



# Bibliography on analytical food chemistry

## 2 GENERAL

Hey H//Ludemannstr 49, W-2300 Kiel 1, FRG  
DEUT LEBENSMM-RUNDSCH 1991, 87 (11) 353  
Options for a European system of qualified food control laboratories - Accreditation, GLP, standardization (German, English Abstract)

## 3 AMINO ACIDS, PROTEINS & ENZYMES

Penther JM//Inst Biol 2, Schanzlestr 1, W-7800 Freiburg, FRG  
J CHROMATOGR 1991, 587 (1) 101  
Analysis of alanine and aspartate aminotransferase isoforms in mustard (*Sinapis alba* L) cotyledons

Konishi Y, Horikawa K, Oku Y, Azumaya J, Nakatani N//Osaka City Univ, Fac Sci Living, Dept Food & Nutr, 3-3-138 Sugimoto, Sumiyoshi ku, Osaka 558, Japan  
AGR BIOL CHEM TOKYO 1991, 55 (11) 2745

Extraction of 2 albumin fractions from amaranth grains - Comparison of some physicochemical properties and the putative localization in the grains

Monastero E, Deutsch W, Ellero M//Consulente Chim Settore Alimentare, via Capri 10-2, I-39100 Bolzano, Italy  
IND ALIMENT 1991, 30 (297) 817  
Apricot characterization with contribution of amino acids analysis (Italian, English Abstract)

Larre C, Popineau Y, Loisel W//INRA, Biochim & Technol Proteines Lab, rue Geraudiere, BP 527, F-44026 Nantes 03, France  
J CEREAL SCI 1991, 14 (3) 231  
Fractionation of gliadins from common wheat by cation exchange FPLC

Esnault MA, Merceur A, Citharel J//Fac Sci Rennes, Physiol Vegetale Lab, Campus Bealieu, F-35042 Rennes, France  
PLANT PHYSIOL BIOCHEM 1991, 29 (6) 573  
Characterization of globulins of yellow lupin seeds

Marshall HF, Conkerton EJ//USDA ARS, Rice Res, Route 7, Box 999, Beaumont, Tx 77713, USA  
J ASSN OFFIC ANAL CHEM 1991, 74 (6) 918  
Analytical evaluation of the globulin proteins of cottonseed meals

Singh NK, Shepherd KW, Cornish GB//Cent Food Technol Res Inst, Dept Food Chem, Mysore 570013, Karnataka, India  
J CEREAL SCI 1991, 14 (3) 203  
A simplified SDS-PAGE procedure for separating LMW subunits of glutenin

Fukamizo T, Ikeda Y, Torikata T, Araki T, Kuramoto M, Goto S//Kinki Univ, Fac Agr, Dept Biophys Chem, 3327 204 Nakamachi, Nara 631, Japan  
J BIOCHEM TOKYO 1991, 110 (6) 997  
<sup>1</sup>H-NMR study on the structure of lysozyme from guinea hen egg white

Goff JP, Reinhardt TA, Sung L, Hollis BW//Natl Anim Dis Ctr, Metab Dis & Immunol Res Unit, POB 70, Ames, Ia 50010, USA  
ENDOCRINOLOGY 1991, 129 (6) 2815  
Parathyroid hormone-related peptide content of bovine milk and calf blood assessed by radioimmunoassay and bioassay

Gonzalez-Lara R, Gonzalez LM//Analisis Vinicos, C-Avd D Antonio Huertas 59, E-13700 Tomelloso, Spain  
CHROMATOGRAPHIA 1991, 32 (9-10) 463  
Analysis of the soluble proteins in grape musts by reversed-phase HPLC

Hussain A, Scanlon MG, Bushuk W//Univ Manitoba, Dept Food Sci, Grain Ind Res Grp, Winnipeg, Manitoba, Canada R3T 2N2  
J FOOD QUAL 1991, 14 (5) 367  
Bean quality - Changes in HPLC profiles of acetic acid-extractable proteins during storage

Notzold H, Kretschmar R, Ludwig E\*\*//Tech Univ Dresden, Inst Lebensmittelchem & Tech Biochem, Chem Abt, Mommsenstr 13, O-8027 Dresden, FRG  
NAHRUNG 1991, 35 (9) 969  
Contribution to the determination of protein hydrophobicity. 1. Determination of the hydrophobicity of selected cereal and milk proteins using their sodium dodecylsulphate binding capacities

Notzold H, Kretschmar R, Ludwig E\*\*//Tech Univ Dresden, Inst Lebensmittelchem & Tech Biochem, Chem Abt, Mommsenstr 13, O-8027 Dresden, FRG  
NAHRUNG 1991, 35 (9) 977  
Contribution to the determination of protein hydrophobicity. 2. Determination of protein-bound sodium dodecylsulphate using ultracentrifugation experiments

Seifert A, Strenge K, Schultz, Schmandke H//Cent Inst Nutr, Arthur Scheunert Allee 114-116, O-1505 Bergholz, FRG  
NAHRUNG 1991, 35 (9) 989  
Determination of stability of food emulsions. 1. The influence of the type and concentration of protein on creaming stability determined by analytical ultracentrifugation

Sievert D, Sapirstein HD, Bushuk W//Univ Manitoba, Dept Food Sci, Winnipeg, Manitoba, Canada R3T 2N2

As a service to subscribers of Food Chemistry, this bibliography contains newly published material in the field of analytical food chemistry. 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 & Chemical 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 subject. Where there are no papers to appear under a heading, it will be omitted

J CEREAL SCI 1991, 14 (3) 243

Changes in electrophoretic patterns of acetic acid-insoluble wheat flour proteins during dough mixing

Ukishima Y, Kino M, Kubota H, Wada S, Okada S/Shizuoka Prefectural Numazu Publ Hlth Ctr, 1-3 Takashimahoncho, Numazu 410, Japan

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 943

Studies on the application of thin layer isoelectric focusing to food analysis. 4. Identification of whale species by thin-layer isoelectric focusing of sarcoplasmic proteins

Walker M, Stevens L\*, Duncan D, Price NC, Kelly SM//Univ Stirling, Dept Biol & Molec Sci, Stirling FK9 4LA, Scotland  
COMP BIOCHEM PHYSIOL PT B 1991, 100 (1) 77

A comparative study of the structure of egg-white riboflavin binding protein from the domestic fowl and Japanese quail

#### 4 CARBOHYDRATES

Mann JD, Lammerink JP, Coles GD//DSIR, Christchurch, New Zealand

N Z J CROP HORTICULT SCI 1991, 19 (2) 199

Predicting potato crisp darkening - 2 methods for analysis of glucose

Kulicke WM, Kaiser U, Schwengers D, Lemmes R//Univ Hamburg, Inst Tech & Makromolek Chem, Bundesstr 45, W-2000 Hamburg 13, FRG

STARCH 1991, 43 (10) 392

Measurements of the refractive index increment on hydroxyethyl starch as a basis for absolute molecular weight determinations

Lai HM, Schmidt SJ\*//Univ Illinois, Div Foods & Nutr, 367 Bevier Hall, 905 S Goodwin Ave, Urbana, IL 61801, USA

J AGR FOOD CHEM 1991, 39 (11) 1921

Proton, deuterium, and oxygen-17 nuclear magnetic resonance relaxation studies of lactose water and sucrose water systems

Laurinavichyus VA, Kurtinaitene BS, Guryavichene VV, Kulis YY//Acad Sci, Inst Biochem, Vilnius, Lithuania

J ANAL CHEM USSR-ENGL TR 1991, 46 (4) 590

Determination of lactose in milk with an enzyme electrode

Adhikari AK, Sahai D, Mathur ON//Natl Dairy Res Inst, Div Dairy Chem, Karnal 132001, Haryana, India

LAIT 1991, 71 (5) 555

A rapid spectrophotometric method for quantitative determination of lactulose in heated milk and milk products

Vinx CJA, Van Nieuwenhove CG, Delcour JA//Katholieke Univ Leuven, Toegepaste Organ Scheikunde Lab, Kardinaal Mercierlaan 92, B-3001 Heverlee, Belgium

CEREAL CHEM 1991, 68 (6) 617

Physicochemical and functional properties of rye nonstarch polysaccharides. 3. Oxidative gelation of a fraction containing water-soluble pentosans and proteins

Karkalas J//Univ Strathclyde, Dept Biosci & Biotechnol, 131 Albion St, Glasgow G1 1SD, Scotland

J CEREAL SCI 1991, 14 (3) 279

Automated enzymic determination of starch by flow injection analysis

Magel E//Tech Univ Munich, Lehrstuhl Bot & Mikrobiol, Arcisstr 21, W-8000 Munich 2, FRG

STARCH 1991, 43 (10) 384

Qualitative and quantitative determination of starch by a colorimetric

method

Wasserman BP, Timpa JD//Rutgers State Univ, Cook Coll, New Brunswick, NJ 08903, USA

STARCH 1991, 43 (10) 389

Rapid quantitative measurement of extrusion-induced starch fragmentation by automated gel permeation chromatography

Benetti G, Cavalli S, Renzetti R//Ilsud Spa, C San Martino 1, I-65013 Citta S Angelo, Italy

IND ALIMENT 1991, 30 (297) 845

HPLC determination of sugars in licorice roots and extracts with ion-exchange column and integrated amperometric detector (Italian, English Abstract)

Martin GJ, Danho D, Vallet C//Univ Nantes 2, Rmn & React Chim Lab, CNRS, UA 472, rue Houssiniere, F-44072 Nantes, France

J SCI FOOD AGR 1991, 56 (4) 419

Natural isotope fractionation in the discrimination of sugar origins

Matsuo N, Yoshida S, Kusakabe I\*, Murakami K//Univ Tsukuba, Inst Appl Biochem, Tsukuba, Ibaraki 305, Japan

AGR BIOL CHEM TOKYO 1991, 55 (11) 2905

Chemical structure of xylan in cotton-seed cake

#### 5 LIPIDS

Lane RH, Smathers JL//Univ Alabama, Dept Human Nutr & Hospital Management, Tuscaloosa, AL 35487, USA

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 957

Monitoring aldehyde production during frying by reversed-phase liquid chromatography

Bartle CM//DSIR, Phys Sci Grp, Nucl Sci Grp, POB 31312, Lower Hutt, New Zealand

APPL RADIAT ISOT-INT J RAD A 1991, 42 (11) 1115

Simultaneous transmission of neutrons and gamma rays (NEUGAT) to measure fat in meat

Beltran A, Moral A//Ciudad Univ, Inst del Frio, E-28040 Madrid, Spain

FOOD CHEM 1991, 42 (3) 347

The effects of fat content and storage temperature on the storage life of smoked sardine fillets (*Sardina pilchardus* W.) prepared from frozen sardine

Stegeman GA, Baer RJ\*, Schingoethe DJ, Casper DP//S Dakota State Univ, Minnesota S Dakota Dairy Foods Res Ctr, Dept Dairy Sci, Brookings, SD 57007, USA

J FOOD PROTECT 1991, 54 (11) 890

Influence of milk fat higher in unsaturated fatty acids on the accuracy of milk fat analysis by the mid-infrared spectroscopic method

Sato T, Kawano S, Iwamoto M//MAFF, Natl Food Res Inst, Div Anal & Nutr, 2-1-2 Kannondai, Tsukuba, Ibaraki 305, Japan

J AMER OIL CHEM 1991, 68 (11) 827

Near infrared spectral patterns of fatty acid analysis from fats and oils

Hanras C, Perrin JL\*//Inst Corps Gras, rue Monge, Parc Ind, F-33600 Pessac, France

J AMER OIL CHEM 1991, 68 (11) 804

Gram-scale preparative HPLC of phospholipids from soybean lecithins

Hogge LR, Taylor DC, Reed DW, Underhill EW//Natl Res Council Canada, Inst Plant Biotechnol, 110 Gymnasium Rd, Saskatoon, Saskat-

chewan, Canada S7N 0W9

J AMER OIL CHEM 1991, 68 (11) 863

Characterization of castor bean neutral lipids by mass spectrometry

Al-Kahtani HA//King Saud Univ, Dept Food Sci, POB 2460, Riyadh 11451, Saudi Arabia

J AMER OIL CHEM 1991, 68 (11) 857

Survey of quality of used frying oils from restaurants

Herrera ML, Segura JA\*, Anon MC//Molinos Rio de La Plata SA, Paseo Colon 746, RA-1323 Buenos Aires, DF, Argentina

J AMER OIL CHEM 1991, 68 (11) 793

Crystalline fractionation of hydrogenated sunflowerseed oil. 1. HPLC analysis

Herrera ML, Anon MC\*\*c/o Segura JA, Molinos Rio de La Plata SA, Paseo Colon 746, RA-1323 Buenos Aires, DF, Argentina

J AMER OIL CHEM 1991, 68 (11) 799

Crystalline fractionation of hydrogenated sunflowerseed oil. 2. Differential scanning calorimetry (DSC)

Kamaleidin A, Yousif G, Appelqvist LA\*\*Swedish Univ Agr Sci, Dept Food Hyg, Box 7009, S-75007 Uppsala, Sweden

J AMER OIL CHEM 1991, 68 (11) 844

Thin-layer chromatographic separations of seed oil unsaponifiables from 4 Sesamum species

Bland JM, Conkerton EJ, Abraham G//South Reg Res Ctr, POB 19687, New Orleans, La 70179, USA

J AMER OIL CHEM 1991, 68 (11) 840

Triacylglyceride composition of cottonseed oil by HPLC and GC

## 6 VITAMINS & CO-FACTORS

Reichert N, Rubach K//Tech Univ Berlin, Inst Lebensmittelchem, Gustav Meyer Allee 25, W-1000 Berlin 65, FRG

DEUT LEBENSMM-RUNDSCH 1991, 87 (11) 341

Determination of biotin and folic acid in vitamin-containing foods by competitive binding protein assays (CBPA) and enzyme immunoassays (ELISA) (German, English Abstract)

Manorama R, Rukmini C\*\*Natl Inst Nutr, Indian Council Med Res, Jamai-Osmania PO, Hyderabad 500-007, India

FOOD CHEM 1991, 42 (3) 253

Effect of processing on beta-carotene retention in crude palm oil and its products

Sumitani H, Suekane S, Sakai Y, Tatsuka K//Toyo Inst Food Technol, 4-23-2 Minamihanayashiki, Kawanishi, Hyogo 666, Japan

AGR BIOL CHEM TOKYO 1991, 55 (11) 2899

FPD-GC determination of S-methylmethioninesulfonium in satsuma mandarin juice

Vanderslice JT, Higgs DJ//USDA ARS, Beltsville Agr Res Ctr, Nutrient Composit Lab, Bldg 161, Room 202, 10300 Baltimore Ave, Beltsville, Md 20705, USA

AMER J CLIN NUTR 1991, 54 (6) SUPPL S1323

Vitamin-C content of foods - Sample variability

## 7 TRACE ELEMENTS & MINERALS

Suzuki EY, Early RJ//Univ Hawaii Manoa, Dept Anim Sci, 1800 EW Rd, Honolulu, Hi 96822, USA

CAN J ANIM SCI 1991, 71 (3) 931

Analysis of chromic oxide in small samples of feeds and feces using chlorine bleach

Kotoucek M, Polaskova K, Zboril M//Address not available

LISTY CUKROV 1991, 107 (4) 79

Determination of copper, cadmium, lead and zinc in refined sugar by method of anodic stripping voltametry

Yang SX, Fu SJ, Wang ML//Zhengzhou Univ, Dept Chem, Zhengzhou 450052, Peoples R China

ANAL CHEM 1991, 63 (24) 2970

Determination of trace iodine in food and biological samples by cathodic stripping voltametry

Doka O, Kispeter J, Lorincz A//Agr Univ Mosonmagyarovar, Dept Phys, H-9200 Mosonmagyarovar, Hungary

J DAIRY RES 1991, 58 (4) 453

Potential value of photoacoustic spectroscopy for determining iron content of milk protein concentrates

Meah MN, Smart GA, Harrison AJ, Sherlock JC//MAFF, Div Food Sci 1, Ergon House, Nobel House, 17 Smith Sq, London SW1P 3JR, England

FOOD ADDIT CONTAM 1991, 8 (4) 485

Lead and tin in canned foods - Results of the UK survey 1983-1987

Hu B, Jiang ZC\*, Zeng Y//Wuhan Univ, Dept Chem, Whan 430072, Peoples R China

J ANAL ATOM SPECTROM 1991, 6 (8) 623

Slurry sampling and fluorination-electrothermal vaporization inductively coupled plasma atomic emission spectrometry for the direct determination of molybdenum in food

Gromes R, Glaser D, Sattig B, Schnellbacher B//E Merck AG, Forschung Reagenzien, Frankfurter Str 250, W-6100 Darmstadt, FRG

DEUT LEBENSMM-RUNDSCH 1991, 87 (11) 346

Determination of nitrate levels in foodstuffs using HPLC and a new enzymatic assay (German, English Abstract)

Harvey RA, Theuer RC//Beech Nut Nutr Corp, Dept Qual Assurance, St Louis, Mo 63164, USA

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 929

Potassium as an index of fruit content in baby food products. 1. Banana-containing and apricot-containing products

Tian JB, Qian QF, Chai CF, Wang K, Ou T//Acad Sinica, Inst High Energy Phys, POB 2732, Beijing 100080, Peoples R China

J RADIOANAL NUCL CHEM ART 1991, 151 (2) 287

The distribution of selenium and other elements in corn samples studied by NAA and a biochemical technique

Okamoto K//Univ Tokushima, Fac Pharmaceut Sci, Shoumachi 1-78, Tokushima 770, Japan

SPECTROCHIM ACTA PT B-AT SPEC 1991, 46 (12) 1615

Isotope dilution inductively coupled plasma mass spectrometric determination of total tin in NIES fish tissue reference material

Kanias GD//Aghia Paraskevi Attikis, Natl Res Ctr Phys Sci Demokritos, Inst Phys Chem, Radioanalyt Lab, GR-15310 Athens, Greece

J RADIOANAL NUCL CHEM ART 1991, 151 (2) 245

Nutrient and other trace elements in instant soups

Schwartz RS, Hecking LT//US Customs Serv, Div Res, Off Labs & Sci Serv, 1301 Constitut Ave, Room 7113, Washington, DC 20229, USA

J ANAL ATOM SPECTROM 1991, 6 (8) 637

Determination of geographic origin of agricultural products by multivariate analysis of trace element composition

Sun LY, Lu FY, Su RW, Zhen HX//Chinese Acad Agr Sci, Inst Appl

Atom Energy, POB 5109, Beijing 100094, Peoples Rep China  
 J RADIOANAL NUCL CHEM ART 1991, 151 (2) 277  
 Determination and evaluation of some trace elements in Chinese foodstuffs

Arnaud J, Favier A, Alary J//Chr Univ Grenoble, Biochim Lab C, BP 217X, F-38043 Grenoble, France  
 J ANAL ATOM SPECTROM 1991, 6 (8) 647  
 Determination of zinc in human milk by electrothermal atomic absorption spectrometry

Ni BF, Wang PS, Luo YJ, Yu SY//Inst Atom Energy, POB 275-50, Beijing, Peoples Rep China  
 J RADIOANAL NUCL CHEM ART 1991, 151 (2) 255  
 Determination of activatable isotopic tracers of zinc by neutron activation analysis for study of bioavailability of zinc

## 8 DRUG, BIOCIDES & CHEMICAL RESIDUES

Plakas SM, Depaola A, Moxey MB//US FDN, Fishery Res Branch, POB 158, Dauphin Isl, AI 36528, USA  
 J ASSN OFFIC ANAL CHEM 1991, 74 (6) 910  
 Bacillus stearothermophilus disk assay for determining ampicillin residues in fish muscle

Hendrikse PW, Dieffenbacher A, Bearetogers J, Pocklington WD, Kurucz E, Zwerenz G, Bruscheweiler H, Fedeli E, Hashimoto T, Holmer G et al//Willem Zwijgerlaan 29, 3136 AR Vlaardingen, The Netherlands  
 PURE APPL CHEM 1991, 63 (11) 1659  
 Determination of benzo[a]pyrene in oils and fats by reversed phase high performance liquid chromatography - Results of a collaborative study and the standardized method

Liu WP, Xu HQ, Chen ZW//Univ Sassari, Ist Chim Agr, via E de Nicola, I-07100 Sassari, Italy  
 PESTIC SCI 1991, 33 (1) 81  
 Method for the determination of butachlor residues in water, soil and rice

Van der Heeft E, De Jong APJM, Van Ginkel LA, Van Rossum HJ, Zomer G//Natl Inst Publ Hlth & Environm Protect, Organ Analyt Chem Lab, POB 1, 3720 BA Bilthoven, The Netherlands  
 BIOL MASS SPECTROM 1991, 20 (12) 763  
 Conformation and quantification of chloramphenicol in cow's urine, muscle and eggs by electron capture negative ion chemical ionization gas chromatography/mass spectrometry

Newton JM, Rothman BS, Walker FA//US FDA, 50 United Nat Plaza, San Francisco, Ca 94102, USA  
 J ASSN OFFIC ANAL CHEM 1991, 74 (6) 986  
 Separation and determination of diesel contaminants in various fish products by capillary gas chromatography

Begley TH, Biles JE, Hollifield HC//US FDA, Div Food Chem & Technol, Washington, DC 20204, USA  
 J AGR FOOD CHEM 1991, 39 (11) 1944  
 Migration of an epoxy adhesive compound into a food-simulating liquid and food from microwave susceptible packaging

Vinas P, Cordoba MH\*, Sanchez-Pedreno C//Univ Murcia, Dept Anal Chem, Fac Chem, E-30071 Murcia, Spain  
 FOOD CHEM 1991, 42 (3) 241  
 Determination of ethoxyquin in paprika by high-performance liquid chromatography

Norman KNT//MAFF, Cent Sci Lab, London Rd, Slough SL3 7HJ, England  
 PESTIC SCI 1991, 33 (1) 23  
 A rapid method for the determination of liquid fumigant residues in food commodities using automated headspace analysis

Motohashi N, Nagashima H, Meyer R//Snow Brand Milk Prod Co Ltd, Life Sci Res Inst, 519 Shimoishibashi, Tochigi 32905, Japan  
 J LIQ CHROMATOGR 1991, 14 (19) 3591  
 High-performance liquid chromatography of fungicides in citrus fruits

Grob K, Artho A, Biedermann M, Egli J//Kantonales Labor, CH-8030 Zurich, Switzerland  
 FOOD ADDIT CONTAM 1991, 8 (4) 437  
 Food contamination by hydrocarbons from lubricating oils and release agents - Determination by coupled LC-GC

Carignan G, Carrier K, Sved S//Bur Drug Res Hlth & Welfare Canada, Drug Residues Sect, Ottawa, Ontario, Canada K1A 0L2  
 FOOD ADDIT CONTAM 1991, 8 (4) 467  
 The identification and assay of 2-methyl-5-nitroimidazole in pigs treated with dimetridazole

Mavelle T, Bouchikhi B, Debry G//Univ Nancy 1, Ctr Nutr Hum, 40 rue Lionnois, F-54000 Nancy, France  
 FOOD CHEM 1991, 42 (3) 321  
 The occurrence of volatile N-nitrosamines in French foodstuffs

Hopper ML//US FDA, Total Diet Res Ctr, 1009 Cherry Sdt, Kansas City, Mo 64106, USA  
 J ASSN OFFIC ANAL CHEM 1991, 74 (6) 974  
 Analysis of organochlorine pesticide residues using simultaneous injection of 2 capillary columns with electron capture and electrolytic conductivity detectors

Kanja LW, Skaare JU\*, Ojwang SBO, Maitai CK//Norwegian Coll Vet Med, Natl Vet Inst, Dept Pharmacol & Toxicol, POB 8146 DEP, N-0033 Oslo 1, Norway  
 ARCH ENVIRONM CONTAM TOXICOL 1992, 22 (1) 21  
 A comparison of organochlorine pesticide residues in maternal adipose tissue, maternal blood, cord blood, and human milk from mother infant pairs

Carignan G, Larocque L, Sved S//Hlth & Wlth Canada, Bur Drug Res, Drug Residues Sect, Ottawa, Ontario, Canada K1A 0L2  
 J ASSN OFFIC ANAL CHEM 1991, 74 (6) 906  
 Assay of oxolinic acid residues in salmon muscle by liquid chromatography with fluorescence detection - Interlaboratory study

Kijak PJ, Leadbetter MG, Thomas MH, Thompson EA//US FDA, Ctr Vet Med, Div Vet Med Res, Beltsville, Md 20705, USA  
 BIOL MASS SPECTROM 1991, 20 (12) 789  
 Confirmation and oxytetracycline, tetracycline and chlortetracycline residues in milk by particle beam liquid chromatography/mass spectrometry

Chichila TM, Walters SM//US FDA, Pesticides & Ind Chem Res Ctr, Detroit, Mi 48207, USA  
 J ASSN OFFIC ANAL CHEM 1991, 74 (6) 961  
 Liquid chromatographic determination of paraquat and diquat in crops using a silica column with aqueous ionic mobile phase

France JE, King JW//USDA ARS, Natl Ctr Agr Utilizat Res, 1815 N Univ St, Peoria, Il 61604, USA  
 J ASSN OFFIC ANAL CHEM 1991, 74 (6) 1013  
 Supercritical fluid extraction enzyme assay - A novel technique to

screen for pesticide residues in meat products

Grob K, Kalin I//Kantonales Lab, CH-8030 Zurich, Switzerland  
J AGR FOOD CHEM 1991, 39 (11) 1950

Attempt for an on-line size exclusion chromatography-gas chromatography method for analyzing pesticide residues in foods

Lee SM, Richman S//Calif Dept Food & Agr, Chem Lab Serv, Sacramento, Ca 95832, USA

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 893

Thoughts on the use of immunoassay techniques for pesticide residue analysis

Patterson JR//Agr Canada, Food Prod & Inspect Branch, Hlth Anim Lab, Saskatoon, Saskatchewan, Canada S7N 2R3

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 1016

Reducing solvent consumption in automated gel permeation chromatographic cleanup for pesticide residue analysis - A modified GPC Autoprep 1002

Ting KC, Peng K//Calif Dept Food & Agr, Pesticide Residue Lab, 169 E Liberty Ave, Anaheim, Ca 92801, USA

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 991

GC/MIP/AED method for pesticide residue determination in fruits and vegetables

Cabanillas CG, Bushway R//Univ Castilla La Mancha, Dept Analyt Chem & Food Technol, E-13071 Ciudad Real, Spain

J LIQ CHROMATOGR 1991, 14 (19) 3603

Analysis of phosmet and azinphosmethyl in apples by high-performance liquid chromatography

Sanders P, Moulin G, Gaudiche C, Delepine B, Mourot D//Minist Agr & Foret, Ctr Natl Etud Vet & Alimentaires, Med Vet Lab, La Haute Marche Javene, F-35133 Fougeres, France

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 912

Comparison of automated liquid chromatographic and bioassay methods for determining spiramycin concentration in bovine plasma

Gazza F, Censi A, Maggi E, Gambetti C//Univ Parma, Fac Med Vet, Ist Ispez Alimenti Origine Anim, via Taglio 8, UI-43100 Parma, Italy

IND ALIMENT 1991, 30 (296) 727

Presence of sulphamethazine residues (enzyme immunoassay) and inhibiting substances (microbiological method) in foreign and national swine thighs (Italian, English Abstract)

Cortesi ML, Degiovanni F, Amendola F, Santoro A, Anastasio A//Fac Med Vet, Dipartimento Patol Profilassi & Ispezione Alimenti, Sezione Ispezione, via Delpino 1, I-80137 Naples, Italy

IND ALIMENT 1991, 30 (297) 831

Research of sulfonamide residues in home and foreign produced fresh pork meat (Italian, English Abstract)

Norman KNT//MAFF, Cent Sci Lab, London Rd, Slough SL3 7HJ, England

FOOD ADDIT CONTAM 1991, 8 (4) 513

Determination of tetrachloroethylene in olive oil by automated head-space gas chromatography

## 9 TOXINS

Sinha KK, Sinha AK//Bhagalpur Univ, Dept Bot, Mycotoxin Lab, Bhagalpur 812007, India

FOOD ADDIT CONTAM 1991, 8 (4) 453

Monitoring and identification of aflatoxins in wheat, gram and maize flours in Bihar State (India)

Stubblefield RD, Honstead JP, Shotwell OL//USDA ARS, Natl Ctr Agr Utilizat Res, Peoria, Il 61604, USA

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 897

An analytical survey of aflatoxins in tissues from swine grown in regions reporting 1988 aflatoxin-contaminated corn

Wilson TJ, Romer TR//Romer Labs Inc, POB 2095, Washington, Mo 63090, USA

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 951

Use of the Mycosep multifunctional cleanup column for liquid chromatographic determination of aflatoxins in agricultural products

Cawood ME, Gelderblom WCA\*, Vlegaar R, Behrend Y, Thiel PG, Marasas WFO//S African MRC, Nutr Dis Res Inst, POB 19070, Tygerberg 7505, South Africa

J AGR FOOD CHEM 1991, 39 (11) 1958

Isolation of the fumonisin mycotoxins - A quantitative approach

Usleber E, Martlbauer E, Dietrich R, Terplan G//Univ Munich, Fac Vet, Inst Hyg & Technol Food Anim Origin, W-8000 Munich 22, FRG

J AGR FOOD CHEM 1991, 39 (11) 2091

Direct enzyme-linked immunosorbent assays for the detection of the 8-ketotrichothecene mycotoxin deoxynivalenol, 3-acetyldeoxynivalenol, and 15-acetyldeoxynivalenol in buffer solutions

Datta PK, Figueroa MODCR, Lajolo FM\*\*//Univ Sao Paulo, Fac Ciencias Farmaceut, Dept Alimentos & Nutr Exptl, CX Postal 66355, BR-05389 Sao Paulo, Brazil

PLANT PHYSIOL 1991, 97 (3) 856

Purification and characterization of 12 major lectins from Araucaria brasiliensis syn Araucaria angustifolia seeds (Pinhao)

Rozen JP, De Groot J//Agr Univ Wageningen, Dept Food Sci, POB 8129, 6700 EV Wageningen, The Netherlands

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 940

Analysis of trypsin inhibitors and lectins in white kidney beans (*Phaseolus vulgaris*, var Processor) in a combined method

Sharman M, Gilbert J, Chilkowski J//MAFF, Food Sci Lab, Colney Lane, Norwich NR4 7UQ, England

FOOD ADDIT CONTAM 1991, 8 (4) 459

A survey of the occurrence of the mycotoxin moniliformin in cereal samples from sources worldwide

Park JC, Zong MS, Chang IM\*\*//Seoul Natl Univ, Grad Sch Publ Hlth, Dept Environm Hlth, Seoul 110460, South Korea

FOOD ADDIT CONTAM 1991, 8 (4) 447

Survey of the presence of the fusarium mycotoxins nivalenol, deoxynivalenol and T-2 toxin in Korean cereals of the 1989 harvest

Fukal L//Higher Inst Chem Technol, Lehstuhl Biochem & Mikrobiol, Suchbatar Str 5, CS-16628 Prague 6, Czechoslovakia

FLEISCHWIRTSCHAFT 1991, 71 (11) 1346

Immunochemical monitoring of ochratoxin-A in pig serum and tissues (German, English Abstract)

Usleber E, Schneider E, Terplan G//Univ Munich, Inst Hyg Technol Lebensmittel Tierursprungs, Schellingstr 10-III, W-8000 Munich 40, FRG

LETT APPL MICROBIOL 1991, 13 (6) 275

Direct enzyme immunoassay in microtitration plate and test strip format for the detection of saxitoxin in shellfish

Guevremont R, Quigley MN, Pathak V, Schweitzer M, Wright JLC//Natl Res Council Canada, Inst Environm Chem, Ottawa, Ontario, Canada K1A 0R6

ANAL CHIM ACTA 1991, 254 (1-2) 41

Effect of metals on the liquid chromatographic determination of paralytic shellfish poisons

Kikuchi S, Yasui M, Oshima Y, Azumi N, Takeuchi M, Oshima T, Takeuchi T, Kito K, Yamada S, Miura T//Muroan Inst Technol, Dept Appl Microbiol, Muroan, Hokkaido 050, Japan  
NIPPON NOGEIKAGAKU KAISHI 1991, 65 (12) 1753

Use of *Bacillus* strains to assay diarrhetic and paralytic shellfish toxins in scallops, *Patinopecten yessoensis* (Japanese, English Abstract)

Langlois GW, Danielson RE, Perera SK, Pickering MV//Calif Dept Hlth Serv, Environm Management Branch, Berkeley, Ca 94704, USA  
LC GC-MAG SEPARATION SCI 1991, 9 (12) 838

Toxins on the half shell - Shellfish monitoring along the California coast

Lawrence JF, Menard C//Food Directorate, Bur Chem Safety, Div Food Res, Hlth Protect Branch, Ottawa, Ontario, Canada K1A 0L2  
J ASSN OFFIC ANAL CHEM 1991, 74 (6) 1006

Liquid chromatographic determination of paralytic shellfish poisons in shellfish after prechromatographic oxidation

## 10 ADDITIVES

Tekel J, Farkas P//Vyskumny Ustav Potravinarsky, Bratislava, Czechoslovakia

LISTY CUKROV 1991, 107 (5) 110

Monitorization of the content of acryl amide monomer in sugar as a contaminant of the anti-incrustation agent on the basis of polyacrylonitrile (Czech, English Abstract)

Losada PP, Mahia PL, Oderiz LV, Lozano JS, Gandara JS//Univ Santiago Compostela, Fac Farm, Dept Quim Analit Nutr Nutr & Bromatol, Area Nutr & Bromatol, E-15706 Santiago, Spain  
J ASSN OFFIC ANAL CHEM 1991, 74 (6) 925

Sensitive and rapid reversed-phase liquid chromatography-fluorescence method for determining bisphenol and diglycidyl ether in aqueous-based food simulants

Ding XD, Magiera DJ, Mazzeo JR, Edmar K, Krull IS//Northeastern Univ, Barnett Inst, 341 Mugar Bldg, 360 Huntington Ave, Boston, Ma 02115, USA

J AGR FOOD CHEM 1991, 39 (11) 1954

Determination of 2-acetyl-4(5)-tetrahydroxybutyl)imidazole in ammonia caramel color by HPLC

Yabe Y, Ninomiya T, Tatsuno T, Okada T//Japan Food Hyg Assoc, Inst Food Hyg, 6-1 Jingu mae, 2 chome, Shibuya ku, Tokyo 150, Japan  
J ASSN OFFIC ANAL CHEM 1991, 74 (6) 1019

Simple colorimetric determination of carrageenan in jellies and salad dressings

Arakawa S, Ishihara H, Nishio O, Isomura S//Nagoya City Univ, Fac Pharmaceut Sci, Dept Hyg Chem, Nagoya, Aichi 467, Japan

J SCI FOOD AGR 1991, 57 (1) 135

A sandwich enzyme-linked immunosorbent assay for kappa-carrageenan determination

Gorchakov VD, Daurova EA, Avdyushkina TV, Sakodynskii KI//IREA Sci Ind Assoc, Moscow, Russia

ZH FIZ KHIM SSSR 1991, 65 (10) 2833

Chromatographic isolation of food dyes from processed grape products (Russian)

Hattula MT, Wallin HC//Tech Res Ctr Finland, Food Res Lab, POB

203, SF-02151 Espoo, Finland

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 921

Enzymatic determination of free glutamic acid in dried soups and in minced sausages - NMKL collaborative study

Anderson DMW, Millar JRA, Weiping W//Univ Edinburgh, Dept Chem, Edinburgh EH9 3JJ, Scotland

FOOD ADDIT CONTAM 1991, 8 (4) 405

Gum arabic (*Acacia senegal*) - Unambiguous identification by <sup>13</sup>C-NMR spectroscopy as an adjunct to the revised JECFA specification, and the application of <sup>13</sup>C-NMR spectra for regulatory legislative purposes

King JM, McEvily AJ, Iyengar R\*\*//Opta Food Ingredients Inc, 64 Sidney St, Cambridge, Ma 02139, USA

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 1003

Liquid chromatographic determination of the processing aid 4-hexylresorcinol in shrimp

Klein E, Edelhofer M, Lippold R//Chem Landesuntersuchungsanstalt Sigmaringen, Hedingerstr 2-1, W-7480 Sigmaringen, FRG

DEUT LEBENS-M-RUNDSCH 1991, 87 (11) 350

Determination of residues of the triphenylmethane dye malachite green and leucomalachite green in edible fish (German, English Abstract)

## 11 FLAVOURS & AROMAS

Huang CJ, Zayas JF//Natl Food Processors Associat, 1401 New York Ave NW, Washington, DC 20005, USA

J FOOD QUAL 1991, 14 (5) 377

Aroma quality of corn germ protein flours determined by sensory and gas chromatographic profiles

Jayalekshmy A, Narayanan CS, Mathew AG//CSIR, Reg Res Lab, Trivandrum 695019, India

J AMER OIL CHEM 1991, 68 (11) 873

Identification of volatile flavor compounds in roasted coconut

Pilkova L, Novakova M, Pokorny J//Prague Inst Chem Technol, Dept Food Chem & Anal, Technicka 1905, CS-16628 Prague 6, Czechoslovakia

NAHRUNG 1991, 35 (9) 999

Naming and identification of tastes in aqueous solutions

Quinsac A, Ribailier D, Elfakir C, Lafosse M, Dreux M//Ctr Tech Interprofess Oleagineux Metropolitains, F-45160 Ardon, France

J ASSN OFFIC ANAL CHEM 1991, 74 (6) 932

A new approach to the study of glucosinolates by isocratic liquid chromatography. 1. Rapid determination of desulfated derivatives of rapeseed glucosinolates

Jackson TC, Acuff GR, Vanderzant C, Sharp TR, Savell JW//Texas A&M Univ Syst, Texas Agr Expt Stn, Dept Anim Sci, College Stn, Tx 77843, USA

MEAT SCI 1992, 31 (2) 175

Identification and evaluation of volatile compounds of vacuum and modified atmosphere packaged beef strip loins

Lee SR, Macku C, Shibamoto T\*\*//Univ Calif Davis, Dept Environm Toxicol, Davis, Ca 95616, USA

J AGR FOOD CHEM 1991, 39 (11) 1972

Isolation and indentification of headspace volatiles formed in heated butter

Mattheis JP, Fellman JK, Chen PM, Patterson ME//USDA ARS, Tree

Fruit Res Lab, 1104 N Western Ave, Wenatchee, Wa 98801, USA  
 J AGR FOOD CHEM 1991, 39 (11) 1902  
 Changes in headspace volatile during physiological development of  
 Bisbee Delicious apple fruit

Rizzolo A, Sodi C, Polesello A//IVTPA-Ist Sperim Valorizzazione  
 Tecnol Prod Agr, via Venezian 26, I-20133 Milan, Italy  
 FOOD CHEM 1991, 42 (3) 275  
 Influence of ethylene removal on the volatile development in Passa  
 Crassana pears stored in a controlled atmosphere

## 12 ORGANIC ACIDS

Consiglieri C//Univ Parma, Ist Merceol, via Kennedy 6, I-43100 Parma,  
 Italy  
 IND ALIMENT 1991, 30 (296) 738  
 Evaluation of the D-lactic and L-lactic and acetic acid in cold-break  
 tomato concentrate (Italian, English Abstract)

Yamamoto A, Matsunaga A, Mizukami E, Hayakawa K, Miyazaki  
 M\*//Shizuoka Univ, Sch Pharmaceut Sci, 395 Yada, Oya, Shizuoka  
 422, Japan  
 J CHROMATOGR 1991, 585 (2) 315  
 Ligand-exchange ion chromatographic determination of malic acid en-  
 antiomers in apple juice with photometric determination

## 13 ANIMAL PRODUCTS

Hofmann K, Bluchel E//Bundesanstalt Fleischforsch, Inst Chem &  
 Phys, EC Baumannstr 20, W-8650 Kulmbach, FRG  
 FLEISCHWIRTSCHAFT 1991, 71 (11)  
 ∅  
 ∅ and muscle pigment - Separation and determination using SDS  
 electrophoresis (German, English Abstract)

Doi T, Kanzaki M, Shibuya M, Matsumoto K//Morinaga Milk Ind Co  
 Ltd, Engr Res Ctr, 4-515 Tateno, Tokyo 207, Japan  
 J JPN SOC FOOD SCI TECHNOL 1991, 38 (11) 990  
 The continuous monitoring of the milk curd formation by the thermo-  
 couple sensors equipped with the Peltier unit as a heat generator  
 (Japanese, English Abstract)

Nakamura T, Mukaiyama T, Nagayama K//Kyushu Univ, Fac Agr,  
 Fisheries Technol Lab, 6-10-1, Fukuoka 812, Japan  
 J FAC AGR KYUSHU UNIV 1991, 36 (1-2) 93  
 A rapid and simple method to detect antioxidative substances on a  
 thin-layer chromatography plate

Okuma H, Takahashi H, Sekimukai S, Watanabe E//New Japan Radio  
 Co Ltd, Res & Dev Lab, 2-1-1 Fukuoka, Saitama 356, Japan  
 J JPN SOC FOOD SCI TECHNOL 1991, 38 (11) 1019  
 Determination of fish freshness with an enzyme reactor electrode sys-  
 tem (Japanese, English Abstract)

Rodel W//Bundesanstalt Fleischforsch, Inst Mikrobiol Toxikol & His-  
 tol, EC Baumann Str 20, W-8650 Kulmbach, FRG  
 FLEISCHWIRTSCHAFT 1991, 71 (11) 1260  
 Measurement magnitudes and transportable measuring instruments  
 for in-factory quality control (German, English Abstract)

Shahidi F, Hong C//Mem Univ Newfoundland, Dept Biochem, St  
 John's, Newfoundland, Canada A1B 3X9  
 FOOD CHEM 1991, 42 (3) 339  
 Role of metal ions and heme pigments in autoxidation of heat-pro-  
 cessed meat products

Belton P, Lyster RLJ//AFRC, Inst Food Res, Norwich Lab, Norwich  
 NR4 7UA, England  
 J DAIRY RES 1991, 58 (4) 443  
<sup>31</sup>P nuclear magnetic resonance spectra of milk from various species

Rongvaux-Gaida D, Piton-Malleret C, Dasen A//INRA, Rech Technol  
 & Anal Laitieres Stn, BP 89, F-39801 Poligny, France  
 LAIT 1991, 71 (5) 575  
 Determination of bacterial ATP level in raw milk with Bactofoss in-  
 strument (French, English Abstract)

## 14 PLANT & MICROBIAL PRODUCTS

Vargas-Lopez JM, Paredes-Lopez O, Ramirez-Wong B//Inst Politech  
 Natl, CIEA, Biotechnol Alimentos Lab, Unidad Irapuato, Apdo Post-  
 al 629, Irapuato 36500, Guanajuato, Mexico  
 CEREAL CHEM 1991, 68 (6) 610  
 Physicochemical properties of extrusion-cooked amaranth under al-  
 kaline conditions

Kimshin MS, Mari F, Rao PA, Stengle TR, Chinachoti P\*//Univ  
 Massachusetts, Dept Food Sci, Amherst, Ma 01003, USA  
 J AGR FOOD CHEM 1991, 39 (11) 1915  
<sup>17</sup>O nuclear magnetic resonance studies of water mobility during bread  
 staling

Louis-Alexandre A, Mestres C, Faure J//Ctr Cooperat Inst Rech  
 Agron Dev, Inst Rech Agron Trop, Technol Cereales Lab, 2 Pl Viala,  
 F-304060 Montpellier, France  
 CEREAL CHEM 1991, 68 (6) 614  
 Measurement of endosperm vitreousness of corn - A quantitative  
 method and its application to African cultivars

Mongeau R, Yiu SH, Brassard R//Hlth & Welf Canada, Food Direc-  
 torate, Banting Res Ctr, Bur Nutr Sci, Ottawa, Ontario, Canada K1A  
 0L2  
 J AGR FOOD CHEM 1991, 39 (11) 1966  
 Chemical and fluorescence microscopic analysis of fiber degradation  
 of oat, hard red spring wheat, and corn bran in rats

Ukhun ME, Ukpebor IE//Univ Benin, Chem Dept, Benin City, Nige-  
 ria  
 FOOD CHEM 1991, 42 (3) 287  
 Production of instant plantain flour, sensory evaluation and physico-  
 chemical changes during storage

Rajaram N, Janardhanan K//Bharathiar Univ, Seed Physiol Lab, Dept  
 Bot, Coimbatore 641 046, India  
 FOOD CHEM 1991, 42 (3) 265  
 Studies on the underexploited tree pulses, *Acacia catechu* Willd., *Par-  
 kinsonia aculeata* L. and *Prosopis chilensis* (Molina) Stunz: Chemical  
 composition and antinutritional factors

Huebner FR, Hussain A, Lookhart GL, Bietz JA, Bushuk W, Juliano  
 BO//USDA ARS, Natl Ctr Agr Utilizat Res, 1815 N Univ St, Peoria, Il  
 61604, USA  
 CEREAL CHEM 1991, 68 (6) 583  
 Discrimination of sister-line IR rice varieties by polyacrylamide gel  
 electrophoresis and reversed-phase high-performance liquid chroma-  
 tography

Marshall WE, Normand FL//USDA ARS, South Reg Res Ctr, Box  
 19687, New Orleans, La 70179, USA  
 CEREAL CHEM 1991, 68 (6) 606  
 Exothermic transitions in whole grain milled rice and milled rice flour  
 studied by differential scanning calorimetry

Lindner P, Kinsella JE//Agr Res Org, Dept Food Sci, PO Box 6, 50250  
Bet Dagan, Israel

FOOD CHEM 1991, 42 (3) 301

Study of the hydration process in tehina

Ganenko TV, Gorshkov AG, Lutskii VI, Baram GI, Semenov AA//  
Acad Sci, Inst Organ Chem, Irkutsk 664003, Russia

ZH FIZ KHIM SSSR 1991, 65 (10) 2863

Application of high-performance liquid chromatography method with  
2-wave photometric detection for analysis of triterpene glycoside in ve-  
getable extract (Russian)