

METHODS COMMITTEE REPORTS

Committee on Residues and Related Topics

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Committee Actions

The General Referee and committee recommends a name change for a topic under the General Refereeship, Pesticides

and Other Chemical Contaminants. The topic "Rapid Multiclass Methods for Pesticide Residues in Foods." should be changed to "Pesticides in Foods Using Acetonitrile Extraction and Partitioning with Magnesium Sulfate". Proposed Topic Advisor, Steve Lehotay, U.S. Department of Agriculture, ARS ERRRC, 600 E. Mermaid Ln, Wyndmoor, PA 19038, Tel: +1-215-233-6433, Fax: +1-215-233-6642, E-mail: slehotay@arserrc.gov. Topic Advisor will be submitting a protocol for a collaborative study in the coming months. Work has progressed well over the past year and more than 10 laboratories have been identified in several countries to conduct the trials.

At the committee meeting, 2 methods, **997.15** and **999.17**, were recommended for Final Action.

Pesticides and Other Chemical Contaminants.—General Referee, David Soderberg

(1) **998.01 Synthetic Pyrethroids.**—Method Advisor, Guo-Fang Pang, Qinhuaodao Entry-Exit and Quarantine Bureau, No. 39 Haibin Rd, P.C. 066002, Qinhuaodao, People's Republic of China, Tel/Fax: +011-86-335-341-7119, E-mail: panggfciq@pang.com.cn. Adopted as Final Action May 2003. Continue monitoring any reports from users of Official Method **998.01** until publication of new edition of *Official Methods of Analysis*.

(2) **2002.03 Pesticides in Nonfatty Foods Using SFE and GC/MS.**—Study Director, Steven J. Lehotay, U.S. Department of Agriculture, Agricultural Research Service, Regional Research Center, Food Safety Research Unit, 600 E. Mermaid Ln, Wyndmoor, PA 19038, Tel: +1-215-233-6433, Fax: +1-215-233-6642, E-mail: slehotay@arserrc.gov. Adopted as First Action, May 2002. Continue monitoring any reports from users of Official Method **2002.03** until adopted Final Action.

(3) *Miniaturized Methods.*—Topic Advisor, Frank Schenck, U.S. Food and Drug Administration, Southeast Regional Laboratory, 60 Eighth St NE, Atlanta, GA 30309, Tel: +1-404-253-1200, Fax: +1-404-253-1208, E-mail: fschenck@ora.fda.gov. This topic area is very active with a variety of methods using SPE, SPME, MSPD, and other alternative techniques being developed. Continue topic.

(4) *Chlorinated Dioxins.*—Topic Advisor, Douglas Hayward, U.S. Food and Drug Administration, HFS-336, 5100 Paint Branch Pkwy, College Park, MD 20740-3835, Tel: +1-301-436-1654, Fax: +1-301-436-263, E-mail: douglas.hayward@cfsan.fda.gov. Two FDA regional laboratories are now successfully analyzing food for dioxins using ion trap GC/MS. This success sets the stage for a possible AOAC interlaboratory study of the method. Continue topic.

(5) **2000.05 Determination of Glyphosate and (Aminomethyl) Phosphonic Acid in Crops by Capillary Gas**

Chromatography with Selective Detection.—Study Director, Phil Alferness, Biomarin Pharmaceuticals, Inc., Ste 210, Analytical Biochemistry Department, 371 Bel Marin Keys Blvd, Novato, CA 94949, Tel: +1-415-506-6121, Fax: +1-415-382-0113, E-mail: palferness@biomarinpharm.com. This method was adopted as Final Action in January 2003. Phil Alferness is unable to continue as Method Advisor. No other Method Advisor has been found. Discontinue topic.

(6) *Determination of Residues of Triazines and Their Chloro-Metabolites in Raw Agricultural Commodities.*—No Topic Advisor has yet been found. Continue topic for 1 more year and try to find Topic Advisor. If unsuccessful, discontinue topic next year.

(7) *Dioxins by GC/MS.*—This topic largely overlaps with the other active dioxin topic and no Study Director was found after advertisement by AOAC. Discontinue topic.

(8) *Rapid Multiclass Methods for Pesticide Residues in Food.*—Topic Advisor, Steven J. Lehotay. Rename topic Pesticides in Foods Using Acetonitrile Extraction and Partitioning with Magnesium Sulfate.

Radioactivity—General Referee, Edmond J. Baratta

(1) *Iodine-131 and Cesium-137 in Milk and Foods.*—Search for and appoint a new Study Director and Topic Advisor. Prepare a protocol for a collaborative study that replaces sodium iodide detectors used in current methods with Germanium detectors. Continue topic.

(2) *Strontium-90.*—Study Director, Marina Silverstone, Washington Department of Health, Division of Labs Radiation, 1610 NE 150th St, Seattle, WA 98155-7224, Tel: +1-206-361-2894, Fax: +1-206-361-2899, E-mail: marina.silverstone@goh.wa.gov. A “Rapid Method for Analyzing Strontium-90 in Water” is being developed using Eichrom cartridges. Continue topic.

(3) *Plutonium-239.*—Recommend a Study Director for the new method using ICP-MS. Continue topic.

Metals and Other Elements—General Referee, Milan Ihnat

(1) *Atomic Absorption Spectrometry.*—Topic Advisor, Milan Ihnat, Pacific Agri-Food Research Centre-Summerland, Agriculture and Agri-Food Canada, Summerland, British Columbia V0H 1Z0, Canada, Tel: +1-250-494-6411, Fax: +1-250-494-0755, E-mail: ihnatm@agr.gc.ca. Complete and submit to *J. AOAC Int.* a report “Flame Atomic Absorption Spectrometric Methodologies for Food Analysis—A Review.” Complete development of a unified, flame atomic absorption scheme of analysis of foods for a range of elements and submit for collaborative study approval and publication in *J. AOAC Int.* Coordinate this development with ICP-AES and ICP-MS methods reported below. Complete a report for submission to *J. AOAC Int.* on the development and application of a highly reliable flame AAS method for multi-element determinations in biological materials. Continue topic.

(2) *Elements in Foods, Feeds, and Biological Materials by Inductively Coupled Plasma-Atomic Emission Spectrometry.*—Topic Advisors, Milan Ihnat, Victor J. Boyko, and

Ralph E. Sturgeon, Chemical Metrology, Institute for National Measurement Standards, National Research Council of Canada, Ottawa, ON K1A 0R9, Canada, Tel: +1-613-993-6395, Fax: +1-613-993-2451, E-mail: Ralph.Sturgeon@nrc.ca. Complete planning of study including selection of elements, materials, decomposition, and measurement procedures to be investigated and complete initial method evaluation and experimental phases. Integrate with studies on atomic absorption spectrometry and inductively coupled plasma-mass spectrometry. Continue study.

(3) *Elements in Foods, Feeds and Biological Materials by Inductively Coupled Plasma-Mass Spectrometry.*—Topic Advisors, Milan Ihnat, Lu Yang and Ralph E. Sturgeon. Complete planning of study including selection of elements, materials, decomposition, and measurement procedures to be investigated and complete initial method evaluation and experimental phases. Integrate with studies on atomic absorption and inductively coupled plasma-atomic emission spectrometries. Continue topic.

(4) *Graphite Furnace Atomic Absorption Spectrometric Determination of Chromium in Foods.*—Study Director, Nancy J. Miller-Ihli, U.S. Department of Agriculture, Nutrient Composition Laboratory, Beltsville Human Nutrition Research Center, Bldg 161, BARC-East, Beltsville, MD 20705, Tel: +1-301-504-8252, Fax: +1-301-504-8314, E-mail: miller-ihli@bhnrc.usda.gov. Complete the collaborative study or peer-validation on the graphite furnace atomic absorption method for the determination of chromium in foods and biological materials, based on the method published (*JAOAC* 75, 354-359 [1992]). Continue study.

(5) **997.15** *Lead in Sugars and Syrups.*—Study Director, Nancy J. Miller-Ihli. First Action 1997. Adopt as Final Action.

(6) **999.17** *Graphite Furnace Atomic Absorption Spectrometric Determination of Lead and Cadmium Released from Ceramicware.*—Study Director, Susan C. Hight, U.S. Food and Drug Administration, Elemental Research Branch, Center for Food Safety and Applied Nutrition, HFS-338, 5100 Paint Branch Pkwy, College Park, MD 20740-3835, Tel: +1-301-436-1652, Fax: +1-301-436-2632, E-mail: susan.hight@cfsan.fda.gov. Adopt as Final Action.

(7) *Lead in Calcium Supplements.*—Study Director, Paul H. Siitonen, U.S. Food and Drug Administration, Division of Chemistry, National Center for Toxicological Research, 3900 NCTR Dr, HFT-230, Jefferson, AR 72079-9502, Tel: +1-870-543-7656, Fax: +1-870-543-7686, E-mail: psiitonen@nctr.fda.gov. Accept resignation of Study Director Siitonen with thanks for past activities on this topic including publications, development of a method for collaboration and precollaborative trial. Appoint new Study Director. Continue with this important topic having an impact on public health and direct study in the direction of a market survey of lead and cadmium in Ca supplements. Consider adding Cd to topic. Depending on advice of new Study Director, consider completion and/or modification of the trial in progress, “Determination of Calcium by Inductively Coupled Plasma-Atomic Emission Spectrometry and Lead by Graphite Furnace

Atomic Absorption Spectrophotometry in Ca Supplements after Microwave Dissolution or Dry-Ash Digestion: Method Trial." Continue study.

(8) *Lead in Wines*.—Study Director, Alan L. Reisig, BATF Laboratory, 1401 Research Blvd, Rockville, MD 20850, Tel: +1-301-413-5227, Fax: +1-301-413-4419, E-mail: Alreisig@atfhq.atf.treas.gov. Complete revision of the collaborative study, "Lead in Beverage Alcohol, Graphite Furnace Atomic Absorption Spectrometric Method," following additional statistical analysis, which was carried out, and resubmit modified method. Continue study.

(9) *Neutron Activation Analysis*.—Methods based on neutron activation analysis are more specialized than most other methods due to the requirement, for typical applications, of a nuclear reactor as a source of neutrons. Subdivisions of this general technique include instrumental neutron activation analysis (INAA) and neutron activation analysis with radiochemical separation (RNAA) with thermal, epithermal, and prompt gamma versions of INAA, plus other variations. The excellent multielement performance of activation-based

methods and moderately wide use makes it desirable to get at least generic versions of neutron activation methods for foods into official status. Appoint new Study Director(s) to pursue both INAA and RNAA methodologies; integrate with current studies on atomic absorption, inductively coupled plasma-atomic emission, and inductively coupled plasma-mass spectrometry to end up with integrated, comprehensive, multielement analytical methods for foods and biological materials. Continue topic.

(10) *999.10 and 999.11 Metals in Foods by Atomic Absorption Spectrometry*.—Method Advisor, Lars Jorhem, National Food Administration, Box 622, S-751 26 Uppsala, Sweden, Tel: +46-18-17-55-00, Fax: 46 18 10 58 48, E-mail: lajo@slv.se. Continue monitoring any reports from users of Official Methods **999.10** and **999.11** until publication of new edition of *Official Methods of Analysis*.

(11) *Total Mercury in Food by Cold Vapor Atomic Absorption Spectrometry*.—This topic was added last year and Robert Dabeka was recommended as Topic Advisor. Continue topic.