

**METHODS COMMITTEE REPORTS****Methods Committee on Food Nutrition****DAVID C. WOOLLARD, CHAIR**

AgriQuality NZ Ltd, PO Box 41, 131 Boundary Rd,  
Auckland, New Zealand, Tel: +64-9-6255819 (H), Tel:  
+64-9-6272508 (O), Fax: +64-9-6279750, E-mail:  
woollardd@agriquality.co.nz or woollard@clear.net.nz

**DIRK SHOEMAKER, SECRETARY**

Nebraska Dept. of Agriculture, 3703 S. 14th, Lincoln, NE  
68502, Tel: +1-402-471-2176, Fax: +1-402-471-0091,  
E-mail: dirkds@agr.state.ne.us

**ROBERT G. ACKMAN**

Dalhousie University, Canadian Institute Fisheries  
Technology, PO Box 1000, 1360 Barrington St, Halifax,  
NS B3J-2X4, Canada, Tel: +1-902-469-5001 (H),  
+1-902-494-6030 (O), Fax: +1-902-420-0219, E-mail:  
robert.ackman@dal.ca

**EVELYN BONNIN**

U.S. Food and Drug Administration, 60 Eighth St, NE,  
Atlanta Center for Nutrient Analysis, Atlanta, GA 30309,  
Tel: +1-770-925-9738 (H), Tel: +1-404-253-1181 (O), Fax:  
+1-404-253-1209, E-mail: ebonnin@ora.fda.gov

**RONALD R. EITENMILLER**

University of Georgia, Food Science and Technology,  
Athens, GA 30602, Tel: +1-706-542-1091, Fax:  
+1-706-542-1050, E-mail: Eiten@arches.uga.edu

**MAGDI M. MOSSOBA**

U.S. Food and Drug Administration, Center for Food  
Safety and Applied Nutrition, Rm BE-012, 5100 Paint  
Branch Pkwy, College Park, MD 20740-3835, Tel:  
+1-301-436-1974, E-mail: MMossoba@cfsan.fda.gov

**JOHN ROACH**

U.S. Food and Drug Administration, HFS-717, 5100 Paint  
Branch Pkwy, College Park, MD 20740, Tel:  
+1-301-436-1993, Fax: +1-301-436-2624, E-mail:  
JRoach@cfsan.fda.gov

**KATHERINE E. SHARPLESS**

National Institute of Standards and Technology, MS 8392,  
100 Bureau Dr, Gaithersburg, MD 20899-8392, Tel:  
+1-301-975-3121, Fax: +1-301-977-0685, E-mail:  
katherine.sharpless@nist.gov

**RANDALL SMITH**

Covance Laboratories, PO Box 7545, 3301 Kinsman Blvd,  
Madison, WI 53707-7545, Tel: +1-608-241-4471, Fax:  
+1-608-241-7227, E-mail: randy.smith@covance.com

**WAYNE WOLF**

U.S. Department of Agriculture, Agricultural Research  
Service, Beltsville Human Nutrition Research Center, Food  
Composition Laboratory, Bldg 161, Beltsville, MD 20705,  
Tel: +1-301-504-8927, Fax: +1-301-504-8314, E-mail:  
wolf@bhnrc.usda.gov

**JOHN G. PHILLIPS, STATISTICAL ADVISOR**

U.S. Department of Agriculture, Agricultural Research  
Service, Eastern Regional Research Center, 600 E.  
Mermaid Ln, Wyndmoor, PA 19038-8551, Tel:  
+1-215-233-6614, Fax: +1-215-233-6434, E-mail:  
jphillips@arserrc.gov

**SARA M. WILLIAMS, SAFETY ADVISOR**

Office of the Texas State Chemist, PO Box 3160, College  
Station, TX 77841-3160, Tel: +1-409-845-4113, Fax:  
+1-409-845-1389, E-mail: sara-williams@tamu.edu

**Committee Actions**

The Committee has experienced a large number of changes with 7 new members and a new Safety Advisor. The term of office of Sungsoo Cho ended in September 2001 so David Woollard has become Chairman. Similarly, Committee Secretary Raffaele Bernetti has been replaced by Dirk Shoemaker. New members are Robert G. Ackman of the Canadian Institute of Fisheries Technology, Evelyn Bonnin of FDA-Atlanta Center for Nutrient Analysis, Ronald Eitenmiller of the University of Georgia Food Science and Technology, Katherine E. Sharpless of National Institutes of Standards and Technology, Dirk Shoemaker of Nebraska Dept. of Agriculture, Randall Smith of Covance Laboratories, and Wayne Wolf of the USDA-ARS Beltsville Human Nutrition Research Center. Sara Williams from the Office of the Texas State Chemist is the new Safety Advisor.

During 2001–2002, 4 new General Referees have joined Committee E. They are Christopher Blake of Nestles Switzerland (Fat-Soluble Vitamins) who is replacing Rick Austin of FDA; Mary Ann Godshall from the Sugar Processing Research Institute (Sugars and Sugar Products) who is replacing Raffaele Bernetti; Erik Konings of Netherlands (Water-Soluble Vitamins) is replacing David Woollard as Woollard cannot simultaneously be a General Referee and Committee member; and Edwin Phifer of FDA-Atlanta is replacing William Chase of FDA (Infant Formula). The recent resignation of Martin Peter Yurawecz of FDA as General Referee for Fats and Oils means a vacancy for this topic.

The Committee has approved First Action Method **2002.02** (E26) Measurement of Resistant Starch by Enzymatic Digestion in Starch Samples and Selected Plant Materials following a conference call on April 30, 2002. Also, Method **2002.05** (E27) Determination of Cholecalciferol (vitamin D<sub>3</sub>) in Se-

lected Foods by Liquid Chromatography: NMKL Method was approved during a conference call on August 16, 2002. The status of Method E22 (Ginsenosides) will be discussed at the Annual Meeting. Method E28 (Vitamin C in Foods, LC Method) will be repeated at a later date due to analyte instability. It will however, be published in *J. AOAC INT.* Method E29 (Vitamin B<sub>6</sub> in Infant Formula by Liquid Chromatographic Analysis) is in progress.

Two General Referees will be formally repealed at the September meeting because of their transfer to a new Committee that exclusively deals with these topics. They are Joseph Betz (Botanicals and Dietary Supplements) and Sungsoo Cho (Phytonutrients). Any future studies in the area of dietary supplements will be handled by other General Referees within Committee E. The Minerals General Referee position is being held vacant until a suitable candidate can be appointed.

Woollard as Chair of Committee E attended the CEN TC 275 WG99 (Vitamins) meeting at The Hague in Holland on May 2–3. Representing AOAC, he learned of the latest developments in vitamin testing in the European Community. This relationship is a continuing one in order to coordinate the efforts of European chemists and those associated with AOAC. The aim is to generate common standards of analysis and avoid duplication of research and validation efforts. Even though the European Community has always been involved in developing AOAC methods, this cooperation really is now occurring at an unprecedented level. This is already evident with 2 Committee methods (E27 Vitamin B<sub>6</sub> and E28 Vitamin D) being derived from European standards. Also, the new General Referees for water-soluble vitamins (Erik Konings) and fat-soluble vitamins (Christopher Blake) are both from Europe. It is interesting to note that recent European regulations list vitamin supplements as foods, therefore new methodology will become the responsibility of TC275 WG9.

Committee E wishes to acknowledge the outstanding work made by Raffaele Bernetti (Secretary) and Sungsoo Cho (Chair) throughout many years, not only to Committee E but also to AOAC in general. Other members whose terms have expired: Erik Konings (now General Referee), Betty Wang Li, and Charles Becoat as Safety Advisor. Many thanks for all of their contributions also.

#### **Dietary Fiber, Leon Prosky**

(1) **2000.11 Polydextrose in Foods, Ion Chromatography Method:** Study Director Stuart Craig, Danisco Cultor, 440 Saw Mill River Rd, Ardsley, NY 10502, Tel: +1-914-674-6574, Fax: +1-914-674-6575, E-mail: stuart.craig@danisco.com. Approve this method Final Action.

(2) **2001.02 Trans-galactooligosaccharides in Food and Food Products, Ion-Exchange Chromatographic Method:** Study Director Jaap de Slegte, Borculo Domo Ingredients, Needseweg 23, 7271 AB Borculo, The Netherlands, Tel: +31-545-256789, Fax: +31-545-256625, E-mail: j.deslegte@bdi.nl. Continue study and method will be presented for Final Action next year.

(3) **2001.03 Combination of AOAC Method for Total Dietary Fiber with Enzymatic-LC Determination of Indigestible**

**Maltodextrin in Foods:** Study Directors Kazuhiro Ohkuma, Masutani Chemical Industry Co. Ltd., 5-3 Kita-Itami, Itami City, Hyogo, Japan 664-8508, Tel: +81-727-71-2010, Fax: +81-727-72-0766, E-mail: XLM10052@nifty.ne.jp, and Dennis T. Gordon, North Dakota State University, PO Box 5728, Harris Hall, Fargo, ND 58105-5728, Tel: +1-701-231-7712, Fax: +1-701-231-7723, E-mail: dgordon@plains.nodak.edu. Continue study and method will be presented for Final Action next year.

(4) **2002.02 Measurement of Resistant Starch in Starch Samples and Plant Materials:** Study Director Barry V. McCleary, Megazyme International Ireland Ltd., Bray Business Park, Bray, Co. Wicklow, Ireland, Tel: +353-1-286-1220, Fax: 353-1-286-1264, E-mail: info@megazyme.com. Method approved First Action in May. Continue study.

#### **Fats and Oils, Vacant**

##### **Fat-Soluble Vitamins, Christopher Blake**

(1) **Vitamins A and E in Foods by LC, 2001.13 (E18):** Collaborative study for vitamin E to be re-run using an international collaborative study protocol. Study Directors Jonathan W. de Vries and Karlene Silvera.

(2) **Carotene in Foods:** Study Director Lynn Hagemann. Continue with preparation of study report. To submit report to Food Nutrition Committee at earliest opportunity.

(3) **Determination of Cholecalciferol in Selected Foodstuff by LC (E-27):** Study Director Anders Staffas, NMKL. The revised E27 study (NMKL procedure) for cholecalciferol should be recommended for acceptance as a joint NMKL/AOAC method at First Action approval level.

(4) **Determination of vitamin K<sub>1</sub> in Foods Using C30 Reversed-Phase LC, Separation of cis- and trans-Phylloquinone:** New topic. Study Director, Vacant.

(5) **Determination of Vitamins K<sub>3</sub> in Human and Petfoods Using Reversed-Phase LC:** New topic. Study Director, Vacant.

##### **Infant Formula and Medical Diets, Edwin Phifer**

(1) **Taurine in Powdered Milk and Powdered Infant Formula:** Method **997.05** to be progressed to Final Action.

(2) **Choline in Infant Formula and Milk Enzymatic Colorimetric Method:** Method **999.14** to be progressed to Final Action.

(3) **Vitamin K in Milk and Infant Formulas, Liquid Chromatographic Method:** Method **999.15** to be progressed to Final Action.

All 3 of the above methods are commonly used in many infant formula laboratories and contract laboratories.

(4) **Zero Control Reference Material:** Discontinue topic.

(5) **Total Folate, Tri-Enzyme Methods:** Discontinue topic.

(6) **Vitamin B<sub>6</sub>:** Study Director Dudley Mann. Submit report to Food Nutrition Committee at earliest opportunity.

**Minerals, Vacant****Non-Vitamin Micronutrients, Harvey Indyk**

(1) *Determination of Isoflavones in Soy and Foods Containing Soy by Extraction, Saponification and LC*: Study Directors Stephen P. Klump and John L. MacDonald. First Action approved by the Official Methods Board.

(2) *Nucleotides in Infant Formulas and Milk*: Study Director Bruce Molitor. Study Director now appointed. Prepare the method protocol for AOAC approval at the earliest opportunity.

(3) *Nucleotides in Infant Formulas*: Study Director Christine Rose Sallin, Nestle, Lausanne, Switzerland, to be appointed.

(4) *Antioxidant Activity in Foods*: Study Director to be appointed.

(5) *Determination of IgG Levels in Milk and Colostrum*: Study Directors Donald Otter and Colin Hughes to be appointed. Prepare the method protocol for AOAC approval at the earliest opportunity.

**Sugars and Sugar Products, Mary An Godshall**

(1) *Sugar Alcohols*: To be transferred to the General Referee, Food Additives.

(2) *Sugars in Cane and Beet Final Molasses, Ion Chromatographic Method*: Method **996.04** be progressed to Final Action. In a recent survey conducted by Schaffler on the use of this method, it was noted that it is in routine use in several sugar industry laboratories.

(3) *Determination of Trace Glucose and Fructose in Raw Cane Sugar, High-Performance Anion-Exchange Chromatography*: Method **2000.17** be progressed to Final Action. In a survey recently conducted by Schaffler on the use of this method, it was noted that the method is in routine use in several sugar industry laboratories.

(4) *Color of Raw Cane Sugars*: Repeal Method **954.10**. The method is no longer scientifically valid, based on modern

methods of color measurement of raw cane sugar. This method, which does not adjust pH, reads at 560 nm, and uses filter aid filtration, is based on obsolete methods used before the days of standardized sugar solution color measurement.

(5) Pursue alternative, modern methods of raw sugar solution color measurement in cooperation with ICUMSA. Appoint a Study Director for this topic.

(6) Appoint a Study Director to review AOAC polarimetric methods that use lead clarification, and make efforts to update to methods that do not use lead salts as clarifying agents.

(7) Conduct a collaborative study on the new spectrofluorimetric method for the determination of formaldehyde in maple syrup.

(8) The SNIF-NMR method for beet or cane sugar in maple syrup (AOAC Method **2000.19**), which was adopted First Action in 2000, be progressed to Final Action.

**Water-Soluble Vitamins, Erik Konings**

(1) *Vitamin C in Foods, LC Method*: Study Director Allan Brause. Repeat collaborative study in fruit juices. Prepare the method protocol for AOAC approval at the earliest opportunity.

(2) *Determination of Niacin in Foods by Capillary Electrophoresis and Liquid Chromatography Acid and Alkaline Extraction*: Study Director Norbert Strobel. Discontinue study.

(3) *Determination of Calcium Pantothenate in Vitamin Premixes and Tablets Using LC*: Study Director Gerald Woollard. Prepare the revised method protocol for AOAC approval at the earliest opportunity.

(4) *Determination of Folic Acid and 5-Methyltetrahydrofolic Acid in Foods by LC*: Appoint Erik J.M. Konings as Study Director. Prepare the method protocol for AOAC approval at the earliest opportunity.