

EXPERIMENTAL BIOLOGY 2011

Events Featuring ODS Staff and
ODS Supported Researchers,
Projects and Activities



Office of
Dietary Supplements
National Institutes of Health

Friday, April 8, 2011

Satellite Conference:

35th National Nutrient Databank Conference

<http://www.nutrientdataconf.org>

8:30 am - 4:30 pm, Marriott Bethesda North Hotel & Conference Center, Bethesda, MD

Saturday, April 9, 2011

Special Session. 25. Nutritional Science Council Graduate Student Research Award

Oral Competition

2:00 - 5:00 pm Washington Convention Center, 102B

Chair: *K. Tucker*

2:35 pm (349.4) A novel role for n-3 polyunsaturated fatty acids in inhibition of EGFR signal transduction. *H. F. Turk, R. Barhoumi, J. R. Lupton, R. S. Chapkin.* Texas A&M Univ.

Minisymposium: 29. Research with Dietary Supplements

3:00 - 5:00 pm, Washington Convention Center, Room 150B

Chairs: *R. Bailey and K. He*

3:15 pm 29.2. Changes in the dietary supplement collection system in NHANES 2007-2008: Implications for researchers. *R.L. Bailey, J.J. Gahche, K. W. Dodd, J.T. Dwyer.* ODS, NIH, Ctrs. for Dis. Control and Prevent., Hyattsville, MD and NCI, NIH.

3:45 pm 29.4. Study results for children's multivitamin/minerals (MVMs) for the Dietary Supplement Ingredient Database (DSID) *J. Roseland, K. Andrews, C. Zhao, A. Middleton, J. Holden, J. Dwyer, L. Douglass, L.G. Saldanha;* USDA, Beltsville, ODS, NIH and Consulting Statistician, Longmont, CO.

4:00 pm 29.5. Analytical vitamin D levels in multivitamin/mineral products from the Dietary Supplement Ingredient Database studies. *K. Andrews, J. Roseland, J. Holden, C. Zhao, A. Middleton, M. Feinberg, J. Dwyer, R. Bailey, L.G. Saldanha.* USDA, Beltsville and ODS, NIH.

Sunday, April 10, 2011

Visit the ODS Booth # 1345 today from 9:00 am – 4:00 pm

**Presidential Symposium: Ameliorating micronutrient deficiencies through biofortification:
The science and prospects.**

8:00 - 10:00 am Washington Convention Center, Ballroom A

Chair: *Robert Russell*

Minisymposium. 96. Biofortification of Staple Crops with Micronutrients

10:30 am - 12:00 pm Washington Convention Center, 152A

Chairs: *J. Haas & E. Johnson*

2:15 pm 96.7 Absorption of zinc from mixed diets containing conventional or zinc-biofortified Bangladeshi rice, or conventional Bangladeshi rice with added zinc, among young children in a peri-urban community. *M.M. Islam, L. R. Woodhouse, M. B. Hossain, T. Ahmed, N. Huda, T. Ahmed, C. Hotz, K. H. Brown.* ICDDR, B, Dhaka, Bangladesh, USDA, Davis, HarvestPlus/Intl. Food Policy Res. Inst., Washington, DC and Univ. of California, Davis

Posters: Sunday, April 10, 7:30 am - 6 pm Washington Convention Center, Exhibit Hall ABC

581. Dietary Bioactive Components Including Botanicals

12:45 pm 581.1 (A1). Spectral fingerprints for chemical differentiation of botanical materials.

J. Harnly, P. Chen, D. Luthria. USDA, Beltsville.

12.45 pm 581.9 (A9) Consumption of *Sutherlandia frutescens*, a South African botanical, alters in vivo bacterial clearance following an *E. coli* challenge in healthy mice. *K. Fritsche, J. Browning, Jr., C. Merle, W. Folk.* Univ. of Missouri-Columbia

1:45 pm 581.16 (A16) Serum 25(OH)D response to soy isoflavone supplementation in postmenopausal women. *R.D. Lewis, W.W. Wong, D.B. Hausman, J.G. Fischer, F.M. Steinberg, M.J. Murray, M. A. Cramer, P. Amato, R. L. Young, S. Barnes, K. J. Ellis, R.J. Shypailo, J.K. Fraley, K.L. Konzelmann, E.O. Smith.* Univ. of Georgia, Baylor Col. of Med., Univ. of California, Davis, No. California Fertility Med. Ctr., Roseville, Oregon Hlth. & Sci. Univ. and Univ. of Alabama at Birmingham

583. Dietary Bioactive Components III: Chronic Disease Risk Reduction I

12:45 pm 583.9 (A44) Dietary sterculic oil improves the metabolic state of obese, leptin deficient ob/ob mice. *R.T. Pickering, L. Ortinu, K. Nickelson, K. Stromsdorfer, C. Naik, J. Browning, D.E. Bauman, K. Fritsche, J.W. Perfield II.* Univ. of Missouri-Columbia and Cornell Univ.

585. Lipid and Fatty Acid Metabolism and Transport

12:45 pm 585.1 (A72) The diacylglycerol kinase inhibitor R59022 attenuates trans-10, cis-12 conjugated linoleic acid-mediated inflammatory signaling and insulin resistance in primary human adipocytes. *K. B. Martinez, S. Shyamasundar, C. C. Chuang, A. Overman, A. Kennedy, M. McIntosh.* Univ. of North Carolina at Greensboro and Vanderbilt Univ.

1:45 pm **585.2 (A73) The phospholipase C inhibitor U73122 inhibits trans-10, cis-12 conjugated linoleic acid-mediated inflammatory signaling and insulin resistance in human adipocytes.** *W. Shen, K. Martinez, C. C. Chuang, A. Overman, M. McIntosh.* Univ. of North Carolina at Greensboro

601. Research with Dietary Supplementation

12:45 pm **601.4 (A273). Determination of cyanocobalamin in multivitamin dietary supplement tablets and infant formulas.** *P. Chen, J. Sun, W. Wolf.* USDA, Beltsville.

12:45 pm **601.5 (A274). Preliminary evaluation of omega-3 dietary supplement label information for products in the Dietary Supplement Ingredient Database.** *A. Middleton, K. Andrews, J. Roseland, C. Zhao, J. Holden, J. Dwyer, L.G. Saldanha.* USDA, Beltsville and ODS, NIH.

1:45 pm **601.6 (A275). The Dietary Supplement Ingredient Database: labeled nutrient distribution in children's multivitamin/mineral products.** *C. Zhao, J. Roseland, K. Andrews, J. Holden, A. Middleton, J. Dwyer, R. Bailey, L.G. Saldanha.* USDA, Beltsville and ODS, NIH.

607. Iron

12:45 pm **607.15 (A325) Identification of residues required for iron transport activity of the transmembrane protein Zip14.** *S. Jenkitkasemwong, M.D. Knutson.* Univ. of Florida

1:45 pm **607.16 (A326) Effect of dietary iron deficiency and overload on Zip14 levels in rats.** *H. Nam, M.D. Knutson.* Univ. of Florida

609. Nutrient Data Methods and Quality

12:45 pm **609.7 (A344). Extension of a LC-UV/fluorescence/mass spectrometry method for vitamin b6 in dietary supplements to additional formulations.** *R.J. Goldschmidt, W.R. Wolf, R. Atkinson.* USDA, Beltsville.

ASN Awards Ceremony
Sunday, April 10, 5:30 – 7:00 pm
Washington Renaissance Grand Ballroom

Awardees:

Paul M. Coates

The Conrad A. Elvehjem Award for Public Service in Nutrition

Patsy Brannon

Roland L. Weinsier Award for Excellence in Medical/Dental Nutrition Education

Monday, April 11, 2011

Visit the ODS Booth # 1345 today from 9:00 am – 4:00 pm

Symposium: 210. Assessing the Effects of Bioactives in Humans: Establishing the Framework for an Evidence-Based Approach

8:00 - 10:00 am Washington Convention Center, 151B

Chairs: *D. Heber and J. Erdman*

8:20 am Application of systematic review methodology to research on bioactives.
P. Coates. ODS, NIH

Symposium: 220. Is "Processed" a Four Letter Word? The role of processed foods in achieving dietary guidelines and nutrient recommendations in the U.S.

10:30 am - 12:30 pm, Washington Convention Center, 151B

Chair: *G. Johnson and J. King*

10:30 am Excitement at interface: Using nutrition and food science to improve public health. *J.T. Dwyer. New England Med. Ctr.*

Minisymposium: 218. Fat Soluble Vitamins

8:00 am - 10:00 am Washington Convention Center, 159B

Chair: *M. Traber*

9:00 am 218.5 Vitamin D supplementation increases osteocalcin but not other markers of bone turnover during short-term caloric restriction in women. *D. Sukumar, S. Schneider, H. Ambia-Sobhan, Y. Schluskel, S. Shapses. Rutgers Univ. and UMDNJ-Robert Wood Johnson Med. Sch.*

Posters: Monday, April 11, 7:30 am – 6 pm Washington Convention Center, Exhibit Hall ABC

720. Metabolism and Diabetes II

1:05 pm 720.3 (B158) Hyperketonemia activates NF- κ B and MAPK pathways in human endothelial cells. *J.L. Rains, S.K. Jain. LSU Hlth. Sci. Ctr., Shreveport*

764. Mode of Action of Bioactive Natural Products

12:25 pm 764.1 (B432) *Emblica officinalis* (amla) improves lipid metabolism by modulating hepatic forkhead transcription factor box O1 (FoxO1). *I. Chik, L.M. Buesa, P.V. Nerurkar. Univ. of Hawaii*

12:25 pm 764.7B438) Salutary effect of bitter melon on lipidemia via liver AMPK regulation. *G. K. Kipyakwai, P. V. Nerurkar. Univ. of Hawaii*

777. Polyunsaturated Fatty Acids and Health

12:45 pm 777.35 (A216) Investigating immune modulation by dietary omega-3 fatty acids in domestic pigs. *C. Merle, S. Jones, J. Browning, G. Allee, K. Fritsche. Univ. of Missouri-Columbia*

Tuesday, April 12, 2011

Visit the ODS Booth # 1345 today from 9:00 am – 4:00 pm

Special Session: 335. Food and Nutrition Board Update: DRIs for Calcium and Vitamin D

10:30 am - 12:30 pm, Washington Convention Center, Ballroom A

Chairs: *L. Meyers, C. Taylor and D. Bier*, Food and Nutr. Board Inst. of Med.

11:05 am Applying a risk assessment approach. *P. Brannon*. Cornell Univ.

Special Session: 336. Changing Face of Nutrition in the United States: How Nutrition Policy and Consumer Awareness are Changing the Practice of Nutrition and Food Science

10:30 am - 12:30 pm, Washington Convention Center, 102B

Chair: *R. Kopec*

11:18 am The role of nutrition science in shaping public policy. *P. Coates*. ODS, NIH

Minisymposium: 341. Innovative Dietary Assessment Tools (Including Use of Image and Visualization Methods)

10:30 am - 12:30 pm, Washington Convention Center, 152B

Chairs: *C. Boushey and L. Arab*

12:15 pm **341.7 MyDS: A mobile application to track dietary supplement use.** *J.S. Engel, P.R. Thomas, R.L. Bailey, A.L. Thurn*. ODS, NIH

Minisymposium: 348. Applications and Challenges of Public Use Data Sets for Secondary Data Analysis Nutrition Research

3:00 pm - 5:00 pm, Washington Convention Center, 150A

Chair: *N. Parekh and C. Boushey*

4:45 pm **348.7. Defining low B12 status in the U.S.** *R.L. Bailey, R. Carmel, R. Green, C.M. Pfeiffer, E.A. Yetley*. ODS, NIH, New York Methodist Hosp., Brooklyn, Weill Cornell Med. Col., Univ. of California, Davis, Sacramento and Ctrs. for Dis. Control and Prevent.

Posters: Tuesday, April 11, 7:30 am – 4:00 pm, Washington Convention Center, Exhibit Hall ABC

981. Bioactive Components IV: Anti-oxidant and Anti-inflammatory Functions II

12:45 pm **981.15 (A172) Bauer ketones 23 and 24 contribute to anti-inflammatory activity of Echinacea paradoxa.** *X. Zhang, L. Rizshsky, C. Hauck, L. Qu, M. P. Widrlechner, B.J. Nikolau, P.A. Murphy, D. F. Birt*. Iowa State Univ.

983. Protein and Amino Acid Metabolism

1:45 pm **983.16 (A209) Skeletal muscle satellite cell content following acute resistance exercise with or without essential amino acid ingestion in young adults.** *D. K. Walker, C.S. Fry, M.J. Drummond, J. M. Dickinson, D.M. Gundermann, K.L. Timmerman, E. Volpi, B. B. Rasmussen*. Univ. of Texas Med. Branch

1:45 pm **983.18 (A211) Nutritional predictors of muscle protein metabolism and function in older adults.** *M.M. Markofski, K.L. Timmerman, C.S. Fry, J.M. Dickinson, D.K. Walker, B.B. Rasmussen, E. Volpi.* Univ. of Texas Med. Branch

996 Fat Soluble Vitamins

12:45 pm **996.5 (A354): 'Dilute-and-Shoot' Method for Vitamin D Analysis in Dietary Supplement Capsules.** *W. Byrdwell.* USDA, Beltsville

1015. Drug Transporters

12:30 pm **1015.6 (C281) Pre-systemic fexofenadine drug-drug interactions at OATP1A2.** *C.A. Flynn, B. Hagenbuch, G.A. Reed.* Univ. of Kansas Med. Ctr.

Wednesday, April 13, 2011

Symposium: 434. Application of Systematic, Evidence-Based Review Methodology to Support Dietary Guidelines, Dietary Reference Intake Values and Medicare Coverage Policies: Challenges, Solutions and Future Steps

8:00 am - 10:00 am Washington Convention Center, 151B

Chair: *J. Lau and L. Van Horn*

Workshop: NIST Micronutrients Measurement Quality Assurance Workshop

9:00 am - 3:30 pm, Washington Convention Center, 102B

Chair: *Jeanice Brown Thomas*, Coordinator for the NIST Fat-Soluble Vitamin and Vitamin C Quality Assurance Programs, National Institute of Standards and Technology.

Visit the ODS Web site: <http://ods.od.nih.gov>