

## METHODS COMMITTEE REPORTS

## Committee on Commodity Foods and Commodity Products

### GEORGE W. LATIMER, JR, CHAIR

Texas State Chemist, Emeritus, PO Box 2642, Bryan, TX 77805

### PRABHAKAR KASTURI, SECRETARY

The Quaker Oats Co., John Stuart Research Labs, 617 W. Main St, Barrington, IL 60010

### P. CHRISTOPHER ELLIS

Rhode Island Department of Health Laboratories, 50 Orms St, Providence, RI 02904

### JOSEPH HILLEBRANDT

Cornell University, NEAS/Diagnostic Laboratory, 777 Warren Rd, Ithaca, NY 14850

### I-PIN HO

National Food Processors Association, 1350 First St, NW, Suite 300, Washington, DC 20005

### DANA A. KRUEGER

Krueger Food Laboratories Inc., 711 Concord Ave, Cambridge, MA 02138-1002

### JOANNA M. LYNCH, PAST-CHAIR

Cornell University, Food Science Department, 207 Stocking Hall, Ithaca, NY 14853

### JOHN M. TENNYSON

National Seafood Inspection Laboratory, PO Drawer 1207, Pascagoula, MS 39568-1207

### KENDRA C. PFEIFER

Hershey Foods Corp., 1025 Reese Ave, Hershey, PA 17033

### JULIE HENDERSON, SAFETY ADVISOR

U.S. Food and Drug Administration, Office of Regulatory Affairs, 1521 W. Pico Blvd, Los Angeles, CA 90015

### STATISTICAL ADVISOR, VACANT

### Committee Actions

#### Approved:

(1) **996.11 Starch in Cereal:** Ask Study Director to serve as Method Advisor. Discontinue topic.

(2) **997.06 Protein in Wheat NIR:** Ask Study Director to serve as Method Advisor. Discontinue topic.

(3) **999.01 Volatile Bases in Fish:** Ask Study Director to serve as Method Advisor. Discontinue topic.

(4) **995.16 beta-D-Glucan in Barley and Oats:** Ask Study Director to serve as Method Advisor. Discontinue topic.

(5) **2002.01 Measurement of alpha-Amylase Activity:** Ask Study Director to serve as Method Advisor. Discontinue topic.

(6) **2002.06 trans-Retinyol Palmitate:** Ask Study Director to serve as Method Advisor. Discontinue topic.

#### Approved First Action:

(1) **2004.01 Detection of  $^{13}C/^{12}C$  Ratio of Ethanol Derived from Fruit Juices and Maple Syrup by IRMS:** Continue study.

(2) **2004.05 Total Folate in Cereal Products, Microbiological Assay Using Trienzyme Extraction:** Continue study.

(3) **2005.02 Determination of Total Monomeric Anthocyanin Pigment Content by the pH Differential Method for Fruit Juices, Beverages, and Natural Colorants:** Continue study.

#### Studies in progress:

(1) **Histamine Determination by Flow Injection Analysis:** Study Director plans to begin with a Single-Laboratory Validation, then Peer Level validation, and finally a collaborative study. The existing method overestimates histamine at low levels. This year's work will concentrate on a rapid SPE-based sample cleanup for those samples testing positive near the 50 mg/kg action level. Continue study.

(2) **Shell in Cocoa Product:** No work has been reported on this study. Because it lacks funding, no work is contemplated. Discontinue study.

(3) **Hydrolyzed Inulin Syrup and High Fructose Corn Syrup Solids in Apple Juice by GC:** Original study was flawed: All test samples were prepared from a single apple juice. The Study Director is preparing a revised protocol. Continue study.

(4) **Determination of Hypoglycine-A in Canned Ackee Fruit by LC:** The Study Director would like to conduct a peer-review study of the method. Continue study.

(5) **Detection of Components Associated with Pulp Wash in Orange Juice:** Data for both methods studied, (1) capillary zone electrophoresis with UV detection and (2) HPLC, were unsatisfactory. No clear reason has as yet been identified. Continue study.

(6) **Capillary Electrophoresis of Organic Acids in Juices:** The data from the original study were unsatisfactory. The original Study Director does not wish to continue, but the General Referee has found another Study Director for the project. Continue study.

(7) **Lactose in Milk:** A collaborative study of a nonproprietary method for the enzymatic determination of the anhydrous lactose content of milk involving 12 laboratories that analyzed 8 milk materials in blind replicate showed excellent repeatability and reproducibility method performance statistics with HorRat values consistently below

0.30. A report is being prepared for submission to the AOAC Official Methods program. Continue study.

(8) **972.16** *Infrared Spectroscopic Methods for Determination of the Fat, Protein, Lactose, Total Solids Content of Milk*: The performance of different calibration approaches for use in AOAC Method **972.16** has never been studied collaboratively within the framework of the harmonized AOAC/IDF/ISO protocol for interlaboratory studies. The Study Directors will submit a collaborative study protocol to provide a basis for revision of this method. The Study Directors have written a manuscript and revised the precalibration quality assurance portions of Method **972.16** as part of a method revision and submission of a collaborative study protocol. They also plan to conduct a collaborative study of different calibration methods for mid-infrared milk analyzers with the objective of characterizing the within- and between-laboratory performance of different calibration approaches. Method **972.16** needs major revisions and should remain as a First Action method and remain as an active topic. Continue study.

(9) *PVM 1:2003 The Rapid Determination of Fat and Moisture in Meats by Microwave in Meats and NMR Analysis*: Assigned a Peer-Verified<sup>SM</sup> Method in 2003. No additional work has been reported. CEM has submitted a manuscript to OMA in July 2005. A full collaborative study is contemplated. Continue study.

New study:

Foss Instruments North America is prepared to write the AOAC collaborative study protocol around the FoodScan /ANN calibration model. The method and instrument is designed for plants preparing fresh-ground and emulsified beef, pork, chicken, and turkey. Topic approved for study.

Studies repealed/rejected:

(1) **998.04** *Neutral beta-Galactosidase Activity in Industrial Enzyme Preparations*.

(2) **992.22** *Iodine (as Iodide)*: Last year, the Committee recommended Final Action. The OMB suggested the study be discontinued because of an unfavorable report by one user only. The Committee is uncomfortable with this action and wishes time to research the matter more fully. Keep First Action and continue study.

(3) **996.15** *Fish Flesh Content in Frozen Fishery Products by the End-Scrape Method*: The Committee is concerned about the request by the SD that recovery factors be added to the method for the following reasons: (1) The fact that AOAC policy is not to accept factors and (2) the actual stability of the proposed correction factors is in question. Continue study. The Committee has asked the Study Director to provide an estimate of both interlaboratory and intralaboratory variability, publish these data as a technical note, and provide a description of the procedure used. The Committee has agreed to provide a decision immediately after these tasks are done.