

Report to Community on the Panel on Strategic Food Analytical Methods (SPSFAM) Stake Holders Meeting held on September 18, 2016

Chair: Erik Konings, Nestlé,

I. Welcome and Introductions

- The March 24, 2016 Mid Year Meeting Minutes were approved
- Erik Konings shared Working Group Initiative Success Stories
 - Select Food Allergen Methods
 - Ethanol in Kombucha Tea Methods

II. ERP Updates

Erik Konings, Nestlé, SPSFAM Chair

- Shared highlights and accomplishments of SPSFAM
- Updates on OMA first action methods:
 - Heavy Metals in Foods Collaborative study samples will start shipping November to participating laboratories. There are five food products represented.
 - Arsenic Species in Fruit Juice by LC-ICP-MS, Would like to extend to other matrices such as Rice and rice products but could not find a suitable method. Needs support to move forward.
- Mid Year Meeting:
 - Draft of SMPR for the Determination of Ethanol in Kombucha was approved
 - Draft of SMPR for the Detection and Quantitation of Food Allergens by Mass Spec based Methods was approved
- ERPs
 - Ethanol in Kombucha had five methods submitted and will meet on September 18, 2016
 - Detection and Quantitation of Food Allergens will meet on September 19, 2016

III. Working Group Launch Presentation: Cannabis Potency

SPSFAM Working Group on Cannabis Potency - Chair: Susan Audino, Audino and Associates LLC

- Medicinal use is legal in 24 states, D.C. and more on the way.
- It is still a Schedule I Drug = “No medicinal value” Federal Prohibition
- Some states are requiring analytical testing
- Most challenging matrices are the edibles and the Hottest Topic currently is pesticides
- Cannabis is a complex matrix and there is no consensus methods
- Sample size is also a concern due to the value of the commodity (5 or less grams provided)
- Analytical needs are Potency (cannabinoids), Pesticide Residues, Matrices (edibles, raw, extracts)
- Need to use technology that are generally available to the average laboratory

- Other issues are samples cannot be shipped across state lines, making it difficult to have collaborative studies and Proficiency samples
- Our first and foremost concern should be consumer safety which includes animals
- The Fit for purpose statement was presented and modified to read:
 - “Standard Methods Performance Requirements (SMPRs) for quantitative methods for various measurements of cannabinoids in raw materials, extracts, foods and topical applications”

The fit for purpose statement was voted on and passed. A working group will be formed and will meet through December to propose a draft SMPR.

IV. Working Group Launch Presentation: Proanthocyanidins in Cranberry Products

SPSFAM Working Group on Proanthocyanidins in Cranberry Products - Chair: Brian Schaneberg, Starbucks

- Some background on the Analyte was presented - Cranberry juice has been used traditionally for the treatment and prevention of urinary tract infections
- Also it was explained why Cranberry PACs are unique – they contain A-type procyanidins
- Cranberries are usually not consumed “as is” but in beverages, dried, snacks etc.
- In addition to urinary tract health, proanthocyanidins contribute to the antioxidant activity exhibited by cranberry and other fruits rich in polyphenolic compounds.
- General Analytical Needs are Quantitative QC method to support product manufacturer and Qualitative method to verify authenticity
- Challenges are analyte heterogeneity and complexity, Lack of Standards, Achieving method consensus
- The Fit for purpose statement was presented and was NOT modified:
 - “The method should be applicable to the analysis of cranberry fruit, juice, beverage, dried cranberry, cranberry sauce, ingredients (concentrates, extracts and powders) dietary supplement formulations, applicable to two potential purposes:
 1. Quantitative QC method
 - Able to quantify total proanthocyanidin content, preferentially as the total sum of all individual oligomers and polymers present, or alternatively as the total sum with reference to a suitable surrogate standard, in samples typically ranging from 0.01% to 55% on a w/w basis
 2. Qualitative method to verify authenticity
 - Able to provide information on the distribution of proanthocyanidin oligomers and polymers present and confirm presence of A-type versus B-type”

The fit for purpose statement was voted on and passed. A working group will be formed and will meet through December to propose a draft SMPR.

V. International Stakeholder Panel on Alternative Methodology (ISPAM) Update

Erik Konings, Nestlé, SPSFAM Chair

- The presentation was presented by Erik but was written by Erin Crowley

- He emphasized the importance of having a partnership with ISPAM. They consist of the method developers and Microbiologists
- For Food Allergens they are focused on rapid method techniques. They have a working group tasked to specifically develop SMPRs for ELISA based food allergy methods

VI. Emerging Contaminants and Multi-Residue Analysis of Veterinary Drugs

Thierry Delatour, Nestlé, Member of Chemical Contaminants and Residues in Food Community

- There are four subgroups in the community which include Veterinary Drugs, Metals, Environmental and Emerging Contaminates and Pesticides
- The purpose of this presentation was to present the need for a standard for Multi-Residue Methods for the analysis of Veterinary drugs in Foods
- Antimicrobial resistance is of great importance
- After looking at 77 possible methods, most of which were for a single food matrix, he determined there was no suitable method to cover the needs. A method needed to be developed
- A compliance driven approach was used
- There are a total of 179 veterinary drugs to be included
- An approach including raw materials, semi-finished and finished products. All relevant food commodities need to be included. Including eggs and honey. Whole milk Powder and skimmed milk powder are highly traded
- The analytical strategy was a screening approach
- Uncontrolled occurrence of veterinary drugs in food is a health concern, particularly
- With regard to antimicrobial resistance
- Multiresidue analysis is needed for an effective control

If there is support in the community for this method a working group can be proposed.

VII. Other Business and Next Steps

Erik Konings, Nestlé, SPSFAM Chair

- Updated methods for Sugar profiles and analysis by Ion Chromatography
 - There were about 15 interested stakeholders by a show of hands. Dawn Frasier asked them to send her an email
- Micro-plastics in Seafood products were also suggested