



## CONTENTS OF VOLUME 49

## Number 1

Functional and nutritional properties of tamarind ( <i>Tamarindus indica</i> ) kernel protein . . . . .	1
S. BHATTACHARYA, S. BAL, R. K. MUKHERJEE & S. BHATTACHARYA (India)	
Lipids from the seeds of seven Fijian plant species . . . . .	11
S. SOTHEESWARAN, M. R. SHARIF (Fiji), R. A. MOREAU & G. J. PIAZZA (USA)	
Development of cathepsin B, L and H activities and cystatin-like activity during two different manufacturing processes for Spanish dry-cured ham . . . . .	15
M. PARREÑO, R. CUSSÓ, M. GIL & C. SÁRRAGA (Spain)	
Composition of babaco, feijoa, passionfruit and tamarillo produced in Galicia (North-west Spain) . . . . .	23
M. A. ROMERO-RODRIGUEZ, M. L. VAZQUEZ-ODERIZ, J. LOPEZ-HERNANDEZ & J. SIMAL-LOZANO (Spain)	
Investigation of syneresis of agar jellies with sorbitol . . . . .	29
G. TONCHEVA, D. HADJIKINOV & I. PANCHEV (Bulgaria)	
Biochemical changes in some tropical fruits during ripening . . . . .	33
M. EL-ZOGHBI (Egypt)	
Alkanol-ammonia-water/hexane extraction of flaxseed . . . . .	39
J. P. D. WANASUNDARA & F. SHAHIDI (Canada)	
Functional properties and amino-acid composition of solvent-extracted flaxseed meals . . . . .	45
J. P. D. WANASUNDARA & F. SHAHIDI (Canada)	
Manufacture of low-fat Feta Cheese . . . . .	53
M. C. KATSIARI & L. P. VOUSINAS (Greece)	
Antioxidant activity of plant leaves in relation to their alpha-tocopherol content . . . . .	61
J. F. MALLET, C. CERRATI, E. UCCIANI, J. GAMISANS & M. GRUBER (France)	
Copper, iron and zinc variations in Manchego-type cheese during the traditional cheese-making process . . . . .	67
R. MORENO-ROJAS, M. A. AMARO-LOPEZ & G. ZURERA-COSANO (Spain)	
Kinetic effect of sulphite ion on ester hydrolysis . . . . .	73
B. L. WEDZICHA & C. L. ALLEN (UK)	
Characterization and biochemical changes during the ripening of a Spanish hard goat cheese . . . . .	
J. CARBALLO, J. M. FRESNO, J. R. TUERO, J. G. PRIETO, A. BERNARDO & R. MARTÍN-SARMIENTO (Spain)	
<b>ANALYTICAL METHODS SECTION</b>	
Characterisation of cocoa masses: low resolution pulse NMR study of the effect of geographical origin and roasting on fluidification . . . . .	83
C. V. HERNANDEZ & D. N. RUTLEDGE (France)	
Determination of tryptophan in feedstuffs: comparison of sodium hydroxide and barium hydroxide as hydrolysis agents . . . . .	95
J. LANDRY & S. DELHAYE (France)	
Effective separation and quantitative analysis of major heat principles in red pepper by capillary gas chromatography . . . . .	99
W. S. HAWER, J. HA, J. HWANG & Y. NAM (South Korea)	
Bibliography of analytical food chemistry . . . . .	105
Book reviews . . . . .	111

## Number 2

<b>The following papers originate from the Royal Society of Chemistry Symposium 'Vitamin Retention in Cooking and Food Processing', 24 November 1992, London, UK</b>	
Foreword M. SPIRO (UK)	iii
Chairman's introduction A. BENDER (UK)	v
Vitamin requirements and vitamin enrichment of foods P. WALTER (Switzerland)	113
Vitamins in thermal processing J. RYLEY & P. KAJDA (UK)	119
Vitamin retention in microwave cooking and cook-chill foods M. A. HILL (UK)	131
Vitamin retention during blanching of vegetables J. D. SELMAN (UK)	137
Vitamin retention in extrusion cooking U. KILLEIT (Germany)	149
Effect of irradiation on vitamins D. KILCAST (UK)	157
Ascorbic acid browning: the incorporation of C <sub>1</sub> from ascorbic acid into melanoidins C. G. A. DAVIES & B. L. WEDZICHA (UK)	165
Mineral content of the honeys produced in Galicia (North-west Spain) J. L. RODRIGUEZ-OTERO, P. PASEIRO, J. SIMAL & A. CEPEDA (Spain)	169
In-vitro formation of cocoa-specific aroma precursors: aroma-related peptides generated from cocoa-seed protein by co-operation of an aspartic endoprotease and a carboxypeptidase J. VOIGT, B. BIEHL, H. HEINRICHS (Germany), S. KAMARUDDIN (Malaysia), G. GAIM MARSONER & A. HUGI (Switzerland)	173
The influence of food preparation methods on the in-vitro digestibility of starch in potatoes S. M. KINGMAN & H. N. ENGLYST (UK)	181
A fast laboratory procedure to assess the hard-to-cook tendency of common bean varieties C. REYES-MORENO, O. PAREDES-LÓPEZ & I. BARRADAS (Mexico)	187
<b>ANALYTICAL METHODS SECTION</b>	
Application of biospecific methods to the determination of B-group vitamins in food—a review P. M. FINGLAS & M. R. A. MORGAN (UK)	191
Determination by HPLC of changes in riboflavin levels in milk and nondairy imitation milk during refrigerated storage A. MUÑOZ, R. ORTÍZ & M. A. MURCIA (Spain)	203
An ultraviolet spectrophotometric method to determine milk protein content in alkaline medium A. Y. KUAYE (France)	207
Bibliography of analytical food chemistry	213
<i>Number 3</i>	
Obituary	iii
Application of capillary electrophoresis to the separation of coloured products of Maillard reactions A. J. TOMLINSON, J. A. MLOTKIEWICZ & I. A. S. LEWIS (UK)	219
Effect of storage and ripening on fresh tomato quality, Part I D. J. STERN, R. G. BUTTERY, R. TERANISHI, L. LING, K. SCOTT & M. CANTWELL (USA)	225
The effect of naturally occurring vitamin C in potato tubers on the levels of nitrates and nitrites E. CIESLIK (Poland)	233

Chemical composition and functional properties of raw, heat-treated and partially proteolysed wild mango ( <i>Irvingia gabonensis</i> ) seed flour . . . . .	237
S. Y. GIAMI, V. I. OKONKWO & M. O. AKUSU (Nigeria)	
Leaf protein contents and nitrogen-to-protein conversion factors for 90 plant species . . . . .	245
H.-H. YEOH & Y.-C. WEE (Singapore)	
Composition of babaco, feijoa, passion-fruit and tamarillo produced in Galicia (NW Spain) . . . . .	251
M. A. ROMERO-RODRIGUEZ, M. L. VAZQUEZ-ODERIZ, J. LOPEZ-HERNANDEZ & J. SIMAL-LOZANO (Spain)	
Studies on malting conditions for sorghum . . . . .	257
C. I. OWUAMA & I. ASHENO (Nigeria)	
Chemical assessment of some traditional Qatari dishes . . . . .	261
S. A. AL NAGDY, S. A. ABD-EL GHANI & M. O. ABDEL-RAHMAN (Qatar)	
Effect of fermentation on protein fractions and tannin content of low- and high-tannin cultivars of sorghum . . . . .	265
A. O. EL KHALIFA & A. H. EL TINAY (Sudan)	
Enzymatic pretreatment to enhance oil extraction from fruits and oilseeds: a review . . . . .	271
H. DOMÍNGUEZ, M. J. NÚÑEZ & J. M. LEMA (Spain)	
Formation of stigmasta-3,5-diene in vegetable oils . . . . .	287
A. CERT, A. LANZÓN, A. A. CARELLI, T. ALBI (Spain) & G. AMELOTTI (Italy)	
Green colour development in potato cooking water . . . . .	295
J. B. ADAMS (UK)	
Protein utilization and in-vitro protein synthesis in young rats given gruels of sprouted white maize supplemented with graded amounts of dried fish . . . . .	299
M. ASIEDU, E. LIED & R. NILSEN (Norway)	
<b>ANALYTICAL METHODS SECTION</b> . . . . .	305
Separation, identification and estimation of biogenic amines in foods by thin-layer chromatography . . . . .	305
A. R. SHALABY (Egypt)	
A TLC method for the analysis of quinoa ( <i>Chenopodium quinoa</i> ) saponins . . . . .	311
K. G. NG, K. R. PRICE & G. R. FENWICK (UK)	
Laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS) for the multielemental analysis of biological materials: A feasibility study . . . . .	317
S. F. DURRANT & N. I. WARD (USA)	
Bibliography of analytical food chemistry . . . . .	325
Book reviews . . . . .	331
<i>Number 4</i>	
Biochemical evaluation of some Nigerian legume seeds . . . . .	333
D. F. APATA & A. D. OLOGHOBO (Nigeria)	
Hypoglycaemic effect of <i>Parkia speciosa</i> seeds due to synergistic action of $\beta$ -sitosterol and stigmasterol . . . . .	339
F. JAMALUDDIN, S. MOHAMED & Md. N. LAJIS (Malaysia)	
Chemical composition of <i>Lepidium meyenii</i> . . . . .	347
A. DINI, G. MIGLIUOLO, L. RASTRELLI, P. SATURNINO & O. SCHETTINO (Italy)	
Kinetics and equilibria of tea infusion. Part 10—The composition and structure of tea scum . . . . .	351
M. SPIRO & D. JAGANYI (UK)	
Kinetics and equilibria of tea infusion. Part 11—The kinetics of the formation of tea scum . . . . .	359
M. SPIRO & D. JAGANYI (UK)	
Determination of the physical functionality of galactomannans in kappa-carrageenan/galactomannan mixed systems by periodate oxidation . . . . .	367
P. B. FERNANDES (Switzerland)	
Purification and molecular properties of papaya pectinesterase . . . . .	373
A. FAYYAZ, B. A. ASBI, H. M. GHAZALI, Y. B. CHE MAN & S. JINAP (Malaysia)	

Effect of pH and hemicellulase digestion on calcium binding by selected gums K. B. KOLB & M. E. KUNKEL (USA)	379
Ascorbate and transition-metal mediation of methanethiol oxidation to dimethyl disulfide and dimethyl trisulfide H.-W. CHIN & R. C. LINDSAY (USA)	387
The effect of packaging conditions and storage time on the volatile composition of Assam black tea leaf M. B. SPRINGETT, B. M. WILLIAMS & R. J. BARNES (UK)	393
Effect of prometryne and indole-3-acetic acid on the chemical composition of yeast protein F. A. AHMED, S. A. EL-SAYED, A. E. BASYONY & A. S. AFIFY (Egypt)	399
Polymeric grape seed tannins prevent plasma cholesterol changes in high-cholesterol-fed rats K. TEBIB, L. BITRI, P. BESANÇON & J.-M. ROUANET (France)	403
Hydrogen donor specificity of mango isoperoxidases A. A. KHAN & D. S. ROBINSON (UK)	407
Enzymatic hydrolysis of sago starch S. GORINSTEIN (Israel), C. G. OATES (Singapore), Sh.-M. CHANG & Ch.Yi. LII (Republic of China)	411
<b>ANALYTICAL METHODS SECTION</b>	
Automated microbiological assay for quantitation of niacin performed in culture microplates read by digital image processing M. SØLVE, H. ERIKSEN & C.-H. BROGREN (Denmark)	419
A DPCSV method for the determination of nickel in infant formulas R. BARBERA, M. J. ESTEVE, R. FARRE & J. C. LOPEZ (Spain)	427
Bibliography of analytical food chemistry	431
Book reviews	436
Announcement	438