

METHODS COMMITTEE REPORTS

Methods Committee on Dietary Supplements

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Committee Actions

Rick Myers has assumed the position of chair replacing co-chairs Mark Roman and Richard Ko. Welcome Rick. Randy Smith from Covance has agreed to assume the position of secretary.

Working Groups

There are several industry working groups in the dietary supplement community that have interacted with Committee K that will be submitting methods for validation in the near future. These working groups include Omega-3, phenolics, CoQ10, and SAME.

Methods

Botanicals and Dietary Supplements: General Referee Paula Brown, British Columbia Institute of Technology, 3700 Willingdon Ave, Burnaby, British Columbia, Canada V3G 3H2

2003.10 *Ephedrine Alkaloids in Human Urine and Plasma by Liquid Chromatography/Tandem Mass Spectrometry*: Study Director Bill Trujillo, Covance Laboratories, 3301 Kinsman Blvd, Madison, WI 53704. (Note: Trujillo has retired. Contact Darryl Sullivan with questions at darryl.sullivan@covance.com.) Method adopted First Action in 2003. No comments have been received. Recommend Final Action.

2003.13 *Ephedrine and Pseudoephedrine in Botanicals and Dietary Supplements by HPLC-UV*: Study Director Mark Roman, Tampa Bay Analytical Research, Safety Harbor, FL, Tel: 727-422-8028, E-mail: mroman@tampabayanalytical.com. Method adopted First Action in 2003. No comments have been received. Recommend Final Action.

2005.01 *Glucosamine in Raw Materials and Dietary Supplements Containing Glucosamine Sulfate and/or Glucosamine Hydrochloride*: Study Director Joseph Zhou, NOW Foods Inc., 395 Glen Ellyn Rd, Bloomingdale, IL 60108, Tel: 630-545-9098 ext. 360, E-mail: jzhou@nowfoods.com. Single-laboratory validation was performed on an HPLC method for determining glucosamine content in dietary supplements and raw material after FMOC-Su derivatization. Results indicated the method to be selective and specific, with great reproducibility. A collaborative study of the method was performed from May 17, 2004 to June 10, 2004, the method revised and then approved as an AOAC Official Method First Action in April 2005. The collaborative study report was scheduled for publication in *J. AOAC Int.* in July/August 2005. Zhou, J., Waszkue, T., & Mohammed, F. (2004) *J. AOAC Int.* **87**, 1083–1092. Continue study.

2005.07 *Determination of β -Carotene in Supplements and Raw Materials by Reversed-Phase HPLC*: Study Directors Jonathon DeVries and John Szpylka, General Mills, Inc.,

9000 Plymouth Ave, Minneapolis, MN 55427-3870, Tel: 763-764-2274, E-mail: jon.devries@genmills.com, John Szpylka, Tel: 763-764-3078, E-mail: john.szpylka@genmills.com. Intercolaborative study completed. The method was accepted for Official First Action with the exception of the beadlets matrix. Additional investigation is ongoing with the beadlets. Continue study.

Ginkgo flavonol glycosides: Study Director Dean Gray, Midwest Research Institute, 425 Volker Blvd, Kansas City, MO 64110-2299, Tel: 816-753-7600, E-mail: dgray@mrresearch.org. The method was recommended and approved for Official First Action, and the collaborative manuscript was published in *J. AOAC Int.* (2007) **90**, 43–53, Method **2006.07**.

Phytosterols in Saw Palmetto: Study Director Wendy Sorenson, Covance Laboratories, 3301 Kinsman Blvd, Madison, WI 53704, Tel: 608-310-8206, E-mail: wendy.sorenson@covance.com. Determination of Campesterol, Stigmasterol, and Beta-Sitosterol in Saw Palmetto Raw Materials and Dietary Supplements by Gas Chromatography: The collaborative study has been conducted and the manuscript has been finalized and submitted to the AOAC. Method **2007.03**.

Aristolochic Acid: Study Coordinator Wendy Sorenson. The collaborative study has been completed and the manuscript submitted to the AOAC. Continue study. Method **2007.05**.

Terpene Lactones in Ginkgo: Study Coordinator Dean Gray, Edward Croom, Roberto Pace, Adrea Paletti, and Nicola Sardone completed the single-laboratory validation, and the manuscript was published in *J. AOAC Int.* (2007) **90**, 647–658.

St. John's Wort: Study Coordinator Steve Baugh, Industrial Labs, 4046 Youngfield St, Wheat Ridge, CO 80033, Tel: 303-287-9691. Method selected by Expert Review Panel (ERP) is currently undergoing SLV. Several problems with the method related to analyte stability have been encountered. Many of these problems have been resolved. Continue study.

Chondroitin sulfate: Study Coordinator Mark Roman, Tampa Bay Analytical Research, Safety Harbor, FL, Tel: 727-422-8028, E-mail: mroman@tampabayanalytical.com. The method has been selected and is currently undergoing SLV. The SLV is completed and collaborative study protocol approved. Continue study.

Coenzyme Q10: Study Coordinator Jules Skamarack, Eurofins Scientific, Inc., 1365 Redwood Way, Petaluma CA

94954, Tel: 800-922-5742, E-mail: juleskamarack@eurofinsUS.com. The SLV is completed and collaborative study protocol approved. Continue study.

Lutein: Study Coordinator Ed Waysek, Caravan Products/AOAC, Totowa, New Jersey, Tel: 973-256-8886 ext. 585, E-mail: waysek@aoac.org. The method has been selected by the ERP. Kemin Laboratories has agreed to conduct the SLV. Expect completion and report submitted by end of December. Continue study.

Lycopene: Study Coordinator Ed Waysek. The SLV has been completed. Joseph Schierle (DSM) has agreed to serve as Study Coordinator and is lining up collaborative laboratories. Expect report by the end of December. Continue study.

MSM: Study Coordinator Ed David Lakey, Cardinal Nutrition, Vancouver, WA, Tel: 360-693-1883, E-mail: dlakey@cardinalnutrition.com. The method has been selected by the ERP. DMSO has been identified as an impurity in raw materials. Joseph Zhou (NOW Foods) has agreed to serve as Study Coordinator. SLVs for MSM and DMSO should begin in early October. Continue study.

Vitamin E: Study Coordinator John Austad, Covance Laboratories, 3301 Kinsman Blvd, Madison, WI 53704, Tel: 608-310-8201, E-mail: john.austad@covance.com. The method has been selected and is currently undergoing SLV. Continue study.

Echinacea: ERP selected a method. Paula Brown has agreed to complete SLV on raw materials (3 species). Need to identify a Study Coordinator. Continue study.

Ginseng: ERP selected a U.S. Pharmacopoeia (Rockville, MD) method. Paula Brown has agreed to complete SLV on raw materials. Some difficulty in finding finished products and a Study Coordinator. Paula lined up 10 potential collaborative laboratories. Continue study.

SAME: ERP selected a method. There is a stability issue with reference standard. Work has begun on using surrogate reference material. The SLV has been completed. Continue study.

Omega-3 fatty acids: ERP has suggested using the food method. Erik Hagestuen, Cargill Health and Food Technologies, 2500 Shadywood Rd, Excelsior, MN 55331, Tel: 952-742-3065, Erik_Hagestuen@cargill.com is working on method modifications. Sandy Diltz from Martec will conduct an SLV on the CRN method. Continue study.

Isoflavones: ERP selected a method and SLV should be completed by end of October. Mark Collison (Archer Daniels Midland) has lined up 12 laboratories for collaborative study. Continue study.