



U.S. Pharmacopeia
The Standard of QualitySM

Food Protein Workshop: Developing a Toolbox of Analytical Solutions to Address Adulteration

June 16–17, 2009
USP Headquarters, Rockville, Maryland
USP Meeting Center

Draft Agenda
(As of May 6, 2009)

Goals and Anticipated Outcomes

- Define the challenges and opportunities for food protein measurement
- Understand the current and emerging analytical methods for protein measurement
- Develop a toolbox of analytical strategies to deal with food protein adulteration including methods to replace total nitrogen-based protein measurements
- Identify potential collaboration with stakeholders for future method development and validation work

Workshop Planning Committee

Roger A. Clemens, Ph.D., MPH
USC School of Pharmacy

Jim Harnly, Ph.D.
USDA-ARS

Juan Romero
Wisconsin Center for Dairy
Research

Jonathan DeVries, Ph.D.
Medallion Laboratories, General
Mills, Inc.

Michael Kennedy, Ph.D.
Cargill, Inc.

Richard Stadler, Ph.D.
Nestlé Product Technology
Centre

Janet Eastridge, M.S.
USDA-ARS

Frank Konstantinides
AminoAcids.com

Darryl Sullivan, Ph.D.
Covance Laboratories Inc.

Andrew Ebert, Ph.D.
International Food Additives
Council

Robert L. Magaletta, Ph.D.
Kraft Foods Global

Franz Ulberth, Ph.D.
Institute for Reference
Materials and Measurements

Eric Eccleston, Ph.D.
AminoAcids.com

Karen Phinney, Ph.D.
NIST

Paul Whittaker, Ph.D.
CFSAN/FDA

Daniel Folmer, Ph.D.
CFSAN/FDA

Suzanne Nielsen, Ph.D.
Purdue University

Jeffrey Moore, Ph.D.
US Pharmacopeia

David B. Funk, Ph.D., D.Sc. (hc)
USDA-GIPSA

Jeanne I. Rader, Ph.D.
CFSAN/FDA

Headquarters

12601 Twinbrook Parkway
Rockville, Maryland 20852
+1-301-881-0666

Europe/Middle East/Africa

Münchensteinerstrasse 41
CH-4052 Basel, Switzerland
+41 (0)61 316 30 10

USP-India Private Limited

ICICI Knowledge Park
Genome Valley
Labs 7-10, Phase III
Turkapally, Shameerpet
Ranga Reddy District
Hyderabad 500 078, A.P., India
+91-40-2348-0088

USP-China

Building 11
Lane 67 Libing Road
Zhangjiang Hi-Tech Park
Shanghai, 201203, China
+86-21-51370600

USP-Brazil

WTorre Technology Park
Avenida Ceci 1600
06460-905 Barueri - SP, Brazil
+55-11-4166-3300

Food Protein Workshop: Developing a Toolbox of Analytical Solutions to Address Adulteration
June 16 – 17, 2009, USP Headquarters, Rockville, MD

Day 1: Tuesday, June 16, 2009

7:30 a.m. Registration, Continental Breakfast, and Networking Exhibition

8:00 a.m. **1. Welcome**

- Roger Williams, M.D., Executive Vice President & Chief Executive Officer, USP
- Darrell Abernethy, M.D., Ph.D., Chief Science Officer, USP
- Jeff Moore, Ph.D., Scientist, Food Ingredient Standards Group, USP

8:30 a.m. **2. Opening Plenary**

Topics: Defining the protein measurement landscape and understanding the problem of adulteration

Moderator: TBD

- Speakers:*
- Jonathan DeVries, Ph.D., Senior Technical Manager, General Mills
 - Darryl Sullivan, Ph.D., President, AOAC
 - Kristine Patterson, Ph.D., Chemist, USDA-ARS
 - Heinz Schimmel, Ph.D., European Commission, Joint Research Center, Institute for Reference Materials and Measurements

10:00 a.m. Break and Networking Exhibition

10:30 a.m. **3. Opening Plenary (continues)**

12:00 p.m. Lunch and Exhibition

1:00 p.m. **4a. Breakout Session A**

Topics: Theory and application of rapid mid-infrared, near-infrared, and Raman methods and chemometrics to measure protein and prevent adulteration

Moderator:

- Robert Magaletta, Ph.D., Kraft Foods Fellow, Analytical Sciences, Kraft Foods Global

- Speakers:*
- Karl Norris, D.Sc., Retired, Research Leader, Instrument Research Laboratory, USDA-ARS
 - Peter Griffiths, Ph.D., Professor, Department of Chemistry, University of Idaho
 - Juan Romero, Analytical Group Coordinator, Wisconsin Center for Dairy Research
 - Panel Discussion

1:00 p.m. **4b. Breakout Session B**

Topics: Biochemical/compendial methods for protein measurement: Nitrogen-, colorimetric-and amino acid-based approaches

Moderator:

- S. Suzanne Nielsen, Ph.D., Professor and Head, Department of Food Science, Purdue University

- Speakers:*
- Jürgen Möller, Ph.D., Laboratory Manager, FOSS
 - Sam Chang, Ph.D., Professor, Department of Cereal and Food Science, North Dakota State University
 - Eric Eccleston, Ph.D., Chief Scientist, AminoAcids.com
 - Dave Barbano, Ph.D., Professor, Department of Food Science, Cornell University
 - Panel Discussion

Day 1: Tuesday, June 16, 2009 (continued)

- 3:00 p.m. Break and Networking Exhibition
- 3:30 p.m. **5a. Breakout Session A (continues)**
- 5b. Breakout Session B (continues)**
- 6:00 p.m. Wine & Cheese Reception and Networking Exhibition

Day 2: Wednesday, June 17, 2009

- 7:30 a.m. Registration, Continental Breakfast, and Networking Exhibition
- 8:00 a.m. **6a. Breakout Session A (continued from Tuesday)**
- Topics:* Theory and application of rapid mid-infrared, near-infrared, and Raman methods and chemometrics to measure protein and prevent adulteration
- Moderator:* • Robert Magaletta, Ph.D., Kraft Foods Fellow, Analytical Sciences, Kraft Foods Global
- Speakers:* • David Funk, Ph.D., D.Sc., Associate Director for Methods Development, USDA-GIPSA
- Jürgen Möller, Ph.D., Laboratory Manager, FOSS
 - Dave Honigs, Ph.D., Applications Manager, Perten Instruments
 - Panel Discussion and Group Discussion on Path Forward
- 6b. Breakout Session B (continued from Tuesday)**
- Topics:* Biochemical/compendial methods for protein measurement: Emerging mass spectrometry, HPLC, microarray, biosensor, and lab-on-chip approaches
- Moderator:* • S. Suzanne Nielsen, Ph.D., Professor and Head, Department of Food Science, Purdue University
- Speakers:* • Sunil Kochhar, Ph.D., Senior Scientist, Nestlé Research Center
- Eric Eccleston, Ph.D., Chief Scientist, AminoAcids.com
 - Harvey Indyk, Ph.D, Fonterra
 - Kevin Shefcheck, Ph.D., Chemist, CFSAN/FDA
 - John Finely, Professor and Head, Food Science Department, LSU AgCenter
 - Panel Discussion and Group Discussion on Path Forward
- 10:00 a.m. Break and Networking Exhibition
- 10:30 a.m. **7a. Breakout Session A (continues)**
- 7b. Breakout Session B (continues)**
- 12:00 p.m. Lunch and Networking Exhibition

Day 2: Wednesday, June 17, 2009 (continued)

1:00 p.m. **8. Closing Plenary Session: A Path Forward**

Topics: Breakout session summaries and recommendations for next steps; areas of overlap and synergy between approaches; opportunities for future research and collaboration

Moderator: TBD

2:30 p.m. Break and Networking Exhibition

3:00 p.m. **9. Closing Plenary Session (continues): A Path Forward**

4:30 p.m. **11. Closing Remarks**

- Roger Williams, M.D., Executive Vice President & Chief Executive Officer, USP
- Darrell Abernethy, M.D., Ph.D., Chief Science Officer, USP

5:00 p.m. Adjourn