

METHODS COMMITTEE REPORTS

Committee on Food Nutrition

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Committee Actions

The Food Nutrition Committee General Referee (GR)
categories were reorganized, with the approval of the Official

Methods Board (OMB), along the lines shown below. Matrix categories (e.g., fats and oils, infant formula) were absorbed into analyte categories. No methods were submitted to the OMB for Final Action this year. The Food Nutrition Committee experienced a significant reduction in methods over the past years, presumably due to changes in the structural and financial models within AOAC INTERNATIONAL. Five methods are currently at various stages of study and review as described below. One *Official Method* is recommended for withdrawal. There have been preliminary discussions with the U.S. Food and Drug Administration (FDA) regarding the formation of a water-soluble vitamin community; we will begin taking a more proactive role in identification of appropriate methods for measurement of water-soluble vitamins.

Dietary Fiber, Barry V. McCleary

The method "Determination of Methylcellulose and Hydroxypropyl Methylcellulose Food Gums as Soluble Dietary Fiber in Food and Food Products," OMA-2006-Jul-054, has been subjected to interlaboratory evaluation and is now up for review by the full Committee. This study was funded by Dow. Study Director Robert Harfmann, The Dow Chemical Co., Analytical Sciences, Bldg 1897, Midland, MI 48667, E-mail: RGHarfmann@dow.com. Continue study.

Barry McCleary has distributed a method for dietary fiber that he would like to process through the Committee as an unfunded method. The Committee is willing to consider this.

Fat and Fatty Acids, Edwin C. Phifer

There has been no activity since the last report.

Elements, Lars Jorhem

There has been no activity since the last report.

*Protein and Amino Acids, Vacant**Sugars, Mary An Godshall*

There has been no activity since the last report.

Fat-Soluble Vitamins, Christopher J. Blake

The analysis of the fat-soluble vitamins (FSVs) A, E, D, and K₁ are covered by the AOAC *Official Methods* in Chapters 45 (vitamins and other nutrients) and 50 (infant formula, baby foods, and enteral products). Some of the older procedures for FSVs are not well validated, and not really suitable for checking the new stricter regulatory compliance regulations around the world. The set of methods available for FSVs needs a thorough review, and where several procedures exist for the same analysis, it is suggested that only the best-in-class methods should be retained, and poorly validated

procedures should be withdrawn. As a first step, the GR recommended withdrawal of:

Vitamin D.—Method **981.17** Vitamin D in Milk and Milk Powder (Final Action 1982).

Vitamin K1.—Method **992.27** *Trans*-Vitamin K in Ready-to-Feed Milk-Based Infant Formula (Final Action 1995).

Full justification for withdrawing these 2 methods is detailed in the complete GR report. In summary, no validation data are available for the vitamin D method. A newer method for vitamin K (**999.15** Vitamin K in Milk and Infant Formula) has greater specificity than **992.27**, however **999.15** does separate *cis* and *trans* isomers of vitamin K.

The Committee voted to withdraw Method **981.17** for vitamin D but to defer withdrawal of Method **992.27** for vitamin K until a method modification can be issued for Method **999.15**, allowing for the use of a C₃₀ column to separate *cis* and *trans* isomers.

Water-Soluble Vitamins, Erik J.M. Konings

The collaborative study report for OMA-2006-May 048, “A Biosensor-Based Method for the Determination of Vitamin B12 Concentration in Food Products,” was provisionally accepted (with major revision) by the GR and Committee chair. Study Director Pathik Vyas, 131 Boundary Rd, POB 41, Blockhouse Bay, Auckland, New Zealand, Tel: 649-626-8216, Fax: 649-626-8282, E-mail: vvasp@agriquality.co.nz. Continue study.

The collaborative study report for OMA-2006-May 049, “Determination of Folic Acid in Fortified Food Using an Optical Biosensor,” was rejected by the GR and Committee chair. Study Director Vyas. Continue study.

Continue extension of AOAC Official Method for the liquid chromatographic analysis of vitamin B6 in infant formula to the determination of vitamin B6 in baby food, biscuit, cereals, yeast, tube-feeding solution, chocolate powder, and powdered milk.

Nonvitamin Micronutrients, Harvey E. Indyk

Determination of IgG in Colostrum Products, Affinity LC Method, OMA-2006-Apr-043.—Study Director Donald Otter, Fonterra Research Centre, Palmerston North, New Zealand, E-mail: don.otter@fonterra.com. Collaborators have been identified. The submitted protocol was rejected by Joanna Lynch, who is acting as GR on this method because of Harvey Indyk’s conflict of interest, and the Committee chair. This is a new method study and is funded by Fonterra, New Zealand. Continue study.

Determination of IgG in Colostrum Products, Biosensor Method, OMA-2006-Apr-044.—Study Director Leyton Gapper, Fonterra Research Centre, Palmerston North, New Zealand, E-mail: leyton.gapper@fonterra.com. Collaborators have been identified and the submitted protocol is currently under review by Joanna Lynch, acting as GR (*see above study*). This is a new method study and is funded by Fonterra, New Zealand. Continue study.