

# Bibliography of analytical, nutritional and clinical methods

(Five weeks journals - Search completed at 11th Oct 1995)

## 1 BOOKS, REVIEWS & SYMPOSIA

Collomb M, Spahni M// Stn Fed Rech Laitieres, CH-3097 Liebefeld, Switzerland

*Food Sci Technol-Lebensm Wiss* 1995 **28** (4) 355

Review of the methods used for the determination of free fatty acids in milk and dairy products (French, English Abstract)

Lipp M// Commiss European Communities, Joint Res Ctr, Environm Inst, TP 740, I-21020 Ispra, Italy

*Food Chem* 1995 **54** (2) 213

Review of methods for the analysis of triglycerides in milk fat: Application for studies of milk quality and adulteration

Miyawaki O// Univ Tokyo, Dept Agr Biol Chem, Bunkyo ku, 1-1-1 Yayoi, Tokyo 113, Japan

*J Jpn Soc Food Sci Technol* 1995 **42** (3) 210

Analysis and control of ice structure in the freezing of food and its application to food processing (Review) (Japanese, English Abstract)

Shimizu M, Iwasaki Y, Yamada S// \*Tokyo Med & Dent Univ, Inst Med & Dent Engr, Div Molec Biol, Chiyoda ku, 2-3-10 Surugadai, Tokyo 101, Japan  
*Yakugaku Zasshi-J Pharm Soc Jpn* 1995 **115** (8) 584

New fluorogenic dienophile: Synthesis, reaction with vitamin D, vitamin A and microcystins, and application to fluorometric assays (Review) (Japanese, English Abstract)

## 2 GENERAL

Akaike T, Ijiri S, Sato K, Katsuki T, Maeda H// \*Kumamoto Univ, Sch Med, Dept Microbiol, Kumamoto 860, Japan

*J Agr Food Chem* 1995 **43** (7) 1864

Determination of peroxyl radical-scavenging activity in food by using bactericidal action of alkyl peroxy radical

Bitar A, Vermorel M\*, Fellmann N, Coudert J// \*INRA, Lab Metab Energet & Lipid, F-63122 St Genes Champane, France

*Amer J Clin Nutr* 1995 **62** (2) 308

Twenty-four-hour energy expenditure and its components in prepubertal children as determined by whole-body indirect calorimetry and compared with young adults

Marsh R, Wetton R// Rheometr Sci Ltd, Jubilee Dr, Belton Pk, Loughborough LE11 0XS, England

*Amer Lab* 1995 **27** (12) 15

Dielectric relaxation spectroscopy: Applications in polymer and food science

Sawaya AL, Saltzman E, Fuss P, Young VR, Roberts SB// \*Tufts Univ, USDA, Human Nutr Res Ctr Aging, Energy Metab Lab, 711 Washington St, Boston, Ma 02111, USA

*Amer J Clin Nutr* 1995 **62** (2) 338

Dietary energy requirements of young and older women determined by using the doubly labeled water method

Stall S, Ginsberg NS, Lynn RI, Zabetakis PM// Lenox Hill Hosp, Dept Med, Nephrol Sect, 100 East 77th St, New York, NY 10021, USA

*Periton Dialysis Int* 1995 **15** (5 Suppl) S59

Use of bioelectrical impedance analysis and dual energy X-ray absorptiometry to monitor nutritional status

## 3 AMINO ACIDS, PROTEINS & ENZYMES

Antoniewicz AM, Kowalczyk J, Kanski J, Gorska-Matusiak Z, Nalepka M// Inst Anim Prod, Dept Anim Nutr, Sarego 2, PL-31047 Krakow, Poland

*Anim Feed Sci Tech* 1995 **54** (1-4) 203

Rumen degradability of crude protein of dried grass and lucerne forage measured by *in sacco* incubation and predicted by near infrared spectroscopy

Ayranci E// Akdeniz Univ, Dept Chem, POB 510, Antalya, Turkey

*Food Chem* 1995 **54** (2) 173

Binding of iodide to bovine serum albumin and protamine studied with an ion-selective electrode

Bauza T, Blaise A, Daumas F, Cabanis JC// Inst Super Vigne & Vin, Fac Pharm, Ctr Format & Rech Oenol, 15 Ave Charles Flahault, F-34018 Montpellier, France

*J Chromatogr A* 1995 **707** (2) 373

Determination of biogenic amines and their precursor amino acids in wines of the Vallee du Rhone by high-performance liquid chromatography with precolumn derivatization and fluorimetric detection

Carratu B, Boniglia C, Bellomonte G// Ist Super Sanita, Alimenti Lab, Viale Regina Elena 299, I-00161 Rome, Italy

*J Chromatogr A* 1995 **708** (2) 203

Optimization of the determination of amino acids in parenteral solutions by high-performance liquid chromatography with precolumn derivatization using 9-fluorenylmethyl chloroformate

Curioni A, Morci MH, Furegon L, Redaelli R, Peruffo ADB// Univ Padua, Dipt Biotechnol Agr, Via Gradenigo 6, I-35131 Padua, Italy

*Electrophoresis* 1995 **16** (6) 1005

Purification of wheat glutenin subunits by preparative acid and two-dimensional electrophoresis

Das Neves HJC, Noronha JP// Univ Nova Lisboa, Fac Ciencias & Tecnol, Dept Quim, P-2825 Monte de Caparica, Portugal

*Fresenius J Anal Chem* 1995 **352** (7-8) 783

Recognition of vification technology through gas chromatographic data on enantiomeric purity of free amino acids

Duquesne S, Janquin MA, Hogstrand C// Univ Sci & Technol Lille, Marine Stn, CNRS, URA 1363, BP 80, F-62930 Wimereux, France

*Fresenius J Anal Chem* 1995 **352** (6) 589

Quantification of fish hepatic metallothioneins, naturally or artificially induced, by ELISA: A comparison with radioimmunoassay and differential pulse polarography

Fauconnier ML, Vanzeveren E, Marlier M, Lognay G, Wathélet JP, Severin M// Fac Sci Agron Etat Gembloux, UER Chim Gen & Organ, 2 Passage Deportes, B-5030 Gembloux, Belgium

*Grasas Aceites* 1995 **46** (1) 6

Assessment of lipoxygenase activity in seed extracts from 35 plant species (Spanish, English Abstract)

Harris WE, Knutson CM, Stahl WL// \*Univ Washington, Sch Med, Dept Physiol & Biophys, Seattle, Wa 98195, USA

*Plant Physiol Biochem* 1995 **33** (4) 389

Fluorescence method for study of cabbage phospholipase D activity

Le Coeur C, Zhao Q, Garreau I, Sannier F, Maurice M, Durand P, Piot JM// Univ La Rochelle, Lab Genie Protein, Ave Marillac, F-17042 La Rochelle 1, France

*J Liq Chromatogr* 1995 **18** (12) 2353

Analytical peptide mapping of a complex yellow-fin tuna myoglobin peptic hydrolysate by high-performance liquid chromatography

Lehmann R, Liebich H, Grubler G, Voelter W// \*Univ Tubingen, Inst Physiol Chem, Phys Biochem Abt, Hoppe Seyler Str 4, D-72076 Tubingen, Germany

*Electrophoresis* 1995 **16** (6) 998

Capillary electrophoresis of human serum proteins and apolipoproteins

Liu AH, Li T, Wang EK// \*Chinese Acad Sci, Changchun Inst Appl Chem, Electroanal Chem Lab, Changchun 130022, Peoples Rep China

*Anal Sci* 1995 **11** (4) 597

Determination of cysteine and reduced glutathione in human plasma by liquid chromatography with pulsed amperometric electrochemical detection using a platinum-particles modified glassy carbon electrode

Molle D, Leonil J// \*INRA, Lab Rech Technol Laitiere, 65 rue St Brieuc, F-35042 Rennes, France

As a service to subscribers of Food Chemistry, this bibliography contains newly published material in the field of analytical, nutritional and clinical methods. The bibliography is divided into fourteen sections: 1 Books, Reviews & Symposia; 2 General; 3 Amino Acids, Proteins & Enzymes; 4 Carbohydrates; 5 Lipids; 6 Vitamins & Co-factors; 7 Trace Elements & Minerals; 8 Drug, Biocide & Processing Residues; 9 Toxins; 10 Additives; 11 Flavours & Aromas; 12 Organic Acids; 13 Animal Products; 14 Plant & Microbial Products. Within each section, articles are listed in alphabetical order with respect to the author. Where there are no papers to appear under a heading, it will be omitted.

- J Chromatogr A* 1995 **708** (2) 223  
Heterogeneity of the bovine  $\kappa$ -casein caseinomacropptide, resolved by liquid chromatography on-line with electrospray ionization mass spectrometry
- Rothwell TC, Kamanna VS, Jin FY, Koren E, Foley T, Kashyap ML\*// \*Vet Adm Med Ctr, Cholesterol Ctr, 5901 East 7th St (111GE), Long Beach, Ca 90822, USA  
*Clin Chem* 1995 **41** (8 Pt 1) 1150  
Characterization of a monoclonal antibody (HB-22) and development of an ELISA for human apolipoprotein A-I
- Tilley KA, Schofield JD// Univ Reading, Dept Food Sci & Technol, POB 226, Reading RG6 2AP, England  
*J Cereal Sci* 1995 **22** (1) 17  
Detection of phosphotyrosine in the high  $M_r$  subunits of wheat glutenin
- Ukishima Y, Sakane Y, Fukuda A, Wada S, Okada S// Shizuoka Prefectural Fujieda Publ Hlth Ctr, 2-2-25 Okadeyama, Fujieda, Shizuoka 426, Japan  
*Mar Mammal Sci* 1995 **11** (3) 344  
Identification of whale species by liquid chromatographic analysis of sarcoplasmic proteins
- Ziauddin KS, Rao DN, Amla BL// Vet Coll, Dept Meat Sci, Bangalore 560024, Karnataka, India  
*J Food Sci Technol-Mysore* 1995 **32** (3) 224  
Effect of lactic acid, ginger extract and sodium chloride on electrophoretic pattern of buffalo muscle proteins
- #### 4 CARBOHYDRATES
- Chung H, Arnold MA\*// \*Univ Iowa, Dept Chem, Iowa City, Ia 52242, USA  
*Appl Spectrosc* 1995 **49** (8) 1097  
Monitoring the acid-catalyzed hydrolysis of starch with near-infrared spectroscopy
- Davis AL, Hoffmann RA\*, Russell AL, Debet M// \*Unilever Res, Colworth House, Sharnbrook MK44 1LQ, Beds, England  
*Carbohydr Res* 1995 **271** (1) 43  
 $^1\text{H}$  and  $^{13}\text{C}$ -NMR characterization of the digalactosylmannopentaose liberated from legume seed galactomannan by  $\beta$ -mannanase action
- Goodall I, Dennis MJ, Parker I, Sharman M// CSL, Food Sci Lab, Norwich Res Pk, Colney Lane, Norwich NR4 7UQ, England  
*J Chromatogr A* 1995 **706** (1-2) 353  
Contribution of high-performance liquid chromatographic analysis of carbohydrates to authenticity testing of honey
- Huang XJ, Pot JJ, Kok WT\*// \*Univ Amsterdam, Analyt Chem Lab, Nieuwe Achtergracht 166, 1018 WV Amsterdam, The Netherlands  
*Chromatographia* 1995 **40** (11-12) 684  
Determination of sugars by liquid chromatography and amperometric detection with a cuprous oxide modified electrode
- Huang XJ, Kok WT\*// \*Address as above.  
*J Chromatogr A* 1995 **707** (2) 335  
Determination of sugars by capillary electrophoresis with electrochemical detection using cuprous oxide modified electrodes
- Ishii Y, Nakahara H, Hattori S, Nakamura M// Tokyo Univ Agr & Technol, Dept Nutr, Setagaya ku, 1-1-1 Sakuragaoka, Tokyo 156, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (7) 519  
GPC patterns of tropical starch amylopectins hydrolyzed by isoamylase reaction (Japanese, English Abstract)
- Kajino K, Ebisuya H, Furukawa K, Fukaya M, Akita S, Kawamura Y, Uchiyama S// Nakano Vinegar Co Ltd, Nakano Res Inst, 2-6 Nakamura cho, Handa, Aichi 475, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (3) 169  
Rapid and simple determination of D-glucose, D-fructose and sucrose in food by combination of quinone-dependent dehydrogenase reactions and self-driven coulometry (Japanese, English Abstract)
- Killinger WE, Murray D, Hatfield GR\*, Hassler T// \*WR Grace & Co Conn, Washington Res Ctr, 7379 Rte 32, Columbia, Md 21044, USA  
*Starch* 1995 **47** (8) 311  
Determination of the degree of cationicity in cationic starches by solid-state  $^{13}\text{C}$  NMR spectroscopy
- Langemeier JM, Rogers DE// Amer Inst Baking, Manhattan, Ks, USA  
*Cereal Chem* 1995 **72** (4) 349  
Rapid method for sugar analysis of doughs and baked products
- Lendl B, Kellner R\*// \*Vienna Tech Univ, Inst Analyt Chem, Getreidemarkt 9-151, A-1060 Vienna, Austria  
*Mikrochim Acta* 1995 **119** (1-2) 73  
Determination of sucrose by flow injection analysis with Fourier transform infrared detection
- Morancay N, Brivet I, Chaveron H// Univ Technol Compiègne, Lab Biophysicochim & Technol Aliment, BP 649, F-60206 Compiègne, France  
*Sci Aliment* 1995 **15** (4) 315  
Methodology for the structural and physicochemical study of starch and water in short pastes (French, English Abstract)
- Rambal C, Pachiaudi C, Normand S, Riou JP, Louisot P\*, Martin A// \*Lyon Sud Med Sch, Ctr Rech Nutr Humaine Lyon, Dept Biochem, CNRS, INSERM, U189, BP 12, F-69921 Oullins, France  
*Ann Nutr Metab* 1995 **39** (3) 143  
Differential incorporation of  $^{13}\text{C}$  label from dietary glucose into neutral sugars of rat intestine macromolecules
- Sakamoto T, Sakai T// Univ Osaka Prefecture, Coll Agric, Dept Appl Biol Chem, 1-1 Gakuen cho, Sakai, Osaka 593, Japan  
*Phytochemistry* 1995 **39** (4) 821  
Analysis of structure and sugar-beet pectin by enzymatic methods
- Samotus B, Dorre E, Scigalski A, Swiderski A, Stefaniuk M// Univ Agr, Dept Biochem, 29 Listopada 54, PL-31425 Krakow, Poland  
*Microchem J* 1995 **52** (1) 113  
Determination of sugars by 3,4-dimethylphenol reagent
- Shiba K, Negishi Y, Okada K// Nissin Flour Milling Co Ltd, Food Res Ctr, 5-3-1 Turugaoka, Saitama 354, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (3) 207  
Determination of carbohydrates in the glutenin aggregative subunit
- Yamada T, Nishimura A, Nakano I, Hisamatsu M// Mie Univ, Fac Bioresources, Dept Food Sci, Tsu, Mie 514, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (7) 478  
Evaluation of rice quality by amylography (Japanese, English Abstract)
- #### 5 LIPIDS
- Al-Rashood KA, Abdel-Moety EM, Rauf A, Abou-Shaaban RR, Al-Khamis KI// King Saud Univ, Coll Pharm, Dept Pharmaceut Chem, POB 2457, Riyadh 11451, Saudi Arabia  
*J Liq Chromatogr* 1995 **18** (13) 2661  
Triacylglycerols-profiling by high-performance liquid chromatography: A tool for detection of pork fat (lard) in processed foods
- Arneth W, Alahmad H// Bundesanstalt Fleischforsch, Inst Chem & Phys, EC Baumann Str 20, D-95326 Kulmbach, Germany  
*Fleischwirtschaft* 1995 **75** (8) 1001  
Cholesterol: Its determination in muscle and adipose tissue and in offal using HPLC (German, English Abstract)
- Cobbaert C, Broodman I, Swart GR, Hoogerbrugge N// Acad Ziekenhuizen Dijkzigt, Lipiden Referentie Lab, Cent Klin Chem Lab, Dr Molewaterplein 40, 3015 GD Rotterdam, The Netherlands  
*Eur J Clin Chem Clin Biochem* 1995 **33** (7) 417  
Performance of a direct, immunoseparation based LDL-cholesterol method compared to Fiedewald calculation and a polyvinyl sulphate precipitation method
- Dominguez H, Nunez MJ\*, Lema JM// \*Univ Santiago de Compostela, Dept Chem Engr, Avda Ciencias s/n, E-15706 Santiago de Compostela, Spain  
*Food Chem* 1995 **54** (2) 223  
Enzyme-assisted hexane extraction of soya bean oil
- El-Hamdy AH, El-Fizga NK// Univ Al-Fatah, Fac Agr, Dept Food Sci, POB 91752, Tripoli, Libya  
*J Chromatogr A* 1995 **708** (2) 351  
Detection of olive oil adulteration by measuring its authenticity factor using reversed-phase high-performance liquid chromatography
- Han TJ// InterMountain Canola Co, Res & Dev, NJ 08110, USA  
*J Amer Oil Chem Soc* 1995 **72** (8) 881  
An improved phosphorus assay for oils without carcinogenic hydrazine sulfate
- Huang AS, Robinson LR, Gursky LG, Pidel A, Delano G, Softly BJ, Templeman GJ, Finley JW, Leveille GA// Nabisco Foods Grp, 200 Deforest Ave, East Hanover, NJ 07936, USA  
*J Agr Food Chem* 1995 **43** (7) 1834  
Quantification of generic SALATRIM material in foods by the combination of nontraditional crude fat extraction and short nonpolar column high-temperature capillary gas chromatography
- Lamberto M, Saitta M\*// \*Univ Messina, Dept Organ & Biol Chem, POB 46, I-98166 Messina, Italy  
*J Amer Oil Chem Soc* 1995 **72** (8) 867  
Principal component analysis in fast atom bombardment mass spectrometry of triacylglycerols in edible oils
- Le Botlan D, Heilie-Fourel I// Fac Sci Nantes, Lab RMN & React Chim, CNRS, URA 472, Nantes 03, France  
*Anal Chim Acta* 1995 **311** (2) 217  
Assessment of the intermediate phase in milk fat by low-resolution nuclear magnetic resonance
- Manninen P, Laakso P, Kallio H// Univ Turku, Dept Biochem & Food Chem, Vatselankatu 2, SF-20500 Turku, Finland  
*Lipids* 1995 **30** (7) 665  
Separation of  $\gamma$ - and  $\alpha$ -linolenic acid containing triacylglycerols by capillary supercritical fluid chromatography
- Pontillon J// Barry SA, Cent Lab, Ctr Rech & Controle, BP 8, F-78250 Meulan, France

- J Amer Oil Chem Soc* 1995 **72** (8) 861  
Determination of milk fat in chocolates by gas-liquid chromatography of triglycerides and fatty acids
- Rouet-Mayer MA, Valentova O, Simond-Cote E, Daussant J, Thevenot C\*\*  
\*Univ Paris 11, Inst Biotechnol Plantes, Batiment 630, F-91405 Orsay, France  
*Lipids* 1995 **30** (8) 739  
Critical analysis of phospholipid hydrolyzing activities in ripening tomato fruits. Study by spectrofluorimetry and high-performance liquid chromatography
- Terry JG, Hinson WH, Evans GW, Schreiner PJ, Hagaman AP, Crouse JR\*\*  
\*Wake Forest Univ, Bowman Gray Sch Med, Dept Internal Med, Med Ctr Blvd, Winston Salem, NC 27157, USA  
*Amer J Clin Nutr* 1995 **62** (2) 297  
Evaluation of magnetic resonance imaging for quantification of intraabdominal fat in human beings by spin-echo and inversion-recovery protocols
- Tsimidou M// Aristotle Univ Thessaloniki, Fac Chem, Lab Food Sci & Technol, Thessaloniki, Greece  
*Chromatogr Anal* 1995 (38) 5  
The use of HPLC in the quality control of virgin olive oil
- Van de Voort FR, Ismail AA, Sedman J// McGill Univ, Dept Food Sci & Agr Chem, Macdonald Campus, St Anne de Bellevue, Quebec, Canada H9X 3V9  
*J Amer Oil Chem Soc* 1995 **72** (8) 873  
A rapid, automated method for the determination of *cis* and *trans* content of fats and oils by Fourier transform infrared spectroscopy
- Winkler K, Nauck M, Siekmeier R, Marz W, Wieland H// Univ Freiburg, Dept Med, Div Clin Chem, Hugstetter Str 55, D-79106 Freiburg, Germany  
*J Lipid Res* 1995 **36** (8) 1839  
Determination of triglycerides in lipoproteins separated by agarose gel electrophoresis
- Woodbury SE, Evershed RP\*, Rossell JB, Griffith RE, Farnell P// \*Univ Bristol, Sch Chem, Cantocks Close, Bristol NS8 1TS, England  
*Anal Chem* 1995 **67** (15) 2685  
Detection of vegetable oil adulteration using gas chromatography/combustion isotope ratio mass spectrometry
- ## 6 VITAMINS & CO-FACTORS
- Ben-Amotz A// Natl Inst Oceanog, Israel Oceanog & Limnol Res, POB 8030, IL-31080 Haifa, Israel  
*J Liq Chromatogr* 1995 **18** (14) 2813  
Simultaneous profiling and identification of carotenoids, retinols, and tocopherols by high-performance liquid chromatography equipped with three-dimensional photodiode array detection
- Boso RL, Bellini MS, Miksik I, Deyl Z\*\*  
\*Acad Sci Czech Republ, Inst Physiol, Videnska 1083, CR-14220 Prague 4, Czech Republic  
*J Chromatogr A* 1995 **709** (1) 11  
Microemulsion electrokinetic chromatography with different organic modifiers: Separation of water- and lipid-soluble vitamins
- Duitsman PK, Cook LR, Tanumihardjo SA, Olson JA// Iowa State Univ Sci & Technol, Dept Biochem & Biophys, Ames, Ia 50011, USA  
*Nutr Res* 1995 **15** (9) 1263  
Vitamin A inadequacy in socioeconomically disadvantaged pregnant Iowan women as assessed by the modified relative dose response (MRDR) test
- Emenisher C, Sander LC, Schwartz SJ\*\*  
\*Nth Carolina State Univ, Dept Food Sci, Box 7624, Raleigh, NC 27695, USA  
*J Chromatogr A* 1995 **707** (2) 205  
Capability of a polymeric C<sub>30</sub> stationary phase to resolve *cis-trans* carotenoid isomers in reversed-phase liquid chromatography
- Lykkesfeldt J, Loft S, Poulsen HE// Univ Copenhagen, Panum Inst, Dept Pharmacol, 3 Blegdamsvej, DK-2200 Copenhagen N, Denmark  
*Anal Biochem* 1995 **229** (2) 329  
Determination of ascorbic acid and dehydroascorbic acid in plasma by high-performance liquid chromatography with coulometric detection: Are they reliable biomarkers of oxidative stress?
- Marshall PA, Trenerry VC\*, Thompson CO// \*Australian Govt Analyt Labs, 338-340 Tapleys Hill Rd, Seaton 5023, Australia  
*J Chromatogr Sci* 1995 **33** (8) 426  
The determination of total ascorbic acid in beers, wines, and fruit drinks by micellar electrokinetic capillary chromatography
- Miura Y, Maruyama T, Koh T// Tokai Univ, Fac Sci, Dept Chem, Hiratsuka, Kanagawa 25912, Japan  
*Anal Sci* 1995 **11** (4) 617  
Ion chromatographic determination of L-ascorbic acid, sulfite, sulfide and thio-sulfate using a cation-exchanger of low crosslinking
- Moeslinger T, Brunner M, Volf I, Spieckermann PG// Inst Med Physiol, Schwarzspanierstr 17, A-1090 Vienna, Austria  
*Clin Chem* 1995 **41** (8 Pt 1) 1177  
Spectrophotometric determination of ascorbic acid and dehydroascorbic acid
- Novotny JA, Dueker SR, Zech LA, Clifford AJ\*\*  
\*Univ Calif Davis, Dept Nutr, Davis, Ca 95616, USA  
*J Lipid Res* 1995 **36** (8) 1825  
Compartmental analysis of the dynamics of  $\beta$ -carotene metabolism in an adult volunteer
- Schleyer E, Reinhardt J, Unterhalt M, Hiddemann W// Univ Gottingen, Dept Hematol & Oncol, Robert Koch Str 40, D-37075 Gottingen, Germany  
*J Chromatogr B-Biomed Appl* 1995 **669** (2) 319  
Highly sensitive coupled-column high-performance liquid chromatographic method for the separation and quantitation of the diastereomers of leucovorin and 5-methyltetrahydrofolate in serum and urine
- Shimada K, Mitamura K, Miura M, Miyamoto A// Kanazawa Univ, Fac Pharmaceut Sci, 13-1 Takara machi, Kanazawa, Ishikawa 920, Japan  
*J Liq Chromatogr* 1995 **18** (14) 2885  
Retention behavior of vitamin D and related compounds during high-performance liquid chromatography
- Shindoh N, Tanaka T, Kondo M// Nishikyushu Univ, Dept Food & Nutr, 4490-9 Ozaki, Kanzaki, Saga 842, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (5) 328  
A rapid determination of ascorbic acid in vegetables and fruits by TLC densitometry based on 2,4-dinitrophenylhydrazine (DNP) method (Japanese, English Abstract)
- Sokoll LJ, O'Brien ME, Camilo ME, Sadowski JA// Johns Hopkins Med Inst, Dept Pathol Div Clin Chem, 600 Nth Wolfe St, Meyer B-125, Baltimore, Md 21287, USA  
*Clin Chem* 1995 **41** (8 Pt 1) 1121  
Undercarboxylated osteocalcin and development of a method to determine vitamin K status
- ## 7 TRACE ELEMENTS & MINERALS
- Adams PE// Beall High Sch, East Main St, Frostburg, Md 21532, USA  
*J Chem Educ* 1995 **72** (7) 649  
Determining iron content in foods by spectrophotometry
- Andersson O, Johansson K, Olin A// Univ Uppsala, Dept Analyt Chem, POB 531, S-75121 Uppsala, Sweden  
*Chem Anal* 1995 **40** (3) 373  
Determination of selenium in biological materials by a new fluorimetric reagent, 2,3-diamino-1,4-dichloronaphthalene
- Araujo PW, Marcano E, Gomez CV, Benzo Z// Inst Venezolano Invest Cient, Ctr Quim, Quim Analit Lab, Apartado 21827, Caracas 1020A, Venezuela  
*An Quim* 1994 **90** (5-6) 343  
Multivariate optimization of conditions for cadmium determination in cocoa seeds by electrothermal platform atomization spectrometry
- Arruda MAZ, Gallego M, Valcarcel M\*\*  
\*Univ Cordoba, Fac Sci, Dept Analyt Chem, E-14004 Cordoba, Spain  
*J Anal Atom Spectrom* 1995 **10** (7) 501  
Flow-through microwave digestion system for the determination of aluminium in shellfish by electrothermal atomic absorption spectrometry
- Barto R, Sips AJAM, Van der Vijgh WJF, Netelenbos JC// Free Univ Amsterdam Hosp, Clin Res Lab Internal Med, BR 232, De Boelelaan 1117, 1081 HV Amsterdam, The Netherlands  
*Clin Chem* 1995 **41** (8 Pt 1) 1159  
Sensitive method for analysis of strontium in human and animal plasma by graphite furnace atomic absorption spectrophotometry
- Baskett CK, Spate VL, Morris JS, Anderson HD, Mason MM, Reams CL, Cheng TP, Zinn KR, Hill GM, Dowdy RP// Univ Missouri, Ctr Res Reactor, Columbia, Mo 65211, USA  
*J Radioanal Nucl Chem Art* 1995 **195** (1) 97  
Investigation of the appearance of supplemental enriched <sup>76</sup>Se using the human nail as a dietary monitor
- Beach AC, Spyrou NM// Univ Surrey, Dept Phys, Guildford GU2 5XH, Surrey, England  
*J Radioanal Nucl Chem Art* 1995 **195** (1) 133  
Determination of the elemental homogeneity of selected biological organs by 2MeV proton induced X-ray emission analysis
- Blanco D, Martinez L, Mangas JJ, Dapena E, Gutierrez D// Univ Oviedo, Fac Quim, Dept Quim Fis & Analit, E-33006 Oviedo, Spain  
*J Liq Chromatogr* 1995 **18** (12) 2445  
Determination of nitrate and nitrite in tap water and vegetables by high performance liquid chromatography
- Carpenter CE, Clark E// Utah State Univ, Dept Nutr & Food Sci, Logan, Ut 84322, USA  
*J Agr Food Chem* 1995 **43** (7) 1824  
Evaluation of methods used in meat iron analysis and iron content of raw and cooked meats
- Chalmers AH, Peake NJ// Flinders Univ Sth Australia, Med Ctr, Dept Haematol, Bedford Pk, SA 5042, Australia  
*Clin Chem* 1995 **41** (8 Pt 1) 1199  
Underestimation of serum iron with automated methods (Letter)

- Che P, Xu J, Shi H, Ma YF\*// \*NE Missouri State Univ, Div Sci, Kirksville, Mo 63501, USA  
*J Chromatogr B-Biomed Appl* 1995 669 (1) 45  
Quantitative determination of serum iron in human blood by high-performance capillary electrophoresis
- Chen HW, Xu SK, Fang ZL\*// \*Acad Sinica, Inst Appl Ecol, Flow Inject Anal Res Ctr, Shenyang 110015, Peoples Rep China  
*J Anal Atom Spectrom* 1995 10 (8) 533  
Electrothermal atomic absorption spectrometric determination of molybdenum in water, human hair and high-purity reagents with flow injection on-line co-precipitation preconcentration
- Cooke AI, Green N, Rimmer DL, Weekes TEC, Wilkins BT// Univ Newcastle upon Tyne, Dept Biol & Nutr Sci, Newcastle upon Tyne, NE1 7RU, England  
*J Environ Radioact* 1995 28 (2) 191  
Development of an *in vitro* method to assess the availability of soil-associated radionuclides for uptake by ruminants
- Cornelis R, Heinzow B, Herber RFM, Christensen JM, Paulsen OM, Sabbioni E, Templeton DM, Thomassen Y, Vahter M, Vesterberg O// State Univ Ghent, Analyt Chem Lab, Proeftuinstr 86, B-9000 Ghent, Belgium  
*Pure Appl Chem* 1995 67 (8-9) 1575  
Sample collection guidelines for trace elements in blood and urine: Technical report
- De Bratter VEN, Bratter P, Reinicke A, Schulze G, Alvarez WOL, Alvarez N// Hahn Meitner Inst Berlin GmbH, Dept Trace Elements Hlth & Nutr, Glienicke Str 100, D-14109 Berlin, Germany  
*J Anal Atom Spectrom* 1995 10 (7) 487  
Determination of mineral and trace elements in total diet by inductively coupled plasma atomic emission spectrometry: Comparison of microwave-based digestion and pressurized ashing systems using acid mixtures
- Deibel MA, Savage JM, Robertson JD, Ehmann WD, Markesbery WR// Univ Kentucky, Dept Chem, Lexington, Ky 40506, USA  
*J Radioanal Nucl Chem Art* 1995 195 (1) 83  
Lead determinations in human bone by particle induced X-ray emission (PIXE) and graphite furnace atomic absorption spectrometry (GFAAS)
- Deval A, Sneddon J\*// \*McNeese State Univ, Dept Chem, Lake Charles, La 70609, USA  
*Microchem J* 1995 52 (1) 96  
Determination of cadmium and lead in blood reference samples by simultaneous graphite furnace atomic absorption spectrometry
- Dundar MS, Haswell SJ// Univ Hull, Sch Chem, Cottingham Rd, Hull HU6 7RX, England  
*Analyst* 1995 120 (8) 2085  
Use of a model gut system to study the effects of dietary fibre and multivitamins on the speciation of copper, zinc and iron
- Ellis KJ, Shypailo RJ, Schoknecht P, Pond WG// Baylor Coll Med, Dept Pediat, Children's Nutr Res Ctr, USDA ARS, Houston, Tx 77030, USA  
*J Radioanal Nucl Chem Art* 1995 195 (1) 139  
Neutron activation analysis: Criterion method for evaluation of dual-energy X-ray absorptiometry measurements in infants
- Enger J, Marunkov A, Chekalin N, Axner O\*// \*Umca Univ, Dept Exptl Phys, S-90187 Umea, Sweden  
*J Anal Atom Spectrom* 1995 10 (8) 539  
Direct detection of antimony in environmental and biological samples at trace concentrations by laser-induced fluorescence in graphite furnace with an intensified charge coupled device
- Feng WY, Qian QF, Zhang PQ, Chai CF// Acad Sinica, Inst High Energy Phys, POB 2732, Beijing 100080, Peoples Rep China  
*J Radioanal Nucl Chem Art* 1995 195 (1) 67  
NAA, GC(EC) and SRXRF study of Hg species in head hair of mothers and their newborn infants
- Gardiner PHE, Littlejohn D, Halls DJ, Fell GS// Sheffield Hallam Univ, Environm Res Ctr, City Campus, Pond St, Sheffield S1 1WB, England  
*J Trace Elem Med Biol* 1995 9 (2) 74  
Direct determination of selenium in human blood serum and plasma by electrothermal atomic absorption spectrometry
- Gokmen IG, Dagli G// Middle East Tech Univ, Dept Chem, Ankara 06531, Turkey  
*Analyst* 1995 120 (7) 2005  
Determination of iodine concentration in human milk, cows' milk and infant formula and estimation of daily iodine intake of infants
- Jimidar M, Hartmann C, Cousement N, Massart DL\*// \*Free Univ Brussels, Inst Pharmaceut, Laarbeeklaan 103, B-1090 Brussels, Belgium  
*J Chromatogr A* 1995 706 (1-2) 479  
Determination of nitrate and nitrite in vegetables by capillary electrophoresis with indirect detection
- Kimarua RW, Kariuki DN, Njenga LW// Dept Chem, POB 30197, Nairobi, Kenya  
*Analyst* 1995 120 (8) 2245  
Comparison of two microdiffusion methods used to measure ionizable fluoride in cows' milk
- Kytzia HJ, Eberle J// Hoffmann La Roche AG, CH-4002 Basel, Switzerland  
*Clin Chem* 1995 41 (8 Pt 1) 1200  
Underestimation of serum iron with automated methods (Reply)
- Lam JWH, McLaren JW, Methven BAJ// Natl Res Council Canada, Inst Environm Res & Technol, Ottawa, Ontario, Canada K1A 0R6  
*J Anal Atom Spectrom* 1995 10 (8) 551  
Determination of chromium in biological tissues by inductively coupled plasma mass spectrometry
- Larsen EH// Natl Food Agcy Denmark, Inst Food Chem & Nutr, 19 Morkhøj Bygade, DK-2860 Soborg, Denmark  
*Fresenius J Anal Chem* 1995 352 (6) 582  
Speciation of dimethylarsinyl-riboside derivatives (arsenosugars) in marine reference materials by HPLC-ICP-MS
- Lasztity A, Krushevska A, Kotrbai M, Barnes RM, Amarasiriwardena D// Univ Massachusetts, Lederle Grad Res Ctr, Dept Chem, Box 3510, Amherst, Ma 01003, USA  
*J Anal Atom Spectrom* 1995 10 (7) 505  
Arsenic determination in environmental, biological and food samples by inductively coupled plasma mass spectrometer
- Mason MM, Spate VL, Morris JS, Baskett CK, Cheng TP, Reams CL, Le Marchand L, Henderson BE, Kolonel LN// Univ Missouri, Ctr Res Reactor, Columbia, Mo 65211, USA  
*J Radioanal Nucl Chem Art* 1995 195 (1) 57  
Determination of iodine in urine, using epithermal instrumental neutron activation analysis (EINAA), at the University of Missouri research reactor (MURR)
- Rondon CE, Burguera M, Burguera JL\*, Brunetto MR, Carrero P// \*Univ Los Andes, Fac Sci, Dept Chem, POB 542, Merida 5101, Venezuela  
*J Trace Elem Med Biol* 1995 9 (1) 49  
Effect of surfactants and of ultrasonic mixing in the determination of calcium, magnesium, copper and zinc in whole blood by flow injection flame atomic absorption spectrometry
- Sai PKP, Mohan MR, Rao SB// Osmania Univ, Dept Chem, Hyderabad 500007, Andhra Pradesh, India  
*Int Sugar J* 1995 97 (1160) 362  
Trace metals in cane juice and sugar factory products: Analysis by direct current plasma atomic emission spectrometry
- Spate VL, Morris JS, Chickos S, Baskett CK, Mason MM, Cheng TP, Reams CL, West C, Furnce C, Willett W, Horn-Ross P// Univ Missouri, Ctr Res Reactor, Columbia, Mo 65211, USA  
*J Radioanal Nucl Chem Art* 1995 195 (1) 21  
Determination of iodine in human nails via epithermal neutron activation analysis
- Sures B, Taraschewski H, Haug C// Univ Karlsruhe, Zool Inst Okol, Kaiserstr 12, D-76128 Karlsruhe, Germany  
*Anal Chim Acta* 1995 311 (2) 135  
Determination of trace metals (Cd, Pb) in fish by electrothermal atomic absorption spectrometry after microwave digestion
- Wagner HP// 84 Hawkesbury Ave, London, Ontario, Canada N5V 2K1  
*J Amer Soc Brew Chemist* 1995 53 (3) 141  
Determination of lead in beer using Zeeman background-corrected graphite furnace atomic absorption spectrometry
- Wang Y, Barry TN\*// \*Massey Univ, Dept Anim Sci, Palmerston North, New Zealand  
*J Sci Food Agr* 1995 68 (4) 417  
The extraction of radiolabelled inorganic sulphate from blood plasma
- Yaman M, Gucer S// Firat Univ, Fac Sci & Arts, Dept Chem, Elazig, Turkey  
*Analyst* 1995 120 (4) 168  
Determination of cobalt in vegetables by flame atomic absorption spectrometry after preconcentration of activated carbon
- Zachilas L, Ioannou PC\*, Polydorou C, Efstathiou CE// \*Univ Athens, Dept Chem, Analyt Chem Lab, Panepistimiopolis, GR-15771 Athens, Greece  
*Analyst* 1995 120 (8) 2115  
Flow injection spectrofluorimetric method for the determination of magnesium in blood serum
- Zaichick V, Tsyb A, Bagirov S// Med Radiol Res Ctr, Obninsk 249020, Russia  
*J Radioanal Nucl Chem Art* 1995 195 (1) 123  
Neutron activation analysis of saliva: Application in clinical chemistry, environmental and occupational toxicology
- Zhuk LI, Kist AA// Ukbek Acad Sci, Inst Nucl Phys, Tashkent 702132, Uzbekistan  
*J Radioanal Nucl Chem Art* 1995 195 (1) 75  
Human hair instrumental neutron activation analysis and medicine

## 8 DRUG, BIOCIDES & PROCESSING RESIDUES

- Abad A, Montoya A\*// \*Univ Politecn Valencia, Integrado Bioingn Lab, Camino Vera s/n, E-46022 Valencia, Spain  
*Anal Chim Acta* 1995 311 (3) 365  
Application of a monoclonal antibody-based ELISA to the determination of

- carbaryl in apple and grape juices
- Bugey K, Black WD\*, McEwen S, Meek A// \*Univ Guelph, Ontario Vet Coll, Dept Biomed Sci, Guelph, Ontario, Canada N1G 2W1  
*J Food Protect* 1995 **58** (8) 922  
Detecting sulfamethazine residues in chicken tissues using the Delvotest® SP system
- Cairns T, Baldwin RA// Psychemed Corp, 5832 Uplander Way, Culver City, Ca 90230, USA  
*Anal Chem* 1995 **67** (17) A552  
Pesticide analysis in food by MS
- Fennell MA, Uboh CE\*, Sweeney RW, Soma LR// \*West Chester Univ, Schmucker Sci Ctr, Dept Chem, Penn Equine Toxicol & Res Lab, West Chester, Pa 19383, USA  
*J Agr Food Chem* 1995 **43** (7) 1849  
Gentamicin in tissue and whole milk: An improved method for extraction and cleanup of samples for quantitation on HPLC
- Fernandez-Alba AR, Valverde A, Aguera A, Contreras M, Rodriguez D// Fac Ciencias Almeria, Pesticide Residues Res Grp, E-04071 Almeria, Spain  
*Anal Chim Acta* 1995 **311** (3) 371  
Determination of procymidone in vegetables by a commercial competitive inhibition enzyme immunoassay
- Frank M, Kolar V, Eremin SA// Vet Res Inst, Hudcova 70, CS-62132 Brno, Czech Republic  
*Anal Chim Acta* 1995 **311** (3) 349  
Enzyme immunoassays for s-triazine herbicides and their application in environmental and food analysis
- Hajee CAJ, Haagsma N\*// \*Univ Utrecht, Fac Vet Med, Dept Sci Food Anim Origin, Chem Sect, POB 80175, 3508 TD Utrecht, The Netherlands  
*J Chromatogr B-Biomed Appl* 1995 **669** (2) 219  
Simultaneous determination of malachite green and its metabolite leucomalachite green in eel plasma using post-column oxidation
- Hormazabal V, Yndestad M// Norwegian Coll Vet Med, Div Food Hyg, POB 8146 Dep, N-0033 Oslo 1, Norway  
*J Liq Chromatogr* 1995 **18** (12) 2467  
Detection of benzylpenicillin in milk by HPLC
- Hormazabal V, Yndestad M// Address as above.  
*J Liq Chromatogr* 1995 **18** (13) 2695  
Determination of dihydrostreptomycin sulfate in milk by HPLC using ion-pair and postcolumn derivatization
- Itoyama T, Sekiguchi Y, Koiguchi S, Hirahara Y, Ohta M, Kimura M, Miyoshi T, Narita M, Hasegawa M, Miyata M *et al*// Ctr Inspect Imported Food & Infect Dis, Kobe Quarantine Stn, Hyogo ku, 1-1 Toyahama cho, Kobe, Hyogo 652, Japan  
*J Food Hyg Soc Jpn* 1995 **36** (4) 516  
Simple and rapid systematic determination of various pesticides in brown rice by gas chromatography (Japanese, English Abstract)
- Jinbo K, Kataoka J, Kokubo Y, Konuma H, Kondo F// Tokyo Metropolitan Res Lab Publ Hlth, Shinjuku ku, 3-24-1 Hyakunincho, Tokyo 169, Japan  
*J Food Hyg Soc Jpn* 1995 **36** (4) 525  
Sensitivity of microbiological simplified method to residual antibiotics in meat and marine products (Japanese, English Abstract)
- Lazaro R, Bayarri S, Conchello P, Arino A, Herrera A// Univ Zaragoza, Fac Vet, Unidad Hig Inspec Ctrl & Microb Aliment, CMiguel Servet 177, E-50013 Zaragoza, Spain  
*Grasas Aceites* 1995 **46** (1) 35  
Comparison between two techniques of fat extraction in foods prior to the determination of chlorinated residues (Spanish, English Abstract)
- Lochbihler E, Usleber E, Terplan G, Engelhardt G, Wallnofer P// Univ Munich, Fak Tierarztl, Lehrstuhl Hyg & Technol Milch, Schellingstr 10, D-80799 Munich, Germany  
*Arch Lebensmittelhyg* 1995 **46** (3) 60  
Investigations by means of enzyme immunoassays on the occurrence of antibiotics and sulfonamides in Bavarian drinking milk (German, English Abstract)
- Longo M, Lionetti C, Cavallaro A// Presidio Multizonale Igiene & Prevenz, Via Juvara 22, I-20129 Milan, Italy  
*J Chromatogr A* 1995 **708** (2) 303  
Determination of *N*-nitrosodimethylamine in beer by gas chromatography-stable isotope dilution chemical ionization mass spectrometry
- Nagase M, Kondo H, Hasebe K// Fukuoka Inst Hlth & Environm Sci, 39 Mukaisano, Fukuoka 81801, Japan  
*Analyst* 1995 **120** (7) 1923  
Determination of tributyltin and triphenyltin compounds in hair and fish using a hydrolysis technique and gas chromatography with flame photometric detection
- Nagayama T// Tokyo Metropolitan Res Lab Publ Hlth, Shinjuku ku, 3-24-1, Hyakunin cho, Tokyo 169, Japan  
*J Food Hyg Soc Jpn* 1995 **36** (4) 534  
Analytical method of pesticides in agricultural products and pesticide residues in raw agricultural commodity (Japanese)
- Norman KNT, Scudamore KA, Matthews WA, Wilson MF// MAFF Cent Sci Lab, London Rd, Slough SL3 7HJ, Berks, England  
*Pestic Sci* 1995 **44** (4) 309  
Determination of methyl bromide residues in stored foods using automated headspace gas chromatography
- Ramsey ED, Berry AJ, Lawrence SD, Games DE, Startin JR// Univ Glamorgan, Sch Appl Sci, Pontypridd CF37 1DL, Wales  
*Rapid Commun Mass Spectrom* 1995 **9** (8) 712  
Ionophores: Potential screening via supercritical-fluid chromatography combined with mass spectrometry and tandem mass spectrometry
- Rivaro P, Zaratini L, Frache R, Mazzucotelli A// Univ Genoa, Ist Chim Gen, Genoa, Italy  
*Analyst* 1995 **120** (7) 1937  
Determination of organotin compounds in marine mussel samples by using high-performance liquid chromatography hydride generation inductively coupled plasma atomic emission spectrometry
- Schlaud M, Seidler A, Salje A, Behrendt W, Schwartz FW, Ende M, Knoll A, Grugel C// Hannover Med Sch, Dept Epidemiol & Social Med, D-30163 Hannover, Germany  
*J Epidemiol Community Health* 1995 **49** (Suppl 1) 17  
Organochlorine residues in human breast milk: Analysis through a sentinel practice network
- Sisak M, Franek M\*, Hruska K// \*Vet Res Inst, Hudcova 70, CS-62132 Brno, Czech Republic  
*Anal Chim Acta* 1995 **311** (3) 415  
Application of radioimmunoassay in the screening of polychlorinated biphenyls in cow's milk
- Sugita T, Kawamura Y, Yamada T// Natl Inst Hlth Sci, Setagaya ku, 1-18-1 Kamiyoga, Tokyo 158, Japan  
*J Food Hyg Soc Jpn* 1995 **36** (4) 501  
Development of a determination method for residual triethylamine and tributylamine in polycarbonate by NPD-GC (Japanese, English Abstract)
- Thompson D, Parry SJ, Benzing R// Imperial Coll Sci Technol & Med, Ctr Analyt Res Environm, Silwood Pk, Buckhurst Rd, Ascot SL5 7TE, Berks, England  
*J Radioanal Nucl Chem Art* 1995 **195** (1) 209  
Neutron activation analysis for the determination of contaminants in food contact materials
- Thomson CA, Sporns P\*// \*Univ Alberta, Dept Agr Food & Nutr Sci, Edmonton, Alberta, Canada T6G 2P5  
*J Food Sci* 1995 **60** (4) 872  
Variation in enzyme-linked immunosorbent assay (ELISA) components to lower sulfathiazole detection limits
- Tonogai Y, Nakamura Y, Tsumura Y, Shibata T, Kimura M, Oota M, Hirahara Y, Miyata M, Narita M, Sekiguchi Y *et al*// Natl Inst Hlth Sci, Chuoh ku, 1-1-43 Hoenzaka, Osaka 540, Japan  
*J Food Hyg Soc Jpn* 1995 **36** (4) 506  
Effect of a component from foods on the determination of benfuracarb and carbosulfan by gas chromatography (Japanese, English Abstract)
- Turnipseed SB, Roybal JE, Rupp HS, Hurlbut JA, Long AR// US FDA, Denver Fed Ctr, Anim Drugs Res Ctr, POB 25087, Denver, Co 80225, USA  
*J Chromatogr B-Biomed Appl* 1995 **670** (1) 55  
Particle beam liquid chromatography-mass spectrometry of triphenylmethane dyes: Application to confirmation of malachite green in incurred catfish tissue

## 9 TOXINS

- Adachi T, Alvarez AM, Aoki N, Nakamura R, Garcia VV, Matsuda T// Nagoya Univ, Sch Agr Sci, Dept Appl Biol Sci, Nagoya, Aichi 46401, Japan  
*Biosci Biotechnol Biochem* 1995 **59** (7) 1377  
Screening of rice strains deficient in 16-kDa allergenic protein
- Kussak A, Andersson B\*, Andersson K// \*Natl Inst Occupat Hlth, Div Analyt Chem, POB 7654, S-90713 Umea, Sweden  
*J Chromatogr A* 1995 **708** (1) 55  
Determination of aflatoxins in airborne dust from feed factories by automated immunoaffinity column clean-up and liquid chromatography
- Oh CH, Mabry TJ\*, Kim KR, Kim JH// \*Univ Texas, Dept Bot, Austin, TX 78713, USA  
*J Chromatogr Sci* 1995 **33** (7) 399  
GC-MS analysis of nonprotein amino acids in *Gymnocladus dioica* as *N(O,S)*-isobutyloxycarbonyl silyl derivatives
- Oh CH, Kim JH, Kim KR, Mabry TJ// SUNY Stony Brook, Dept Pharmacol Sci, Stony Brook, NY 11794, USA  
*J Chromatogr A* 1995 **708** (1) 131  
Rapid gas chromatographic screening of edible seeds, nuts and beans for non-protein and protein amino acids
- Posch A, Weiss W, Wheeler C, Dunn MJ, Gorg A\*// \*Tech Univ Munich, Lehrstuhl Allgemeine Lebensmitteltechnol, D-85350 Freising, Germany  
*Electrophoresis* 1995 **16** (7) 1115  
Sequence analysis of wheat grain allergens separated by two-dimensional electrophoresis with immobilized pH gradients

Ruiz RG, Price KR, Rose ME, Rhodes MJC, Fenwick GR// AFRC Inst Food Res, Dept Food Molec Biochem, Norwich Res Pk, Norwich NR4 7UA, England

*J Liq Chromatogr* 1995 18 (14) 2843

Determination of saponins in lupin seed (*Lupinus angustifolius*) using high-performance liquid chromatography: Comparison with a gas chromatographic method

Sato M, Nakano T, Takeuchi M, Kumagai T, Kanno N, Nagahisa E, Sato Y// Tohoku Univ, Fac Agr, Aoba ku, Tsutsumi dori, Sendai, Miyagi 981, Japan  
*Biosci Biotechnol Biochem* 1995 59 (7) 1208

Specific determination of histamine in fish by high-performance liquid chromatography after diazo coupling

Teglia MC, De Santoro MV, Galicio M, De Marco N// Univ Buenos Aires, Fac Ciencias Vet, Dept Fisiol & Ciencias Basic, Catedra Quim Organ Biomolec, RA-1427 Buenos Aires, DF, Argentina

*An Asoc Quim Argent* 1994 82 (6) 443

Extraction and determination of aflatoxin B<sub>1</sub> in animal tissue by thin layer chromatography. New method for clean-up

Yamanishi R, Kondo K, Tsuji H, Ogawa T// Univ Tokushima, Sch Med, Dept Nutr, Tokushima 770, Japan

*Biosci Biotechnol Biochem* 1995 59 (7) 1272

Micro-assay to measure the allergenicity of a Kunitz-type soybean trypsin inhibitor toward Balb/c mice by using RBL-2H3 cells

Yano Y, Kataho N, Watanabe M, Nakamura T, Asano Y// Ithoham Foods Inc, Cent Res Inst, 1-2 Kubogaoka, Moriya-machi, Kitasouma-gun, Ibaraki 30201, Japan

*Food Chem* 1995 54 (2) 155

Changes in the concentration of biogenic amines and application of tyramine sensor during storage of beef

## 10 ADDITIVES

Analyt Meth Committee// Royal Soc Chem, Analyt Div, Burlington House, London W1V 0BN, England

*Analyst* 1995 120 (8) 2175

Determination of lasalocid sodium in poultry feeds and premixes

Caloni F, Montana M, Pasqualucci C, Pompa G// Univ Milan, Inst Vet Pharmacol & Toxicol, Via Celoria 10, I-20133 Milan, Italy

*Vet Res Commun* 1995 19 (4) 285

Detection of  $\beta_2$ -agonists in milk replacer

Golc-Wondra A, Skocir E, Prosek M// Natl Inst Chem, Food Chem Lab, POB 30, Ljubljana 61115, Slovenia

*J Planar Chromat-Mod TLC* 1995 8 (2) 117

Determination of monosodium glutamate in food products

Fagan NP, McEvoy JDG, Lynas L, Campbell JN, McCaughey WJ// Dept Agr, Div Vet Sci, Stoney Rd, Belfast BT4 3SD, Northern Ireland

*Analyst* 1995 120 (8) 2265

Improved recovery of avoparcin from animal feedstuffs using a novel extraction method

Gouveia ST, Fatibello O\*, Nobrega JD// \*Univ Fed Sao Carlos, Dept Quim, Quim Analyt Grp, BR-13560-905 Sao Carlos, SP, Brazil

*Analyst* 1995 120 (7) 2009

Flow injection spectrophotometric determination of cyclamate in low calorie soft drinks and sweeteners

Ichi T, Higashimura Y, Katayama T, Koda T, Tada M// Okayama Univ, Grad Sch Nat Sci & Technol, 3-1-1 Tsushima Naka, Okayama 700, Japan

*J Food Hyg Soc Jpn* 1995 36 (4) 482

Determination of a food colorant, cardenia yellow pigment, in processed foods with a high-performance liquid chromatograph photodiode-array detector mass spectrometer system (Japanese, English Abstract)

Matsumoto T, Fukaya M, Akita S, Kawamura Y, Ito Y// Nakano Vinegar Co Ltd, Nakano Res Inst, 2-6 Nakamura cho, Handa, Aichi 475, Japan

*J Jpn Soc Food Sci Technol* 1995 42 (5) 316

Determination of sulfite in sea foods by a microbial sensor method (Japanese, English Abstract)

Nasirullah, Krishnamurthy MN, Nagaraja KV// Cent Food Technol Res Inst, Dept Lipid Technol, Mysore 570013, Karnataka, India

*J Food Sci Technol-Mysore* 1995 32 (3) 240

Detection and determination of ester gum (substitute for brominated vegetable oil) in ready-to-serve beverages and their concentrates

Nishiyama O, Kurita R, Kurozuka M, Matsumura M, Oukuni N, Awano K, Morioka S, Kaneda Y// Kakogawa Hith Ctr, Kitazaike, Kakogawa, Hyogo 675, Japan

*J Food Hyg Soc Jpn* 1995 36 (4) 495

Analysis of preservatives in foods by using steam distillation with ammonium sulfate saturated solution

Smith MC, Sherma J\*// \*Lafayette Coll, Dept Chem, Easton, Pa 18042, USA

*J Planar Chromat-Mod TLC* 1995 8 (2) 103

Determination of benzoic and sorbic acid preservatives by solid phase extraction and quantitative TLC

Zhi ZL, Rios A, Valcarcel M\*// \*Univ Cordoba, Fac Sci, Dept Analyt Chem, E-14004 Cordoba, Spain

*Analyst* 1995 120 (7) 2013

Direct determination of free sulfur dioxide in wine and dried apple samples by using a gas generating and purging device coupled to a continuous flow (injection) system

## 11 FLAVOURS & AROMAS

Bouseta A, Collin S\*// \*Univ Catholique Louvain, Unite Brasserie & Ind Alimentaires, Pl Croix Sud 2-Bte 7, B-1348 Louvain, Belgium

*J Agr Food Chem* 1995 43 (7) 1890

Optimized Likens-Nickerson methodology for quantifying honey flavors

Cai XJ, Block E\*, Uden PC, Quimby BD, Sullivan JJ// \*SUNY Albany, Dept Chem, Albany, NY 12222, USA

*J Agr Food Chem* 1995 43 (7) 1751

*Allium* chemistry: Identification of natural abundance organoselenium compounds in human breath after ingestion of garlic using gas chromatography with atomic emission detection

Cai XJ, Block E\*, Uden PC, Zhang X, Quimby BD, Sullivan JJ// \*Address as above.

*J Agr Food Chem* 1995 43 (7) 1754

*Allium* chemistry: Identification of selenoamino acids in ordinary and selenium-enriched garlic, onion, and broccoli using gas chromatography with atomic emission detection

Fondville-Bagnol A, Sarris J, Bayonove C, Flanzky C// BP 320, 66 Sicarex Beaujolais, F-69661 Villefranche, France

*Sci Aliment* 1995 15 (4) 359

Method of analysis of volatile compounds in fermenting grape berries (French, English Abstract)

Hashim IB, Resurreccion AVA, McWatters KH// Univ Georgia, Georgia Stn, Coll Agr & Environm Sci, Dept Food Sci Technol, Griffin, Ga 30223, USA

*J Food Sci* 1995 60 (4) 664

Descriptive sensory analysis of irradiated frozen or refrigerated chicken

Kiridena W, Miller KG, Pooler CF// Univ London Imperial Coll Sci Technol & Med, SmithKline Beecham Ctr Analyt Chem, London SW7 2AY, England

*J Planar Chromat-Mod TLC* 1995 8 (3) 177

Identification of 2-hydroxycinnamaldehyde in the cinnamons of commerce

Langourieux S, Cruzet J\*// \*Univ Montpellier 2, INRA, Unite Microbiol & Biochim Ind, Genie Biol & Sci Aliments Lab, F-34095 Montpellier 05, France

*J Chromatogr A* 1995 707 (2) 181

Study of aroma compound-natural polymer interactions by dynamic coupled column liquid chromatography

Osmicote O, Forney CF\*, Richards J, Liew C// \*Agr Canada, Res Ctr, Kentville, Nova Scotia, Canada B4N 1J5

*Hortscience* 1995 30 (2) 183

Development of an olfactory detector for the evaluation of fruit aroma: A proposed approach

Rossi V, Denoyer C, Berdague JL// INRA, Rech Viande Stn, Lab Flaveur, F-63122 St Genes Champane, France

*Sci Aliment* 1995 15 (4) 381

Effect of storage in air on cooked beef meat. Analysis of desorbed volatile compounds (French, English Abstract)

Ruiz-Mendez MV, Marquez-Ruiz G, Dobarganes MC// CSIC, Inst Grasa, Avda Padre Garcia Tejero 4, E-41012 Seville, Spain

*Grasas Aceites* 1995 46 (1) 21

Quantitation of major compounds present in deodorizer distillates from fats and oils

Sakamoto K, Soyoda J, Kurihara M, Tsuchiya Y, Yoshiwa T, Morimoto K// Hiroshima Prefectural Food Technol Res Ctr, Minami ku, 12-70 Hijiya

*Honmachi, Hiroshima 732, Japan*

*J Jpn Soc Food Sci Technol* 1995 42 (7) 512

Analysis of volatile compounds in salted *Perilla frutescens* (Japanese, English Abstract)

Stancik L, Macholan L, Pluhacek I, Scheller F// Masaryk Univ, Dept Biochem, Kotlarska 2, CS-61137 Brno, Czech Republic

*Electroanal* 1995 7 (8) 726

Biosensing of rapeseed glucosinolates using amperometric enzyme electrodes based on membrane-bound glucose oxidase or tyrosinase

## 12 ORGANIC ACIDS

Gajovic N, Warsinke A\*, Scheller FW// \*Max Delbruck Centrum Molec Med, Univ Potsdam, Inst Biochem & Molec Physiol, Robert Rossle Str 10, D-13125 Berlin, Germany

*J Chem Technol Biotechnol* 1995 63 (4) 337

A novel multienzyme electrode for the determination of citrate

Lodi S, Rossin G// Eridania ZN SpA, Chim Cent Lab, Via Argine Ducale 397, Ferrara, Italy

- J Chromatogr A* 1995 **706** (1-2) 375  
Determination of some organic acids in sugar factory products  
Saccani G, Gherardi S, Trifiro A, Bordini CS, Calza M, Freddie C// Sfr Sperimentale Ind Conserve Alimentari, V F Tanara 31-A, I-43100 Parma, Italy  
*J Chromatogr A* 1995 **706** (1-2) 395  
Use of ion chromatography for the measurement of organic acids in fruit juices

### 13 ANIMAL PRODUCTS

- Agullo E, Gelos BS// Univ Nacl Sur, Dept Quim & Ingn Quim, Catedra Bromatol, Avda Alem 1253, RA-8000 Bahia Blanca, Argentina  
*An Asoc Quim Argenti* 1994 **82** (6) 415  
Detection of bovine plasma in egg pastas (Spanish, English Abstract)
- Fiala M, Honikel KO// Bundesanstalt Fleischforsch, Inst Chem & Phys, D-95326 Kulmbach, Germany  
*Fleischwirtschaft* 1995 **75** (8) 1013  
The application of the differential scanning calorimetry (German, English Abstract)
- Mishiro T, Sugiyama M, Minegishi Y, Abe H, Kawano S, Iwamoto M// Marudai Food Co Ltd, 21-3 Midori, Takatsuki, Osaka 569, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (6) 436  
Nondestructive determination of moisture content in dry sausage using near infrared (NIR) transmittance method
- Noronha RL, Damasio MH\*, Pivatto MM, Negrillo BG// \*UNICAMP, Fac Engn Alimentos, CP 6121, BR-13081-970 Campinas, SP, Brazil  
*Food Qual Preference* 1995 **6** (1) 49  
Development of the attributes and panel screening for texture descriptive analysis of milk gels aided by multivariate statistical procedures
- Paredi ME, Tomas MC, De Mattio NDV, Crupkin M, Anon MC// INTI, CITEP, Marcelo T de Alvear 1168, RA-7600 Mar del Plata, Buenos Aires, Argentina  
*J Agr Food Chem* 1995 **43** (7) 1758  
Postmortem changes in adductor muscles from *Aulacomya ater ater* (Molina) stored at 2-4°C. A differential scanning calorimetric study
- Rachidi A, Jana M, Dalal A// Univ Cadi Ayyad, Fac Sci Semlalia, Physiol Anim Lab, Marrakech, Morocco  
*Rev Med Vet* 1995 **146** (7) 485  
Quality control of seafood. II. Advantage and limitation of microbiological assay and chemical analysis
- Sakai N, Morita N, Qiu P, Hanzawa T// Tokyo Univ Fisheries, Dept Food Sci & Technol, Minato ku, 4-5-7 Konan, Tokyo 108, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (7) 524  
Two dimensional heat transfer analysis of the thawing process of tuna by far-infrared radiation (Japanese, English Abstract)
- Yamagata M, Low LK// SE Asian Fisheries Dev Ctr, Marine Fisheries Res Dept, Changi Fisheries Complex, Changi Point 1749, Singapore  
*J Food Sci* 1995 **60** (4) 718  
Rapid determination of formaldehyde in banana shrimp, *Penaeus merguensis*
- Angerosa F, D'Alessandro N\*, Konstantinou P, Di Giacinto L// \*Ist Sperimentale Elaiotecn, Contrada Fonte Umamo 37, I-65013 Citta S Angelo, Italy  
*J Agr Food Chem* 1995 **43** (7) 1802  
GC-RIS evaluation of phenolic compounds in virgin olive oil
- Cladera-Fortez A, Tomas-Mas C, Estela-Ripoll JM, Cerda-Martin V, Ramis-Ramos G\*\*// \*Univ Illes Balears, Dept Quim, E-07071 Palma de Mallorca, Spain  
*Microchem J* 1995 **52** (1) 28  
Determination of tannins in white wines by thermal lens spectrometry
- Fujiwara T, Honjo T// Mie Agr Res Ctr, 530 Kawagita, Ureshino, Mie 51523, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (2) 109  
Determination of sugar and acid contents in fruit juice of Satsuma mandarin by near infrared spectroscopy (Japanese, English Abstract)
- Galletti GC, Modafferi V, Poiana M, Bocchini P// Univ Reggio Calabria, Ist Microbiol & Tecnol Agr & Forestale, Piazza S Francesco 4, I-89061 Gallina, Italy  
*J Agr Food Chem* 1995 **43** (7) 1859  
Analytical pyrolysis and thermally assisted hydrolysis-methylation of wine tannin
- Garcia-Jares C, Medina B// Univ Santiago de Compostela, Fac Quim, Dept Quim Analit Nutr & Bromatol, Avda Ciencias s/n, E-15706 Santiago de Compostela, Spain  
*Analyst* 1995 **120** (7) 1891  
Prediction of some physico-chemical parameters in red wines from ultraviolet-visible spectra using a partial least-squares model in latent variables
- Goldberg DM, Ng E, Karumanchiri A, Yan J, Diamandis EP, Soleas GJ// Univ Toronto, Dept Clin Biochem, 100 Coll St, Toronto, Ontario, Canada M5G 1L5  
*J Chromatogr A* 1995 **708** (1) 89  
Assay of resveratrol glucosides and isomers in wine by direct-injection high-performance liquid chromatography
- Hulbert GJ, Litchfield JB\*, Schmidt SJ// \*Univ Illinois, Dept Agr Engr, 1304 Penn Ave, Agr Engr Sci Bldg, Urbana, IL 61801, USA  
*J Food Sci* 1995 **60** (4) 780  
Temperature mapping in carrot using T<sub>1</sub> weighted magnetic resonance imaging
- Kajino K, Furukawa K, Ebisuya H, Fukaya M, Akita S, Kawamura Y, Uchiyama S// Nakano Vinegar Co Ltd, Nakano Res Inst, 2-6 Nakamura cho, Handa, Aichi 475, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (3) 163  
Rapid determination of ethanol in food by combination of quinone-dependent alcohol dehydrogenase reaction and self-driven coulometry (Japanese, English Abstract)
- Kikoku Y, Fukuhara K, Saito I, Oota H// Aohata Corp, Ctr Res & Dev, Hiroshima 72923, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (2) 118  
Identification and high-performance liquid chromatographic determination of strawberry anthocyanin pigments (Japanese, English Abstract)
- Laber H, Schulz J, Sponholz WR, Bremser W\*\*// \*CAQ, Bruckner Str 17, D-86356 Neuss, Germany  
*Fresenius J Anal Chem* 1995 **351** (6) 530  
Use of a combined GC/FTIR/MS system for the analysis of spirits
- Maas JL, Line MJ// USDA ARS, Beltsville Agr Res Ctr, Fruit Lab, Beltsville, Md 20705, USA  
*Hortscience* 1995 **30** (5) 1090  
Nuclear magnetic resonance microimaging of strawberry flower buds and fruit
- Maness NO, Brusewitz GH, Chrz D, Taylor GG// Oklahoma State Univ, Oklahoma Agr Expt Stn, Dept Hort & Landscape Architecture, Stillwater, Ok 74078, USA  
*J Food Qual* 1995 **18** (4) 335  
Performance of an instrument designed for, and evaluation of methods to assess, peach fruit impact bruise susceptibility
- Nelson SO, Lawrence KC// USDA ARS, Richard B Russell Agr Res Ctr, Athens, Ga 30613, USA  
*Trans ASAE* 1995 **38** (4) 1147  
Nondestructive moisture determination in individual pecans by RF impedance measurements
- Pietta PG, Mauri PL, Simonetti P, Testolin G// CNR, ITBA, Via Cervi 90, Segrate, Italy  
*Fresenius J Anal Chem* 1995 **352** (7-8) 788  
HPLC and MEKC determination of major flavonoids in selected food pools
- Savelli RA, Padua TS, Dobrzycki JH, Cal-Vidal J// ESAL, Lavras, MG, Brazil  
*Pesquisa Agr Brasil* 1995 **30** (3) 395  
Textural and microstructural analyses of French bread containing sweet potato flour (Portuguese, English Abstract)
- Suematsu S, Hisanobu Y, Saigo H, Matsuda R, Komatsu Y// Tokyo Inst Food Technol, 4-23-2 Minamihanayashiki, Kawanishi, Hyogo 666, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (6) 419  
A new extraction procedure for determination of caffeine and catechins in green tea: (Studies on preservation of constituents in canned drinks. V.) (Japanese, English Abstract)
- Sugiyama S, Konishi M, Terasaki D, Hatae K, Shimada A// Tokyo Gas Co Ltd, Minato ku, 1-5-25 Shibaura, Tokyo 105, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (6) 401  
Determination of the chemical components and distribution in the milled rice kernel (Japanese, English Abstract)
- Tagawa A, Murata S, Hinosawa H// Tokyo Univ Agr & Technol, Fac Bioind, 196 Yasaka, Abarshiri, Hokkaido 09924, Japan  
*J Jpn Soc Food Sci Technol* 1995 **42** (2) 93  
Measurements of effective thermal conductivity of azuki beans by transient heat flow method using a probe (Japanese, English Abstract)
- Wightman JD, Wrolstad RE// Oregon State Univ, Dept Food Sci & Technol, Wiegand Hall, Corvallis, Or 97331, USA  
*J Food Sci* 1995 **60** (4) 862  
Anthocyanin analysis as a measure of glycosidase activity in enzymes for juice processing
- Yanez-Limon M, Rodriguez ME, Alvarado-Gil JJ, Zeleya-Angel O, Sanchez-Sinencio F, Cruz-Orea A, Vargas H, Figueroa JDC, Martinez-Bustos F, Martinez JL, Gonzalez-Hernandez J, Arguello C, Miranda LCM// Inst Politecn Nacl, Ctr Invest & Estudios Avanzados, Dept Fis, Apdo Postal 14-740, Mexico City 07000, DF, Mexico  
*Analyst* 1995 **120** (7) 1953  
Photoacoustic measurements of thermal diffusivity and correlation with viscosity of instant corn dry masa flour
- Zapata MA, Coll L, Gutierrez ML// Univ Complutense Madrid, Fac Farm, Dept Nutr & Bromatol 2, E-28040 Madrid, Spain  
*An Quim* 1994 **90** (7-8) 412  
Factor analysis applied to the characterization and typification of fruit liqueurs

### 14 PLANT & MICROBIAL PRODUCTS