



AOAC INTERNATIONAL

Stakeholder Panel for Infant Formula and Adult Nutritionals (SPIFAN)

Meeting at Hilton Washington DC North/Gaithersburg

EXPERT REVIEW PANEL (CONTAMINANTS)

REPORT OF THE EXPERT REVIEW PANEL (ERP) PROCEEDINGS

SPIFAN Chair – Darryl Sullivan

(Tuesday, March 17, 2015)

EXPERT REVIEW PANEL MEMBERS

Martin Alewijn, *RIKILT*

John Austad, *Covance Labs*

Joe Boison, *CFIA*

Scott Christiansen, *Perrigo/PBM Nutritionals*

Jo Marie Cook, *FL. Dept. of Agriculture*

Jon DeVries, *Medallion Labs/General Mills*

Harvey Indyk, *Fonterra Cooperative*

George Joseph, *AsureQuality*

Erik Konings, *Nestlé/ISO*

Alex Krynitsky, *FDA-CFSAN*

Tom Phillips, *MD. Dept. of Agriculture*

Bert Popping, *Mérieux NutriSciences*

Murali Reddy, *Abbott Nutrition*

Darryl Sullivan, *Covance Labs*

Jon Wong, *FDA-CFSAN*

MEETING PARTICIPANTS (part or all of the meeting)

Sean Austin, *Nestlé*
Brad Barrett, *Sciex*
Anne Bienvenue, *U.S. Dairy Export Council*
Chris Blake, *Nestlé Research Center*
Esther Campos-Gimenez, *Nestlé*
Erin Crowley, *Q Labs, Inc.*
Hans Cruijisen, *FrieslandCampina*
Marcel de Vreeze, *NEN/ISO*
Clay Detlefsen, *National Milk Producers Federation*
Jaap Evers, *Fonterra Cooperative/IDF*
Jennifer Fruth, *Mead Johnson Nutrition*
Christophe Fuerer, *Nestlé Research Center*
Jim Harnly, *USDA*
Steve Holroyd, *Fonterra Cooperative*
Greg Hostetler, *Perrigo/PBM Nutritionals*
Harvey Indyk, *Fonterra Cooperative*
Wes Jacobs, *Abbott Nutrition*
Greg Jaudzems, *Nestlé USA, Inc.*
Ron Johnson, *Merieux NutriSciences*
Estela Kneeteman, *INTI*
Markus Lipp, *USP*
Frederic Martin, *Nestlé Research Center*
Adrienne McMahon, *Nestlé Research Center*
Josh Messerly, *Eurofins*
Paul Milne, *Keurig Green Mountain Inc.*
Bill Mindak, *FDA-CFSAN*
Deepali Mohindra, *Thermo Fisher Scientific*
Shu Na, *Abbott Nutrition*

Matt Noestheder, *Sciex*
Mike Nygaard, *U.S. Dairy Export Council*
Lawrence Pacquette, *Abbott Nutrition*
Shay Phillips, *Mead Johnson*
Günther Raffler, *CLF-Eurofins*
Robert Ragan, *Abbott Nutrition*
Robert Rankin, *INCA*
Rick Reba, *Nestlé USA, Inc.*
Lars Reimann, *Eurofins*
Shauna Roman, *Reckitt Benckiser (RB)*
Joe Romano, *Waters Corp.*
Steve Royce, *Agilent Technologies, Inc.*
Louis Salvati, *Abbott Nutrition*
Dan Schmitz, *Abbott Nutrition*
Olga Shimelis, *SUPELCO/Sigma-Aldrich*
Brian Shira, *Mead Johnson*
David Stone, *University of Oregon*
Darryl Sullivan, *Covance*
Fabrízis Suarez, *Abbott Nutrition*
John Szpylka, *Silliker/Merieux NutriSciences*
Joe Thompson, *Abbott Nutrition*
Marina Torres-Rodriguez, *LATU*
Wil Van Loon, *FrieslandCampina*
Wayne Wargo, *Nestlé*
David Woollard, *Hill Labs, Ltd.*
Jinchuan Yang, *Waters Corp.*
Jupiter Yeung, *Nestlé Nutrition*
Joyce Zhu, *Jamieson Labs*

AOAC STAFF

Delia Boyd
E. James Bradford, *Executive Director*
Scott Coates, *CSO*
Arlene Fox
Deborah McKenzie
Nora Marshall
Alicia Meiklejohn
Tien Milor
La'Kia Phillips
Gar Riegler
Bob Rathbone

I. WELCOME AND INTRODUCTIONS

Darryl Sullivan welcomed all participants to the ERP meeting and introduced the ERP members.

II. EXPERT REVIEW PANEL (ERP) ORIENTATION

Deborah McKenzie provided the ERP members with an overview of the process including policies, procedures and logistics.

III. REVIEW OF METHODS BY EXPERT REVIEW PANEL (ERP) FOR FIRST ACTION *OFFICIAL METHOD*SM STATUS

For each method, the ERP/Working Group Chair discussed methods submitted. The ERP also provided comments to the methods authors that were recommended for First Action.

- **Compound 1080 – Chair:** Joe Boison (CFIA)

Method Title	Reviewer(s)	Vote	Comments
*MFA-01 - Determination of sodium monofluoroacetate (1080) in dairy powders by Gas Chromatography Tandem Mass Spectrography (GC-MS/MS)	Jo Marie Cook Alex Krynitsky	Method not recommended for First Action	<ul style="list-style-type: none"> ✧ Calibration curve ✧ Method meets criteria in SMPR ✧ Confirmatory method ✧ Sample chromatograms needed ✧ Covered different types of matrices ✧ Two (2) internal standards used ✧ Uses two (2) types of extractions
MFA-02 - Determination of sodium monofluoroacetate in dairy powders by Liquid Chromatography Tandem Mass Spectrography (LC-MS/MS)	Scott Christiansen Bert Popping	Jon DeVries moved Jo Marie Cook second *Motion: recommend for First Action Yes- 11/ No-3 /Abstain 0 *Second vote: Yes- 13/ No-0 /Abstain-1	<ul style="list-style-type: none"> ✧ 5 pt. calibration curve ✧ Need to see chromatograms ✧ Consider use of one internal standard <ol style="list-style-type: none"> Suitability 10.2.28 needs to be rephrased for clarification ✧ Need completed validation information to demonstrate compliance with SMPR
MFA-03 - Sodium Fluoroacetate By LC-MS/MS	Alex Krynitsky John Austad	Jon DeVries moved Jon Wong second *Motion: recommend for First Action Yes- 13/ No-0 /Abstain-1	<ul style="list-style-type: none"> ✧ Ruggedness data ✧ Column performance over extended use ✧ Need completed validation information to demonstrate compliance with SMPR
MFA-04 - Rapid quantitative and qualitative confirmatory method for the determination of monofluoroacetic acid in foods by liquid chromatography mass spectrometry	Tom Phillips George Joseph	Method not recommended for First Action	<ul style="list-style-type: none"> ✧ Does not meet LOD requirements ✧ No supporting data ✧ Optimized extraction conditions ✧ No system suitability ✧ Calibration range does not meet SMPR
MFA-05 - Quantitation of Fluoroacetic Acid and Fluoroacetamide with Mass Spectrometric Detection	Murali Reddy Erik Konings	Method not recommended for First Action	<ul style="list-style-type: none"> ✧ Matrix is drinking water; not shown for infant formula ✧ Does not have sufficient data
MFA-06 - Method Validation: Determination of Monofluoroacetate in Milk Products by LC-MS/MS	Jon Wong Jo Marie Cook	Method not recommended for First Action	<ul style="list-style-type: none"> ✧ Uses a 3 point calibration curve (1, 2, 5 pp) ✧ Requires overnight derivatation ✧ Procedure has met the performance criteria
*MFA-07 - Determination of Sodium Monofluoroacetate in Dairy Powder by Gas Chromatography Tandem Mass Spectrometry (GC-MS/MS)	Jo Marie Cook Alex Krynitsky	Method not recommended for First Action	Comments are the same as MFA-01

*MFA-01 & 07 are the same method submitted by 2 different method authors

<p>MFA-08 - Determination of Monofluoroacetate by LC-MS/MS</p>	<p>Tom Phillips Martin Alewijn</p>	<p>Tom Phillips moved Martin Alewijn second</p> <p>*Motion: recommend for First Action Yes- 10/ No-3 /Abstain 1 _____</p> <p>*Second vote: Yes- 7/ No-5 /Abstain-2 (did not pass)</p>	<ul style="list-style-type: none"> ✧ Non-derivitized method ✧ Samples were separated in UPLC ✧ No clean-up step ✧ Extremely clear & easy to run ✧ Confirmatory method; good recovery ✧ Doesn't meet SMPR ✧ Low manual for high throughput
<p>MFA-09 - Determination of monofluoroacetate in powdered nutritional products by derivatization with 2-nitrophenylhydrazide and LC-MS/MS</p>	<p>Jon DeVries Jon Wong</p>	<p>Tom Phillips moved Scott Christiansen second</p> <p>*Motion: recommend for First Action Yes- 11/ No-2 /Abstain-2 _____</p> <p>*Second vote: Yes- 11/ No-2 /Abstain-2</p>	<ul style="list-style-type: none"> ✧ Over spiked ✧ Confirmatory method ✧ Can detect at lower levels ✧ 2nd transition ion required ✧ Need completed validation information to demonstrate compliance with SMPR

*MFA-01 & 07 are the same method submitted by 2 different method authors