 Physical behaviour and composition of low- and high-melting fractions of sediment in canola oil
H. LIU, C. G. BILIADERIS, R. PRZYBYLSKI & N. A. M. ESKIN (Canada)
- 43 A rapid method for the determination of total L-ascorbic acid in fruits and vegetables by micellar electrokinetic capillary chromatography
C. O. THOMPSON & V. C. TRENERRY (Australia)
- 51 Water dispersions of myofibrillar proteins from capelin (*Mallotus villosus*)
F. SHAHIDI & A. C. ONODENALORE (Canada)
- 55 Investigation of the influence of reaction conditions on the elementary composition of melanoidins
B. CÄMMERER & L. W. KROH (Germany)
- 61 Trimethylamine oxide and derived compounds' changes during frozen storage of hake (*Merluccius merluccius*)
C. G. SOTELO, J. M. GALLARDO, C. PIÑEIRO & R. PÉREZ-MARTIN (Spain)
- 67 α -Tocopherol content in trout oil
M. C. LÓPEZ, M. T. SATUÉ, M. L. GONZÁLEZ & A. AGRAMONT (Spain)
- 71 Influence of variety and geographical origin on the lipid fraction of hazelnuts (*Corylus avellana* L.) from Spain: (III) Oil stability, tocopherol content and some mineral contents (Mn, Fe, Cu)
J. PARCERISA, M. RAFECAS, A. I. CASTELLOTE, R. CODONY, A. FARRÀN, J. GARCIA, C. GONZALEZ, A. LÓPEZ, A. ROMERO & J. BOATELLA (Spain)
- 75 Pineapple fruit: morphological characteristics, chemical composition and sensory analysis of Red Spanish and Smooth Cayenne cultivars
A. P. BARTOLOMÉ, P. RUPÉREZ & C. FÚSTER (Spain)
- 81 Composition of San Marzano tomato varieties
R. LOIUDICE, M. IMPEMBO, B. LARATTA, G. VILLARI, A. LO VOI, P. SIVIERO & D. CASTALDO (Italy)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 91 Determination of organic sulphur compounds in garlic extracts by gas chromatography and mass spectrometry
R. ARTACHO MARTÍN-LAGOS, M. F. OLEA SERRANO & M. D. RUIZ LOPEZ (Spain)
- 95 Quantitative analysis of potential adulterants of extra virgin olive oil using infrared spectroscopy
Y. W. LAI, E. K. KEMSLEY & R. H. WILSON (UK)
- 99 Supercritical CO₂ extraction of carotenoids and other lipids from *Chlorella vulgaris*
R. L. MENDES, H. L. FERNANDES, J. P. COELHO, E. C. REIS, J. M. S. CABRAL, J. M. NOVAIS & A. F. PALAVRA (Portugal)
- 105 The determination of sugars in beverages and medicines using on-line dialysis for sample preparation
G. M. GREENWAY & N. KOMETA (UK)
- 111 Bibliography of analytical, nutritional and clinical methods

Number 2

- 117 Alkaline stability of the oligosaccharides present in beet medium invert sugar
L. L. LLOYD, D. A. J. WASE & J. F. KENNEDY (UK)
- 125 Effect of germination and degree of grind (coarse/fine) on the extract and sugar contents of sorghum malts
O. O. LASEKAN, M. A. IDOWU & W. LASEKAN (Nigeria)
- 129 Kinetics of papaya pectinesterase
A. FAYYAZ, B. A. ASBI, H. M. GHAZALI, Y. B. CHE MAN & S. JINAP (Malaysia)
- 137 Heat-inactivation of mango pectinesterase and polygalacturonase
A. A. S. LABIB, F. A. EL-ASHWAH, H. T. OMRAN & A. ASKAR (Egypt)
- 143 The effect of fermentation conditions on the nutrients and acceptability of tarhana
S. IBANOGLU, P. AINSWORTH, G. WILSON & G. D. HAYES (UK)
- 149 Effect of fermentation on tannin content and *in-vitro* protein and starch digestibilities of two sorghum cultivars
I. A. G. HASSAN & A. H. EL TINAY (Sudan)
- 153 Effect of metabisulphite on alcohol production in palm-wine
F. N. I. MORAH (Nigeria)
- 157 Protein concentrates from yeast cultured in wood hydrolysates
J. C. PARAJO, V. SANTOS, H. DOMINGUEZ, M. VÁZQUEZ & C. ALVAREZ (Spain)
- 165 Effect of arabinoxylans on bread-making quality of wheat flours
C. G. BILIADERIS (Greece), M. S. IZYDORCZYK & O. RATTAN (Canada)
- 173 Effect of heat-treatment and defatting on the proximate composition of some Nigerian local soup thickeners
E. N. ONYEIKE, T. OLUNGWE & A. A. UWAKWE (Nigeria)
- 177 Characterisation of the coloured thermal degradation products of bixin from annatto and a revised mechanism for their formation
M. J. SCOTTER (UK)
- 187 Peptide generation in the processing of dry-cured ham
E. RODRÍGUEZ-NUÑEZ, M.-C. ARISTOY & F. TOLDRÁ (Spain)
- 191 Impact of processing on Fe dialysability from bean (*Phaseolus vulgaris* L.)
G. LOMBARDI-BOCCIA, N. DE SANTIS, G. DI LULLO & E. CARNOVALE (Italy)
- 197 Comparative flavan-3-ol composition of seeds from different grape varieties
C. SANTOS-BUELGA, E. M. FRANCIA-ARICHA & M. T. ESCRIBANO-BAILÓN (Spain)
- 203 Effects of physico-chemical parameters of a model wine on the binding of γ -decalactone on bovine serum albumin
C. DRUAUX, S. LUBBERS, C. CHARPENTIER & A. VOILLEY (France)

RESEARCH NOTE

- 209 Evaluating protein quality of meats using collagen content
S. N. EL (Turkey)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 211 Ascorbic acid in exotic fruits: a liquid chromatographic investigation
G. VINCI, F. BOTRÈ, G. MELE & G. RUGGIERI (Italy)
- 215 Total dietary fibre content of some green and root vegetables obtained at different ethanol concentrations
A. M. ALMAZAN & X. ZHOU (USA)
- 219 The determination of sorbic acid and benzoic acid in a variety of beverages and foods by micellar electrokinetic capillary chromatography
I. PANT & V. C. TRENERRY (Australia)
- 227 Bibliography of analytical, nutritional and clinical methods
- 233 Book review
- 234 Announcement

Number 3

- 235 Study of some factors affecting water absorption by faba beans during soaking
Z. M. ABDEL KADER (Egypt)
- 239 Nutrients and anti-nutrients in small snails (*Limicolaria aurora*)
A. P. UDOH, E. O. AKPANYUNG & I. E. IGIRAN (Nigeria)
- 243 Starch and amylopectin: effect of solutes on their calorimetric behavior
L. A. BELLO-PÉREZ & O. PAREDES-LÓPEZ (Mexico)
- 249 Influence of the method of protein extraction on the *in-vitro* evaluation of mineral dialysability from legumes
M. CARBONARO, G. LOMBARDI-BOCCIA & E. CARNOVALE (Italy)
- 253 Effect of shortening and surfactants on selected chemical/physicochemical parameters and sensory quality of Arabic bread
I. TOUFEILI, S. SHADAREVIAN, A. M. A. MISKI & I. HANI (Lebanon)
- 259 Structure–function relationships of cowpea (*Vigna unguiculata*) globulin isolate: influence of pH and NaCl on physicochemical and functional properties
R. E. ALUKO & R. Y. YADA (Canada)
- 267 Maillard reaction products inhibit apple polyphenoloxidase
B. K. TAN & N. D. HARRIS (USA)
- 275 A comparative study of the physicochemical properties of starches from two lentil cultivars
R. HOOVER & H. MANUEL (Canada)
- 285 Production and characteristics of protein hydrolysates from capelin (*Mallotus villosus*)
F. SHAHIDI, X.-Q. HAN & J. SYNOWIECKI (Canada)
- 295 Characterisation of flour by means of pattern recognition methods
P. ZAGRODZKI, M. SCHLEGEL-ZAWADZKA, M. KROŚNIAK, P. MALEC, A. BICHONSKI & E. DUTKIEWICZ (Poland)
- 299 Nutrient and chemical evaluation of raw seeds of *Xylia xylocarpa*: an underutilized food source
P. SIDDHURAJU, K. VIJAYAKUMARI & K. JANARDHANAN (India)
- 305 Cell walls limit *in vitro* protein digestibility in processed legume seeds
C. MELITO & J. TOVAR (Venezuela)
- 309 Caffeoyl-tyrosine and Angol II as characteristic markers for Angolan robusta coffees
A. M. N. G. CORREIA, M. C. A. LEITÃO (Portugal) & M. N. CLIFFORD (UK)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 315 Analysis of diacetyl in yogurt by two spectrophotometric and fluorimetric methods
E. J. GUERRA HERNÁNDEZ, R. GARCÍA ESTEPA & I. RODRIGUEZ RIVAS (Spain)
- 321 Comparison between the tristimulus measurements Y_{xy} and $L^*a^*b^*$ to evaluate the colour of young red wines
L. ALMELA, S. JAVALOY, J. A. FERNÁNDEZ-LÓPEZ & J. M. LÓPEZ-ROCA (Spain)
- 329 Optimisation of chromatographic conditions for the determination of folates in foods and biological tissues for nutritional and clinical work
M. D. LUCOCK, M. GREEN, M. PRIESTNALL, I. DASKALAKIS, M. I. LEVENE & R. HARTLEY (UK)
- 339 Bibliography of analytical, nutritional and clinical methods
- 347 Book reviews
- 351 Announcement

Number 4

- 353 Chemical evaluation of the nutritive value of leaf of fluted pumpkin (*Telferia occidentalis*)
O. LADEJI, Z. S. C. OKOYE & T. OJOBE (Nigeria)
- 357 Nature of the condensed tannins present in the dietary fibre fractions in foods
B. BARTOLOMÉ (Spain), L. M. JIMÉNEZ-RAMSEY & L. G. BUTLER (USA)
- 363 Effect of oxygen and fluorescent light on the quality of orange juice during storage at 8°C
O. SOLOMON, U. SVANBERG & A. SAHLSTRÖM (Sweden)

Papers published in Volumes 52-54

- 369 Partial purification and characterisation of a lipase from *Lactobacillus plantarum* MF32
H. J. ANDERSEN, H. ØSTDAL (Denmark) & H. BLOM (Norway)
- 375 Nutrient and anti-nutrient components of some tropical leafy vegetables
V. A. ALETOR & O. A. ADEOGUN (Nigeria)
- 381 Clonal variations in the response of black tea quality due to plucking standards
M. OBANDA & P. O. OWUOR (Kenya)
- 385 Distribution pattern of some heavy metals in Egyptian fish organs
M. N. E. GOMAA, A. A. K. ABOU-ARAB, A. BADAWY & N. KHAYRIA (Egypt)
- 391 Stability studies of papaya pectinesterase
A. FAYYAZ, B. A. ASBI, H. M. GHAZALI, Y. B. CHE MAN & S. JINAP (Malaysia)
- 397 Riboflavin-sensitized photooxidation of ascorbic acid: kinetics and amino acid effects
M. Y. JUNG, S. K. KIM & S. Y. KIM (Republic of Korea)
- 405 Studies on starch-hydrocolloid interactions: effect of salts
V. SUDHAKAR, R. S. SINGHAL & P. R. KULKARNI (India)
- 409 Relationships between textural changes and the changes in linkages of pectic substances of sweet pepper during cooking processes, and the applicability of the models of interactions between pectin molecules
C. Y. CHANG, L. R. LAI & W. H. CHANG (Taiwan)
- 417 Isolation of xanthophylls from Taiwanese orange peels and their effects on the oxidation stability of soybean oil
W. J. YEN & B. H. CHEN (People's Republic of China)
- 427 Aqueous processing of sunflower kernels with enzymatic technology
H. DOMÍNGUEZ, M. J. NÚÑEZ & J. M. LEMA (Spain)
- 435 Effects of Manchego-type cheese-making process on contents of mineral elements
R. MORENO-ROJAS, M. A. AMARO-LOPEZ, R. H. GARCIA-GIMENO & G. ZURERA-COSANO (Spain)
- 441 The composition and properties of date proteins
I. S. A. AHMED, K. N. AL-GHARIBI, A. S. DAAR & S. KABIR (Sultanate of Oman)
- 447 The effects of grinding, soaking and cooking on the degradation of amygdalin of bitter apricot seeds
G. TUNÇEL (Turkey), M. J. R. NOUT (The Netherlands) & L. BRIMER (Denmark)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 453 Methods of analysis used for the determination of selenium in milk and infant formulae: a review
L. H. FOSTER & S. SUMAR (UK)
- 467 Amino acids interfere with the ninhydrin assay for asparagine
P. L. HURST, B. K. SINCLAIR & J. R. EASON (New Zealand)
- 471 Bibliography of analytical, nutritional and clinical methods
- 475 Book review
- 477 Contents of Volume 53

CONTENTS OF VOLUME 54

Number 1

- 1 Volatile compounds of rehydrated French beans, bell peppers and leeks. Part II. Gas chromatography/sniffing port analysis and sensory evaluation
S. M. VAN RUTH, J. P. ROOZEN, J. L. COZIJNSEN & M. A. POSTHUMUS (The Netherlands)
- 9 Hypoglycaemic effect of Stigmast-4-en-3-one, from *Parkia speciosa* empty pods
F. JAMALUDDIN, S. MOHAMED & Md. N. LAJIS (Malaysia)
- 15 Specificity and stability of the carboxypeptidase activity in ripe, ungerminated seeds of *Theobroma cacao* L.
G. BYTOF, B. BIEHL, H. HEINRICHS & J. VOIGT (Germany)
- 23 Interactions of Fe(II), Ca(II) and Fe(III) with high dietary fibre materials: A physicochemical approach
M. TORRE, A. R. RODRIGUEZ & F. SAURA-CALIXTO (Spain)
- 33 Lipxygenases and the quality of foods
D. S. ROBINSON, Z. WU, C. DOMONEY & R. CASEY (UK)
- 45 Fatty acid composition of some Malaysian freshwater fish
S. A. RAHMAN, T. S. HUAH, O. HASSAN & N. M. DAUD (Malaysia)

- 51 Influence of *Saccharomyces cerevisiae* var. *uvarum* on histamine and tyramine formation during beer fermentation
M. IZQUIERDO-PULIDO, J. FONT-FÁBREGAS & C. VIDAL-CAROU (Spain)
- 55 A comparative study of some functional properties of *Azelia africana* and *Glycine max* flours
J. C. ONWELUZO, K. C. ONUOHA & Z. A. OBANU (Nigeria)
- 61 Calcium oxalate and physico-chemical properties of cocoyam (*Colocasia esculenta* and *Xanthosoma sagittifolium*) tuber flours as affected by processing
C. I. IWUOHA & F. A. KALU (Nigeria)
- 67 Chemical evaluation of the nutritive value and changes in ascorbic acid content during storage of the fruit of 'bitter kola' (*Garcinia kola*)
M. I. DOSUNMU & E. C. JOHNSON (Nigeria)
- 73 Fractionation of volatiles from blackcurrant (*Ribes nigrum* L.) by different extractive methods
J. PÍRY, A. PRÍBELA, J. ĎURČANSKÁ & P. FARKAŠ (Slovakia)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 79 The metabolism of copper during pregnancy—a review
H. J. McARDLE (UK)
- 85 The development of a monoclonal antibody-based ELISA for the determination of histamine in food: application to fishery products and comparison with the HPLC assay
D. SERRAR, R. BREBANT, S. BRUNEAU & G. A. DENOYEL (France)
- 93 Chemical characterization of pineapple juices and nectars. Principal components analysis
M. CÁMARA, C. DíEZ & E. TORIJA (Spain)
- 101 Development and evaluation of an HPLC method for the analysis of carotenoids in foods, and the measurement of the carotenoid content of vegetables and fruits commonly consumed in the UK
D. J. HART & K. J. SCOTT (UK)
- 113 Analytical study of the mineral and sugar fractions of peach liqueurs
L. GUTIÉRREZ, A. ZAPATA, L. COLL & C. DíEZ (Spain)
- 119 Bibliography of analytical, nutritional and clinical methods

Number 2

- 127 Changes in antioxidant activity and components of methanolic extracts of peanut hulls irradiated with ultraviolet light
P.-D. DUH & G.-C. YEN (Taiwan)
- 133 Trace element content of Malaysian cockles (*Anadara granosa*)
N. IBRAHIM (Malaysia)
- 137 Residues and persistence of some organophosphorus insecticides applied to cabbage plants
M. A. ABO-EL-SEOUD, A. M. SHAMS-EL-DIN, L. N. DANIAL & S. M. AHMED (Egypt)
- 141 Distribution of organochlorine pesticides in the Egyptian aquatic ecosystem
A. A. K. ABOU-ARAB, M. N. E. GOMAA, A. BADAWY & K. NAGUIB (Egypt)
- 147 Effect of fermentation and germination on the *in vitro* protein digestibility of low and high tannin cultivars of sorghum
A. MONEIM, O. EL KHALIFA & A. H. EL TINAY (Sudan)
- 151 Effect of gamma-irradiation and extended storage on chemical quality in onion (*Allium cepa* L.)
C. A. CROCI, S. A. BANEK & O. A. CURZIO (Argentina)
- 155 Changes in the concentration of biogenic amines and application of tyramine sensor during storage of beef
Y. YANO, N. KATAHO, M. WATANABE, T. NAKAMURA & Y. ASNO (Japan)
- 161 The role of fungi in the production of chloroanisoles in general purpose freight containers
J. L. HILL, A. D. HOCKING & F. B. WHITFIELD (Australia)
- 167 Physicochemical attributes and pollen spectrum of some unifloral Spanish honeys
C. PÉREZ-ARQUILLUÉ, P. CONCHELLO, A. ARIÑO, T. JUAN & A. HERRERA (Spain)
- 173 Binding of iodide to bovine serum albumin and protamine studied with an ion-selective electrode
E. AYRANCI (Turkey)
- 177 The effect of cooking, autoclaving and germination on the nutritional quality of faba beans
A. H. KHALIL & E. H. MANSOUR (Egypt)
- 183 Pyruvate and flavor development in macerated onions (*Allium cepa* L.) by γ -glutamyl transpeptidase and exogenous C-S lyase
T. HANUM, N. K. SINHA, D. E. GUYER & J. N. CASH (USA)

- 189 Carotene content of some common and less familiar foods of plant origin
K. BHASKARACHARY, D. S. SANKAR RAO, Y. G. DEOSTHALE & V. REDDY (India)
- 195 Changes in protein components and storage stability of Royal Jelly under various conditions
C. CHEN & S.-Y. CHEN (Taiwan)
- 201 Turbidity measurement of heated egg proteins using a microplate system
N. KITABATAKE & Y.-I. KINEKAWA (Japan)
- 205 Laboratory simulation of captan residues degradation during apple processing
J. ALARY, D. BESCOS, M. C. MONGE, L. DEBRAUWER & G. F. BORIES (France)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 213 Review of methods for the analysis of triglycerides in milk fat: application for studies of milk quality and adulteration
M. LIPP (Italy)
- 223 Enzyme-assisted hexane extraction of soya bean oil
H. DOMÍNGUEZ, M. J. NÚÑEZ & J. M. LEMA (Spain)
- 233 Bibliography of analytical, nutritional and clinical methods
- 241 Book reviews
- 243 Announcement

Number 3

- 245 Leaching of lead from local ceramic tableware
N. MOHAMED, Y. M. CHIN & F. W. POK (Malaysia)
- 251 Proposal of a mechanism for the inhibition of all-*trans*- β -carotene autoxidation at elevated temperature by *N*-(2-phenylethyl)-3,4-diphenylpyrrole
K. PAPADOPOULOU & J. M. AMES (UK)
- 255 Sorption of β -carotene from solutions of a food colorant powder into low-density polyethylene and its effect on the adhesion between layers in laminated packaging material
T. J. NIELSEN & G. E. OLAFSSON (Sweden)
- 261 Studies on Tanzanian *Acacia* gums. Part 3. Some properties of gum exudates from the series *Vulgares* and *Gummiferae*
G. S. MHINZI & H. D. J. MROSSO (Tanzania)
- 265 Compositional studies on edible tropical species of mushrooms
V. A. ALETOR (Nigeria)
- 269 Sono-oscillatory mobilisation of bound precarthamine from flower florets of dyer's saffron
K. SAITO & K.-I. MIYAKAWA (Japan)
- 273 Clonal variation in the individual theaflavin levels and their impact on astringency and sensory evaluations
P. O. OWUOR & M. OBANDA (Kenya)
- 279 Biochemical and physical changes in fruits of four guava cultivars during growth and development
R. E. EL-BULUK, E. E. BABIKER & A. H. EL TINAY (Sudan)
- 283 The effect of eating on aroma release from strawberries
K. E. INGHAM, R. S. T. LINFORTH & A. J. TAYLOR (UK)
- 289 Influence of extrusion variables on subsequent saccharification behaviour of sago starch
S. GOVINDASAMY (Republic of Singapore), O. H. CAMPANELLA (New Zealand) & C. G. OATES (Republic of Singapore)
- 297 Recycling study of some heavy metals in the Egyptian aquatic ecosystem
M. N. E. GOMAA (Egypt)
- 305 Chemical composition of date varieties as influenced by the stage of ripening
I. A. AHMED, A. W. K. AHMED (United Arab Emirates) & R. K. ROBINSON (UK)
- 311 Accumulation of lead, zinc and cadmium in plant seeds growing in metalliferous habitats in Bulgaria
K. STEFANOV, K. SEIZOVA, N. YANISHLIEVA, E. MARINOVA & S. POPOV (Bulgaria)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 315 Effect of polysaccharides on the colour of anthocyanins
C. E. LEWIS, J. R. L. WALKER & J. E. LANCASTER (New Zealand)
- 321 Discrimination between *Coffea arabica* and *Coffea canephora* variant *robusta* beans using infrared spectroscopy
E. K. KEMSLEY, S. RUAULT & R. H. WILSON (UK)

- 327 Determination and occurrence of various tetrahydro- β -carboline-3-carboxylic acids and the corresponding *N*-nitroso compounds in foods and alcoholic beverages
N. P. SEN, S. W. SEAMAN, B. P.-Y. LAU, D. WEBER & D. LEWIS (Canada)
- 339 Bibliography of analytical, nutritional and clinical methods

Number 4

- 347 Editorial Statement

RAPID COMMUNICATIONS

- 349 Analysis of non-coloured phenolic compounds in red wines. A comparison of high-performance liquid chromatography and capillary zone electrophoresis
C. GARCIA-VIGUERA (Spain) & P. BRIDLE (UK)
- 353 A rapid method for separation of anomeric saccharides using a cyclodextrin bonded phase and for investigation of mutarotation
D. SCHUMACHER & L. W. KROH (Germany)

GENERAL PAPERS

- 357 A comparative rheological study of heat and high pressure induced whey protein gels
J. VAN CAMP & A. HUYGHEBAERT (Belgium)
- 365 Effect of intermittent frying and frying medium on the quality of potato chips
MEENAKSHI RANI & G. S. CHAUHAN (India)
- 369 Changes in organoleptic quality during ripening of cheese made from cows and soya milk blends, using microbial rennet
MEENAKSHI RANI & N. S. VERMA (India)
- 377 Effects of antioxidants on the stability of triacylglycerols and methyl esters of fatty acids of sunflower oil
N. VI. YANISHLIEVA & E. M. MARINOVA (Bulgaria)
- 383 Physical-chemical changes during extraction and clarification of guava juice
I. M. BRASIL, G. A. MAIA & R. W. DE FIGUEIREDO (Brazil)
- 387 Retention of aroma compounds by proteins in aqueous solution
P. LANDY, C. DRUAUX & A. VOILLEY (France)
- 393 Kinetics and equilibria of tea infusion —Part 12. Equilibrium and kinetic study of mineral ion extraction from black Assam Bukial and green Chun Mee teas
M. SPIRO & P.-L. L. LAM (UK)
- 397 Kinetics of the oligosaccharide-glycine-sulphite reaction: relationship to the browning of oligosaccharide mixtures
B. L. WEDZICHA & C. KEDWARD (UK)
- 403 The endogenous vitamin K₁ content of bovine milk: temporal influence of season and lactation
H. E. INDYK & D. C. WOOLLARD (New Zealand)
- 409 Comparison of chemical composition of striped bass (*Morone saxatilis*) from three Chesapeake Bay tributaries with those of two aquaculture hybrid striped bass types
C. KARAHADIAN, K. P. FOWLER & D. H. COX (USA)

ANALYTICAL, NUTRITIONAL AND CLINICAL METHODS SECTION

- 419 Determination of total fat and saturated fat in foods by packed column gas-liquid chromatography after acid hydrolysis
J. J. RADER, G. ANGYAL, R. G. O'DELL, C. M. WEAVER, A. J. SHEPPARD & M. P. BUENO (USA)
- 429 Comparison of a HPLC and radioprotein-binding assay for the determination of folates in milk and blood samples
K. WIGERTZ & M. JÄGERSTAD (Sweden)
- 437 The identification of vegetable matter using Fourier Transform Infrared Spectroscopy
P. S. BELTON, E. K. KEMSLEY, M. C. MCCANN, S. TFOFIS, R. H. WILSON (UK) and I. DELGADILLO (Portugal)
- 443 Bibliography of analytical, nutritional and clinical methods
- 451 Book reviews
- 453 Announcements
- 455 Erratum
- 457 Contents of Volume 54