

**MINUTES FROM THE MEETINGS OF  
AAFCO'S LABORATORY METHODS AND SERVICES COMMITTEE**

**September 20, 2011; 8:00AM- Noon**

**at the Sheraton Hotel, New Orleans, LA**

Present were:

<b>NAME</b>	<b>E-MAIL ADDRESS</b>	<b>ORGANIZATION</b>
Adrian Burns	Burns.adrian@epa.gov	EPA
Alois Schiessl	Alois.schiessl@romerlabs.com	Romer Labs
Bill Hall	Bill.Hall@mosaicco.com	Mosaic
Curt Jarand	curtisjarand@eurofinsus.com	Eurofins
Dawn Frazier	dfrazier@aoac.org	AOAC Staff
Garrett Zielinski	Garrett.Zielinski@Covance.com	Covance
Gina Clapper	Gina.clapper@aocs.org	AOCS Staff
John McCurdy	John.McCurdy@fda.hhs.gov	FDA/CVM
John Reuther	JohnReuther@EurofinsUS.com	Eurofins Scientific
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Lars Reimann	larsReimann@EurofinsUS.com	Eurofins Scientific, Inc.
Laszlo Torma	Laszlo@pickeringlabs.com	Pickering Labs.
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Lauryn Bailey	lauryneve@msn.com	AB Sciex
Lei Tang	Lei.Tang@fda,hhs.gov	CVM/FDA Feeds
Lu Wetzler	luann.wetzler@nebraska.gov	NE Dept of Ag
Mark Coleman	mcoleman@lilly.com	Elanco
Mark Collison	Mark.Collison@adm.com	ADM
Michael Prinster	Michael.Prinster@romerlabs.com	Romer Labs
Nancy Thiex	Nancy.Thiex@sdstate.edu	SD Dept of Ag

Robert Lemieux	Robert.lemieux@inspection.gc.ca	CFIA
Simon Bevis	simon@r-biopharmrhone.com	R-Biopharm
Steve Lunetton	Slunetton63@yahoo.com	Natural Balance Pet Foods
Susie Dai	Susie@otsc.tamu.edu	Office of Texas State Chemist
Tai Ha	Tai.ha@nebraska.gov	NE Dept of Ag.
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Virginia Greene	Virginia.Greene@agmkt.ny.state.us	NY State Dept of Ag.
Wei Li	wei@otsc.tamu.edu	Office of Texas State Chemist
Yi-Cheng Shieh	hsieh@otsc.tamu.edu	Office of Texas State Chemist

Nancy Thiex opened the meeting. After introductions the following issues were covered:

Approval of Agenda – The agenda was approved. **(Exhibit 1)**

Approval of Minutes from the January Meeting – The Minutes from the meeting held on July 30, 2011, 2011 in Austin, TX were approved as modified **(Exhibit 2)**

Status of FDA Submissions of Methods for Medicated Feed Additives – Thiex reported that 7 methods so far had received FDA approval and that we are looking for the next. Coleman to check w/ AOAC if Tylosin could be the next

Virginiamycin (VIR)–Allredd reported that ELISA Technologies had developed a test kit for DDGs with a LOQ of approx. 0.5PPM. A food petition has been submitted on behalf of VIR but there is currently no approved use of VIR in ethanol plants. McCurdy to check for FDA’s interest in such a kit. A similar kit exists for monensin.

Relationship with ISO– Clapper reported that US is an observer on both the ISO feed and Fertilizer Committees both chaired by Iran. She suggested that both AAFCO and AOAC seek liaison status (See everything but no vote). Clapper to write summary of options. **(Exhibit 3)**

Amino Acid project – Reimann summarized on behalf of Dr. Yanhong Zhang the activities and results of these projects. Currently there are no plans of further detailed studies in this area.

Fatty Acid Collaborative Studies – Clapper reported that 2 collabs had been completed (Alkaline and Acid hydrolysis based). Feed samples were included – canned cat food proved to be very difficult. Clapper to provide

preliminary data. Currently she is waiting for the last data set from one lab. Hope to have all data compiled for a vote by the AOCS Committee in November.

Wetzler to provide a cleaned up version of the "Palmquist method". **(Exhibit 4)**

Dietary Starch – Thiex reported that the protocol had been submitted to AOAC, that Method Centric Committee Members had been assigned but no official appointment letters issued, and that samples were ready to ship. AOAC to send out the appointment letters.

Thiamine in Canned Cat Foods – Reimann explained that current methods for thiamine seemed to give VERY different results when applied to high ash (high seafood) content. Need to locate an appropriate sample as well as labs interested in participating. Reimann has approached AFIA and PFI. Siegel expressed interest in participating.

Working Group Reports –

Tylosin – Coleman summarized outcome of discussions at the Austin meeting – While State labs will use HPLC-MS/MS based methods regardless of FDA approval status, there is a preference for HPLC methods for verifying active ingredient content in medicated feeds. 2 methods are in the process of being evaluated, one of which is the SD Dept. of Ag method.

Mycotoxins – method needs statement completed but may need to be further expanded. Foodshield workgroup set up w/24 participants. 2 candidate methods (Romer labs, NY Dept of Ag) are in the process of undergoing SLV. FDA's method has not been promoted. A mini collab will be started on the two methods – people interested in participating should contact Siegel. The AOAC Mycotoxin committee is currently undertaking a small ring test covering a smaller scope of mycotoxins.

Sugars (Mono- and Di\_ saccharides) - Reimann reported that Jeff Horst is in the process of generating the necessary protocols covering the analysis of feed extracts for their content of simple sugars (mono- and di-saccharides) plus stachyose and raffinose. Participating labs should analyze the extracts provided using their method of choice. It was suggested to include standards among the extracts

Vitamin A – Siegel reported that 3 candidate methods had been selected and that a round-robin study involving 8 labs was underway. Dale Hill is assisting by providing samples representing products currently in the trade. Decoquinatate a possible interference.

Vitamin E- Collinson reported that the his group was keeping an eye on current AOAC activities involving this analyte and that people with good methods and/or interested in participating as collaborators should contact him.

Methods Need Statements –

Vitamin D – Final version posted on AAFCO web site.

Vitamin E – Final version posted on AAFCO website. Does NOT require differentiation between natural and synthetic vitamin E.

Fatty Acid – Final version posted on AAFCO website.

Multi-pesticide residue – Karen Stephani to have draft ready for the January AAFCO meeting.

It was agreed that by now several method needs statements have been completed and that no more statements will be initiated unless supported by a strong need. Likewise no further surveys are being planned.

Report on June 2011 Mid-West AOAC Workshops – Lu Wetzler reported that the with Midwest Section AOAC International Meeting and Exposition, June 6 – 9, 2011 had been a great success with 193 registered attendees of which 53 were vendors. 26 states and 5 countries were represented. Four AAFCO Workshops were held in conjunction with meeting. The four workshops given were; Sample Preparation by Lawrence Novotny, South Dakota State University, and three hands on method demonstrations, one for Fatty Acid Analysis In Feeds And Forages presented by Jana Kraft, University of Vermont and Don Palmquist, Ohio State University, Dietary Starch In Feeds And Forages directed by Mary Beth Hall, USDA – Agriculture Research Service, and Mycotoxins In Feeds utilizing the Pickering AcceClean workstation, led by Maria Ofitserova, Pickering Laboratories. These four workshops were held at 3 different locations, the Downtown Holiday Inn, Hamilton Hall (Chemistry Building) on the University of Nebraska city campus, and Filley Hall (Food Industry Complex) on the University of Nebraska East Campus. The Sample preparation workshop was attended by over 20 participants and several vendors who demonstrated their sample preparation equipment. There were 9 participants at both the starch and fatty acids workshops. The mycotoxin workshop exceeded the maximum number of registered attendees (12) so a second session was added Thursday afternoon. A total of 18 attended the mycotoxin workshop. Total number of participants for all four workshops, including instructors, and equipment vendors was seventy two.

Future Symposia– Brain storming activity:

AOAC, Sep 30-October 3, 2012 in Las Vegas, NV

“Issues associated with converting methods from HPLC to UPLC”

“Comparison of lab test results with field test results”

“Workshop on amino acid analysis (Torma to Chair)

AOCS, April 30-May 2, 2012, Long Beach California.

Clapper to send draft program

AOAC MidWest Section, June 407, 2012 in St Louis.

People interested in being involved should contact Michael Prinster, Romer Labs.

Update on AAFCO Check Sample Program Siegel reported that the program had 260 participants worldwide. The program is constantly being upgraded – currently working toward ISO accreditation and inclusion of screening tests for mycotoxins and toxic minerals. May possibly institute a separate program for pet foods and their ingredients.

Roxarsone / 3-Nitro – Carson reported the finding that the presence of organo-arsenicals in poultry feed increased the level of inorganic arsenic (a human carcinogen) in the muscle. Pfizer withdrew the products from the market in July 2011. CVM is trying to validate a method for speciating. As and as part of this process is looking for non-expired roxarsone premix samples.

MGA clean-up – Bevis inquired into interest in having R-Biopharm make a monoclonal AB for MGA for use in immunoaffinity columns for cleanup and concentration of MGA extracts. Elanco has developed a LC-MS/MS method for customer support (difficult, expensive). States expressed moderate interest.

Respectfully submitted,

**Lars Reimann**

*Eurofins Scientific, Inc.*

Exhibit 1 – Agenda

Exhibit 2 – Minutes from July 2011 meeting

Exhibit 3 – ISO background material

Exhibit 4 – “Palmquist” fatty acid method

**Joint Meeting of the  
AOAC Feed Additive and Contaminants Group of the Ag Community  
and the  
AAFCO Laboratory Methods and Service Committee**

**New Orleans, Louisiana  
Tuesday, September 20, 8:00AM – 12:00 Noon**

**Proposed Agenda**

1. Welcome and Introductions.—Nancy Thiex
2. Review and Adoption of agenda – Nancy Thiex
3. Review and approval of minutes from the August meeting – Lars Reimann
4. Status of FDA Submissions of Methods for Medicated Feed Additives.
5. **Virginiamycin**
6. Relationship with ISO – Gina Clapper
7. Amino Acids methods project continuation? - Gina Clapper
8. Fatty Acids Collaborative Studies – Gina Clapper or Lars Reimann
9. Dietary Starch Mary Beth Hall – AOAC dietary starch collaborative study protocol
10. Thiamine – Lars Reimann
11. Formal Working Groups Reports
  - Tylosin Working Group update and report on technology survey – Mark Coleman
  - Mycotoxin Working Group – Vicki Siegel
  - Sugar (Mono and di-saccharides) Methodology next steps – Lars for Jeff Horst, Laszlo
  - Vitamin A Update –Vicki Seigel on behalf of Regina Wixon
  - Vitamin E– Mark Collison. Interested parties contact [mark.collison@adm.com](mailto:mark.collison@adm.com) to form a working group.
12. Method Needs Statements – Aaron Price or Lu Wetzler
  - Vitamin D – final version.
  - Vitamin E – final version.
  - Fatty-acid Analysis – final version.
  - Multi-analyte pesticides. Review draft. Karen Stephani and Bob Sheridan
  - Which, if any, 2010 survey methods are a priority for future method development/collaborative studies? – amino acids, ractopamine, virginiamycin, penicillin.
13. Report on June Workshops – Luann Wetzler
14. Future symposia
  - Midwest AOAC, AOACI Annual with new names for sessions, or AOCS, or other?
15. Update on activities within the AAFCO Check Sample Committee
16. Roxarsone (3-nitro 20) voluntary stop sale. *Mary Carson needs premix, med feed samples.*
17. MGA clean up small group.

**MINUTES FROM THE MEETINGS OF  
AAFCO'S LABORATORY METHODS AND SERVICES COMMITTEE  
July 30, 2011; 8:00AM- 04:00PM  
at  
the Hyatt, in Austin TX.**

Present were:

<b>NAME</b>	<b>E-MAIL ADDRESS</b>	<b>ORGANIZATION</b>
Aaron Price	<a href="mailto:pricea@inspection.gc.ca">pricea@inspection.gc.ca</a>	CFIA
Ali Kashani	<a href="mailto:akashani@agr.wa.gov">akashani@agr.wa.gov</a>	WA Dept of Ag
Amy Johnson	<a href="mailto:amyj@aocs.org">amyj@aocs.org</a>	AOCS
Andy Crawford	<a href="mailto:andy@crawford.org">andy@crawford.org</a>	Nupal Tech Support
Angel Carlson	<a href="mailto:Angela.carlson@sgs.com">Angela.carlson@sgs.com</a>	SGS
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Anne Beyer		Vitakraft Sunseed
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Diane Loiselle	<a href="mailto:Diane_Loiselle@hillspet.com">Diane_Loiselle@hillspet.com</a>	Hill's Pet Nutrition
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Jenny Murphy	<a href="mailto:Jenny.murphy@fda.hhs.gov">Jenny.murphy@fda.hhs.gov</a>	FDA/CVM
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Karen Stephani	<a href="mailto:Karen.Stephani@agmkt.state.ny.us">Karen.Stephani@agmkt.state.ny.us</a>	NY Department of Ag.
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Melody Harwood	<a href="mailto:Melody.Harwood@akerbiomarine.com">Melody.Harwood@akerbiomarine.com</a>	Aker Biomarine
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Randy Gordon	<a href="mailto:rgordon@ngfa.org">rgordon@ngfa.org</a>	NGFA
Regina Wixon	<a href="mailto:Regina.Wixon@sdstate.edu">Regina.Wixon@sdstate.edu</a>	SD State University
Ron Reid	<a href="mailto:Ron.Reid@vitakraft.us">Ron.Reid@vitakraft.us</a>	Vitakraft Sunseed
Sandy Flick	<a href="mailto:Sandy.Flick@alpharma.com">Sandy.Flick@alpharma.com</a>	Alpharma
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Sharon Webb	<a href="mailto:sharon.webb@uky.edu">sharon.webb@uky.edu</a>	University of KY
Steve Auman	<a href="mailto:skauman@potashcorp.com">skauman@potashcorp.com</a>	Potash Corp
Susie Dai	<a href="mailto:Susie@otsc.tamu.edu">Susie@otsc.tamu.edu</a>	Office of Texas State Chemist
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Virginia Connelly	<a href="mailto:Virginia.Connelly@fda.hhs.gov">Virginia.Connelly@fda.hhs.gov</a>	FDA
William Burkholder	<a href="mailto:William.Burkholder@fda.hhs.gov">William.Burkholder@fda.hhs.gov</a>	FDA/CVM
Zohair Mulla	<a href="mailto:Zsmulla.c@sfd.gov.sa">Zsmulla.c@sfd.gov.sa</a>	Saudi Arabia FDA

Nancy Thiex opened the meeting. After introductions the following issues were covered:

Approval of Agenda – The agenda was approved. (Exhibit 1)).

Approval of Minutes from the January Meeting – The Minutes from the meeting held on January 19, 2011 in St Pete’s Beach, FL, were approved (Exhibit 2)

Annual Report – Thiex reported that the Annual Report had been submitted to AAFCO as well as to the Lab Committee (Exhibit 3)

Announcements –Thiex reported that Aaron Price had accepted the position as co-chair of the committee, that Lu Wetzler had accepted the position as co-chair of the Feed Additives and Contaminants Group of the AOAC Ag Community and that Mark Collison had accepted the role as Chair of the work group addressing Vit. E.



Committee Purpose Statement – The Committee Purpose Statement was reviewed. A couple of small changes were made to provide uniformity among committees.

Status of FDA Submissions of Methods for Medicated Feed Additives and other Drug related Projects – Thiex reported that submissions of drug methods were on track -

- Sulfamethazine – Vickie Siegel sent data package to FDA around April 1. Mark Coleman sent a request to FDA to review the package around April 11. John McCurdy will check on status.
- Monensin, Narasin and Salinomycin – Data package approved by FDA. This makes a total of 6 analytes covered by methods approved through the effort of the AAFCO Lab Committee.
- CTC - No report.
- Tylosin – Working Group formed to address methodology issues and needs. Mark Coleman is Chair. The Working Group met in a separate meeting following the Committee meeting.

Survey of State Laboratory Capabilities – Mark Coleman presented the outcome of the survey of state labs regarding their LC-MS/MS capabilities and interest in methods based on this technique (Exhibit #4). The issue originated from a discussion a couple of years ago when a person from FDA made it clear that methods based on such technology would not be accepted because state labs did not have the equipment required to use such methods for enforcement actions. 27 states plus Canada responded, and 89% of the responding labs assayed for drugs. 37% of the respondents already assayed for drugs in feeds using LC-MS and 79% would use LC-MS if validated method was available. 70% of the respondents would be willing to participate in a collaborative study with these techniques. Several state labs mentioned that they would use such a method even if it was not “FDA approved” as they did not feel obliged to follow FDA directions. Discussion followed regarding the relative merits of HPLC versus HPLC-MS/MS (precision versus specificity).

Also discussed was AOAC’s new approval process. Coleman explained the background for the new process while many other attendees aired their concerns and disappointment with AOAC’s decision. Amy Johnson explained how AOCS uses the term “Recommended Practice” for methods with somewhat similar level of review/validation.

FDA Survey of Antibiotics in DDG – Linda Benjamin reported that FDA in 2008 collected 20 samples of DDG for use in developing a method to measure drug residues in this matrix since every ethanol plant they contacted used antimicrobials in one form or another as a processing aid. FDA elected to use HPLC-MS/MS rather than the validated microbial methods since they wanted to be able to perform screening analyses covering multiple components. Concurrently FDA discontinued their position of “enforcement discretion” relative to drug residues in DDG based on the large amount of DDG being processed combined with antibiotic resistance concerns. In 2010 FDA re-surveyed plants and several still used antimicrobials with the major ones being virginiamycin, erythromycin, tylosin and penicillin. As part of the process FDA collected another 20 samples. All samples collected to date were survey samples and not suitable for regulatory action regardless of findings. FDA is looking at levels leading to antibiotic resistance in microbes relative to the levels in the samples collected so far. FDA has drafted a document addressing the levels of drugs leading to resistance in animals that is currently under review by regulatory counsel. Marla Luther (sp?) coordinates FDA’s DDG related activities. Currently FDA has no plans to publish the survey data.

FDA Survey of Salmonella in Animal Feed – Linda Benjamin reported that Dr. Xin Li is in charge of the program. She will be giving a presentation on the program on Aug 3. FDA currently has 2 programs addressing this issue – the feed contamination program covering a wide range of imports and domestic samples and a direct assignment to collect samples of “Direct Human Contact Feed” focusing strictly on US manufactured products (no imports). Both programs are based on the BAM method. Of the samples collected as part of the direct assignment 5% were positive in Yr 1, 2% were positive in samples collected yr 2 and 4% of the samples collected Yr 3 were positive. A new assignment has been issued to collect 400 samples that will be serotyped as well. Additionally 300 samples will be collected and tested for a wide variety of microbes. Dr. Benjamin noted that the incidence of contamination was much higher in the general feed survey program (close to 10%).

Relationship with ISO – White paper – Amy Johnson explained that at the last meeting the slot as Chair for the ISO Feed Committee was still open with Iran as the only applicant at the time. However, before the white paper encouraging US to apply for the position could be completed Iran had been awarded to the position. It was mentioned that ANSI is the general US interface with ISO. It was agreed that Amy Johnson would draft an outline of the different levels of involvement in the ISO process with associated responsibilities and privileges.

New EU Guidelines for Contaminants in Animal Feed – Lars Reimann reported that EU on June 11, 2011 issued a document setting limits on several residues in animal feed and their ingredients (Exhibit 5)

Fatty Acid Collaborative Study – Amy Johnson reported that Don Palmquist had been informed that AOCS would not be moving forward with Dr. Palmquist's method. She also stated that one of the methods under validation would be split in two as result of the findings from the collaborative study. Johnson expected to be able to present the validated methods at the AAFCO meeting in January. 5 feed samples have been included in collab study. Question of the LOQ of the method. Thiex reported that Dr. Jana Craft was a very capable analyst working with Dr. Palmquist (she did a very nice job at the AOAC Mid-West meeting) from whom the committee should consider requesting feedback from and a possible collaboration with in the future.

Vitamin A method – Dale Hill presented a summary of facts associated with Vitamin A and its use in the feed industry (Exhibit 6). Regina Wixon reported that the working group now had 13-14 members and a site on FoodShield with methods and associated discussions listed. People interested in joining this work group should contact Wixon.

Vitamin E method – Mark Collison considered the needs statement acceptable. Highlighted the need for knowing if the vitamin E present came from a natural source or was produced chemically as the methods for ascertaining this are very limited in number and performance. AOAC Food Nutrition Group and AOAC SPIFAN both are reviewing methods for Vit. E. It was agreed that while from a chromatographic point of view you likely could come up with a method quantifying A and E in the same

run, the different sample prep required (saponification versus non-saponification) suggested keeping the two methods separate.

Amino Acids Project: – Amy Johnson presented a summary of the studies performed by Dr. Yanhong Zhang. (Exhibit 7). It was agreed that this should/could be used as a basis for a seminar/discussion group focused on better defining the critical control points for this analysis.

Starch Method – Thiex reported that the method validation protocol is going through AOAC for approval including the formation of a “Methods Committee”. People invited to be part of the Committee should respond to AOAC ASAP. Samples for the collab study have been prepared and are ready to ship.

Sugar methodologies - Jeff Horst gave a presentation summarizing the results obtained so far. (Exhibit 8). A Working Group has been established on FoodShield to facilitate discussions on this issue as well. It was agreed that the next step would be the preparation and distribution of extracts of samples and standards to interested labs following an approach similar to the one used for the amino acid project. Horst hoped to have this completed by the end of August. It was agreed that even though raffinose and stachiose were not included in the method needs statement labs would be asked to provide information on those two oligo-saccharides as well. Labs interested in participating in study should contact Horst.

Mycotoxin Working Group – Siegel reported that the group now had 23 members and a site on FoodShield with two methods listed (Brewer from Romer Labs and Karen Stephani from NY Dept of Ag). Cristina Nochetto with FDA is also working on a method. Following the review of the SLV’s a round-robin study will be initiated. It was stressed that instrument performance specifications should be included in all methods based on HPLC-MS/MS.

Purdue Mixer/Tumbler – Vickie Siegel reported that the Purdue machine shop had completed the manufacture of 4 units and would be willing to produce such units in batches of 4 at a cost of \$3,100 each (excluding shipping). People interested in purchasing a unit should contact Siegel.

Report on June 2011 Mid-West AOAC Workshops – Lu Wetzler reported that the with Midwest Section AOAC International Meeting and Exposition, June 6 – 9, 2011 had been a great success with 193 registered attendees of which 53 were vendors. 26 states and 5 countries were represented. Four AAFCO Workshops were held in conjunction with meeting. The four workshops given were; Sample Preparation by Lawrence Novotny, South Dakota State University, and three hands on method demonstrations, one for Fatty Acid Analysis In Feeds And Forages presented by Jana Kraft, University of Vermont and Don Palmquist, Ohio State University, Dietary Starch In Feeds And Forages directed by Mary Beth Hall, USDA – Agriculture Research Service, and Mycotoxins In Feeds utilizing the Pickering AcceClean workstation, led by Maria Ofitserova, Pickering Laboratories. These four workshops were held at 3 different locations, the Downtown Holiday Inn, Hamilton Hall (Chemistry Building) on the University of Nebraska city campus, and Filley Hall (Food Industry Complex) on the University of Nebraska East Campus. The Sample preparation workshop was attended by over 20

participants and several vendors who demonstrated their sample preparation equipment. There were 9 participants at both the starch and fatty acids workshops. The mycotoxin workshop exceeded the maximum number of registered attendees (12) so a second session was added Thursday afternoon. A total of 18 attended the mycotoxin workshop. Total number of participants for all four workshops, including instructors, and equipment vendors was seventy two.

Future Symposia – Thix reported that there were no scheduled activities in the pipeline including presentations at AOAC meetings or other venues. It was noted that any suggestion for activities at the 2012 Annual AOAC meeting would have to be submitted this September for consideration. It was agreed not to pursue that venue.

Thiamine issue – William Burkholder reported on the thiamine in pet food issue. The key issue is thiamine in canned cat food. FDA has had 3 recalls recently associated with cat foods deficient in thiamine as judged by animal performance and by analytical testing. FDA recommends 5mg/kg on a dry basis with the NRC stating 4.4mg/kg as the absolute minimum. The issue is that thiamine is very labile under canning conditions and the industry rule of thumb has been to fortify 10 times the target level in the finished product but it now appears that even higher over fortification may be required.

There appears to be an issue with the analytical methodology for determining the content of thiamine in canned cat food with a regulatory lab (FDA) getting drastically different results from a commercial lab (0.2PPM versus 1.0ppm). It was agreed that this warranted further action. Lars Reimann suggested the following approach:

1. Have labs analyze a sample of canned pet food for thiamine using their current methodology (single analysis on 3 runs – three data points per lab). Vickie Siegel believed she had cans left over from the AAFCO program and would check if a thiamine content could still be measured in those (2+ yr old); Amy Johnson had cans left over from another study.
2. Tabulate the data AND the methods. Examine data and method for correlation between level and methodology.
3. If appropriate, repeat study using agreed upon method modifications.

Vickie Siegel, Ken Riter, Lars Reimann and Dale Hill expressed an interest in participating. Reimann would seek FDA-Atlanta's participation as well as ask PFI and AFIA's Pet Food Committee members for assistance in encouraging labs to participate.

Dale Hill stressed the need for a reliable method in order to accurately assess the extent of degradation in the canning process and in light of an anticipated very short supply of all vitamin B material within the next couple of months due to brown-outs in China that would make it impossible to source the amount of thiamine required for very large over-fortification levels (e.g., 40x).

Animal Feed Regulatory Standard – Jenny Murphy and Ben Jones presented on the Animal Feed Regulatory Program Standard project (Exhibit 9). Murphy discussed the background as well as the current status of the project. Plan to have draft ready by Jan 2012. Ben Jones presented the content of the Standard 10, the standard addressing Laboratory Support. Key items in the standard are processes to ensure communication among the program and laboratory staff and requirements for quality systems in laboratories used by feed programs.

Partnership for Food Protection Laboratory Task Group – Hitelia Castellanos presented an overview (Exhibit 10). The Partnership for Food Protection (PFP) Lab Task Group has representatives from most state and federal agencies that are in any way associated with food testing. The PFP Lab Task Group has formed 7 sub committees: Accreditation, Regulatory Requirements, National Proficiency Testing, Methods, Standardized Worksheet, Data Reporting and Sampling. The Accreditation Subcommittee has developed an action plan template for labs wishing to be accredited, has documented comparison of different accreditation standards and “gaps” between them and ISO 17025. FDA will provide consulting and financial support to regulatory labs seeking accreditation. **Beverly Kent, AFRPS project manager, was available to answer questions about the feed standards.**

Method Needs Statements (MNS)– Aaron Price demonstrated how to access the most updated versions of each method needs statement on the AAFCO web site. A draft template for preparing such documents is posted there as well.

- Fatty Acids – modified and completed
- Vitamin D – Modified and completed
- Vitamin E – Modified and completed
- Multi analyte pesticides – no report
- Multi analyte mycotoxin – It was agreed that the MNS needed to be updated and the work group intended to do so at the next conference call.

Based on current activity in the pipeline and relatively weak demand it was decided to complete not to initiate more studies / work groups.

Lab Critical Ingredients Definitions – Melton Bryant reported how some new ingredient definitions as well as labeling changes (e.g. the addition of “%Max:” guarantees) needed the input from the lab committee as to the practicability of their implementation and verification. It was difficult to have a way to ensure such input especially since FDA was not concerned about methodology for validating the level present. It was recommended that a letter be drafted to the AAFCO BOD outlining how such a review process could best be established that would ensure definitions were consistent with analytical methodology.

Respectfully submitted,

**Lars Reimann**  
***Eurofins Scientific, Inc.***

10 Exhibits attached.



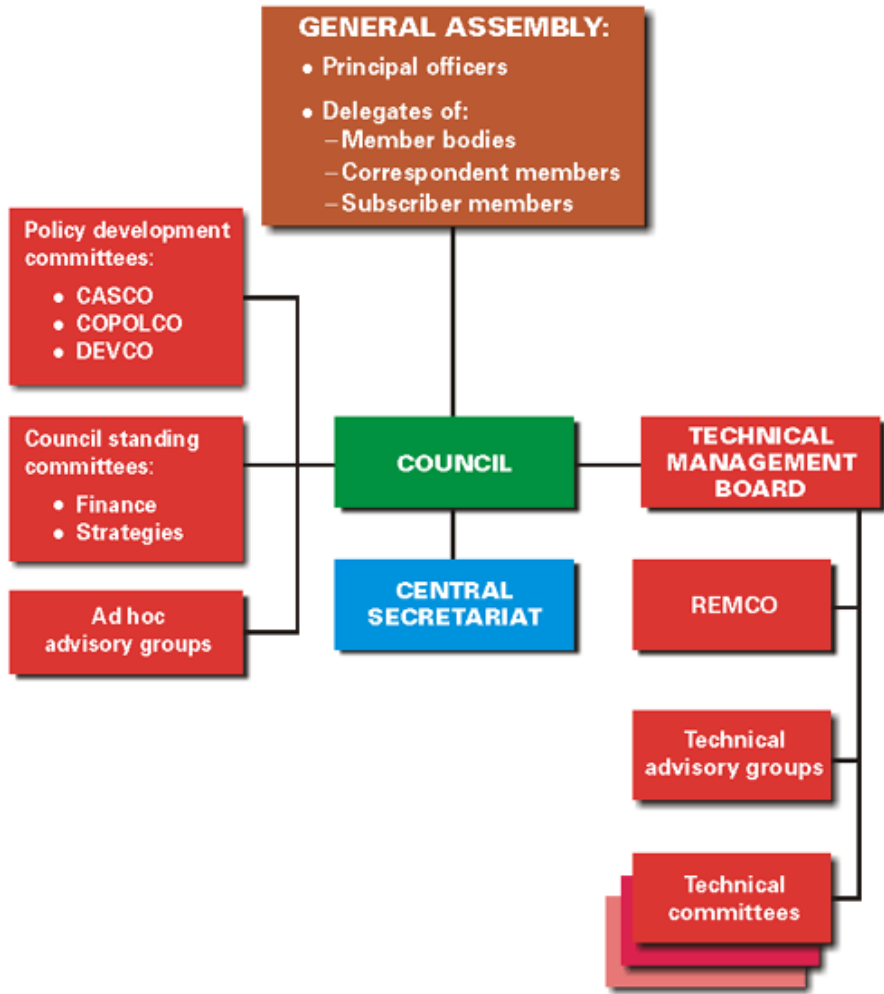
# ISO 101



**GINA M. CLAPPER**  
**AOCs Technical Specialist**  
**31 October 2011**



## ISO STRUCTURE



# ISO structure



ISO standards are developed according to the following principles:

- **Consensus**
- **Industry-wide**
- **Voluntary**





- **Consensus**

The views of all interests are taken into account: manufacturers, vendors and users, consumer groups, testing laboratories, governments, professionals and research organizations.



- **Industry-wide**

Global solutions to satisfy industries and customers worldwide.



- **Voluntary**

International standardization is market-driven and therefore based on voluntary involvement of all interested parties.



# ISO/TC 34 Food Products

## SCOPE

- Standardization in the field of human and animal foodstuffs as well as animal and vegetable propagation materials, in particular terminology, sampling, methods of testing and analysis, product specifications and requirements for packaging, storage and transportation.
- Excluded : products covered by ISO/TC 54 Essential oils and ISO/TC 93 Starch (including derivatives and by-products).



# ISO/TC 34 - Structure

Secretariat: AFNOR(S. Espeillac) and ABNT (C. Guerreiro)

Chair: F. Falconnet (through 2009)

## ISO TC 34: 4 Working Groups (WG):

- **WG 10** Food Irradiation
- **WG 12** Quality Management Systems for Grain Production
- **WG 13** Royal Jelly



## ISO TC 34: 14 sub-committees:

- **SC 2, Oleaginous seeds and fruits**
  - Participating Member (AOCS)
- **SC 3, Fruit and vegetable products**
  - No Membership
- **SC 4, Cereals and pulses**
  - No Membership, though AOCS is a Liaison Member
- **SC 5, Milk and milk products**
  - No Membership
- **SC 6, Meat, poultry, fish, eggs and their products**
  - Participating Member (USDA-AMS, Livestock and Seed, Martin O'Connor)
- **SC 7, Spices and condiments**
  - Observer Status
- **SC 8, Tea**
  - No Membership



- **SC 9, Microbiology**
  - No Membership , though AOAC is a Liaison Member
- **SC 10, Animal feeding stuffs**
  - **No Membership**
- **SC 11, Animal and vegetable fats and oils**
  - Participating Member (AOCS)
- **SC 12, Sensory analysis**
  - Participating Member (ASTM, Scott Orthey)
- **SC 14, Fresh, dry and dried fruits and vegetables**
  - No Membership
- **SC 15, Coffee**
  - Participating Member (Specialty Coffee Association, Ric Rhinehart)
- **SC 16, Molecular Biomarker Analysis**
  - Participating Member and Secretariat (AOCS)
- **SC 17, Food Safety Management Systems**
  - Participating Member (AOCS)



# Advantages of ISO Participation

- TAGs balance their membership equally among government, industry, academia
- Participation provides international voice
- Access to all versions of standards under development
- **Observers cannot vote**





- ISO is building a strategic partnership with the World Trade Organization (WTO)
- ISO provides special technical support to WTO programs (e.g. Codex).
- Other countries might participate in both Codex and ISO.
- Note: there is a financial component (personnel, time, travel both natl. and intl., US TAG admin fees).



## **Functions and Responsibilities of the U.S. TAG**

- Recommend P- or O-membership on an ISO TC or SC
- Recommend a change in membership status on an ISO TC or SC (P,O or terminate)
- Approve proposals for new work items
- Approve working drafts
- Initiate new proposals for work items



## Functions and Responsibilities of the U.S. TAG

- Determine US position on ALL documents
- Provide adequate U.S. representation to ISO TC or SC meetings, designate membership and heads of delegations.
- Determine U.S. positions for ISO TC or SC meetings and advise the U.S. delegation of any flexibility it may have.
- Nominate U.S. technical experts for ISO working groups.



- Assist U.S. secretariats of ISO TC or SC to resolve comments on draft international standards, draft technical reports, and committee drafts.
- Liaise with other U.S. TAGs in related fields, or identify other activities that may overlap the U.S. TAG's scope.
- Recommend that ANSI invite the ISO TC or SC to meet in the US.



- Recommend to ANSI U.S. candidates for the chair of ISO TC or SC and U.S. Conveners of ISO WG.
- Recommend to ANSI to accept the secretariat for an ISO TC or SC.

**Voting** -- Each member of the TAG vote one of the following positions: Approve, approve with comments, disapprove with reasons, abstain with reasons.



# Stages of the development of International Standards (1)

- An International Standard is the result of an agreement between the member bodies of ISO.
- **It may be used as such, or may be implemented through incorporation in national standards of different countries.**
- International Standards are developed by ISO technical committees (TC) and subcommittees (SC) by a six step process



## Stages of the development of International Standards(2)

- Stage 1: Proposal stage
- Stage 2: Preparatory stage
- Stage 3: Committee stage
- Stage 4: Enquiry stage
- Stage 5: Approval stage
- Stage 6: Publication stage



## Stage 1: Proposal stage

- Confirm that a particular International Standard or Sub-Committee is needed.
- A new work item proposal (NP/NWI) is submitted for vote by the members of the relevant TC/SC for inclusion in the program of work.
- Acceptance by a majority of the P-members and at least five P-members commit to participate.
- The secretariat and project leader are determined in the NP





## Stage 2: Preparatory stage

- Usually, a working group (WG) of experts, the chairman (convener/ project leader), is announced by the TC/SC for the preparation of a working draft.
- Successive working drafts are considered until the WG has developed the best technical solution to the problem being addressed.
- At this stage, the draft is forwarded to the working group's parent committee for the consensus-building phase.



## 3: Stage Committee stage

- The first committee draft is registered by the ISO Central Secretariat.
- It is distributed for comments and, if required, voting, by the P-members of the TC/SC.
- Successive committee drafts may be considered until consensus is reached on the technical content.
- Once consensus has been attained, the text is finalized for submission as a Draft International Standard (DIS).



## Stage 4: Enquiry stage

- DIS is circulated to all ISO member bodies by the ISO CS for a 5-month voting and comment period.
- Approval for submission as a Final Draft International Standard (FDIS) requires a two-thirds majority of the P-members and not more than one-quarter of votes cast are negative.
- If the approval criteria are not met, the text is returned to the originating TC/SC for further study and revision



## Stage 5: Approval stage

- The FDIS is circulated to all ISO member bodies by ISO CS Central Secretariat for a final Yes/No vote within a period of two months.
- Technical comments are no longer considered at this stage, but retained for a future revision of the International Standard.
- The text is approved as an International Standard if a two-thirds majority of the P-members of the TC/SC are in favor and not more than one-quarter of the total number of votes cast are negative.
- If these approval criteria are not met, the standard is referred back to the originating TC/SC for reconsideration in the light of the technical reasons submitted in support of the negative votes received.



## Stage 6: Publication stage

- Once a final draft International Standard has been approved, only minor editorial changes, if and where necessary, are introduced into the final text.
- The final text is sent to the ISO Central Secretariat which publishes the International Standard.



# Review of International Standards (Confirmation, Revision, Withdrawal)

- All International Standards are reviewed at least once every five years by the responsible TCs/SCs.
- A majority of the P-members of the TC/SC decides whether an International Standard should be confirmed, revised or withdrawn.



# Voting

- Voting on the standards is done by the standards organizations that are members of ISO. The US is represented by the American National Standards Institute (ANSI).
- Only one standards organization is allowed to represent a single nation, each nation is allowed only one vote during the approval phase of a standard.







# U.S. TAG Administrator (1)

- Appointed by ANSI and undertakes the responsibilities below:
  - Organizes the U.S. TAG and applies to ANSI for approval of the TAG administrator, initial TAG membership list and accreditation of the TAG.
  - Submits the U.S. TAG membership list and annual report to ANSI.
  - Ensures that the members of the U.S. TAG participate.



## U.S. TAG Administrator (2)

- Provides administrative services, arranges meetings, prepares and distributes documents for the U.S. TAG, maintains records, minutes of meetings and results of ballots.
- Transmits proposals and positions from the U.S. TAG to ANSI.
- Transmits to ANSI the U.S. delegates lists for all international meetings.
- Establishes a procedure to hear appeals of actions or inactions of the U.S. TAG.
- Ensures compliance with applicable ANSI and ISO procedures



- Links:

[www.iso.org](http://www.iso.org)

Standards Development

List of ISO Technical Committees

TC 34

[www.ansi.org](http://www.ansi.org)

Standards Activities

ISO Programs

US TAGs to ISO



# Thank You!

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**Joint Meeting of the  
AOAC Feed Additive and Contaminants Group of the Ag Community  
and the  
AAFCO Laboratory Methods and Service Committee**

**New Orleans, Louisiana  
Tuesday, September 20, 8:00AM – 12:00 Noon**

**Proposed Agenda**

1. Welcome and Introductions.—Nancy Thiex
2. Review and Adoption of agenda – Nancy Thiex
3. Review and approval of minutes from the August meeting – Lars Reimann
4. Status of FDA Submissions of Methods for Medicated Feed Additives.
5. **Virginiamycin**
6. Relationship with ISO – Gina Clapper
7. Amino Acids methods project continuation? - Gina Clapper
8. Fatty Acids Collaborative Studies – Gina Clapper or Lars Reimann
9. Dietary Starch Mary Beth Hall – AOAC dietary starch collaborative study protocol
10. Thiamine – Lars Reimann
11. Formal Working Groups Reports
  - Tylosin Working Group update and report on technology survey – Mark Coleman
  - Mycotoxin Working Group – Vicki Siegel
  - Sugar (Mono and di-saccharides) Methodology next steps – Lars for Jeff Horst, Laszlo
  - Vitamin A Update –Vicki Seigel on behalf of Regina Wixon
  - Vitamin E– Mark Collison. Interested parties contact [mark.collison@adm.com](mailto:mark.collison@adm.com) to form a working group.
12. Method Needs Statements – Aaron Price or Lu Wetzler
  - Vitamin D – final version.
  - Vitamin E – final version.
  - Fatty-acid Analysis – final version.
  - Multi-analyte pesticides. Review draft. Karen Stephani and Bob Sheridan
  - Which, if any, 2010 survey methods are a priority for future method development/collaborative studies? – amino acids, ractopamine, virginiamycin, penicillin.
13. Report on June Workshops – Luann Wetzler
14. Future symposia
  - Midwest AOAC, AOACI Annual with new names for sessions, or AOCS, or other?
15. Update on activities within the AAFCO Check Sample Committee
16. Roxarsone (3-nitro 20) voluntary stop sale. *Mary Carson needs premix, med feed samples.*
17. MGA clean up small group.