Fall 2011

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Staff Scientists Rebecca Costello and Marguerite Klein Retire

Two of the Office of Dietary Supplements' senior scientists retired this summer. Working in adjacent offices, they contributed in many important ways to help fulfill the mission of ODS, and they will be missed. New scientists will be hired to take over their positions.



Rebecca Bortz Costello

Rebecca Bortz Costello, Ph.D., retired in September after 13 years with ODS, most recently as director of grants and extramural activities where she encouraged partnerships with other National Institutes of Health (NIH) Institutes and Centers to facilitate funding of grants of high relevance to the ODS mission and goals. In 1999, she became the acting director of ODS, then deputy director through 2006. Over the years, Dr. Costello also organized numerous workshops and conferences on topics of

national interest in dietary supplements and conducted scientific reviews to identify gaps in knowledge on supplement ingredients. Recently, she collaborated with the U.S. Department of Defense and the Human Performance Resource Center at the Uniformed Services University in developing two educational materials on dietary supplements: A dietary supplement risk and benefit classification table and an interactive training module for health care professionals. Her research interest has focused on cardiovascular disease, and she is currently conducting a qualitative review of dietary supplement interventions for endothelial cell dysfunction. Dr. Costello will continue with ODS as a part-time scientific consultant.



Marguerite Klein

Marguerite Klein, M.S., who retired in July, joined ODS in 2008 as a health science administrator. She was the director of the NIH Botanical Research Centers (BRC) Program, whose purpose is to advance the scientific base of knowledge about botanical safety, efficacy, and biological action. She also worked closely with the director of the ODS Analytical Methods and Reference Materials (AMRM) Program, Joseph M. Betz, Ph.D. AMRM supports the development of validated analytical methods and reference materials for ingredients in dietary supplements. Together, they expanded the program and identified opportunities for integrating components of the BRC and AMRM programs. She also worked on specific projects, such as those involving soy and probiotics, to improve the integrity of products used in dietary supplement research. Ms. Klein retires after a

27-year career at the NIH. Prior to ODS, she spent 15 years with the National Heart, Lung, and Blood Institute and 9 years with the National Center for Complementary and Alternative Medicine (NCCAM).

Roundtable Assesses Biomarkers of Folate and Vitamin B12 Status Used in National Health Surveys

ODS, together with the National Center for Health Statistics at the Centers for Disease Control and Prevention (CDC), convened a roundtable panel, July 15–16, 2010, to review the measurement of biomarkers of folate and vitamin B12 status used in the National Health and Nutrition Examination Surveys (NHANES). The scientific papers resulting from this roundtable were published as a special supplement to the July issue of the American Journal of Clinical Nutrition (pp. 297S–365S). The roundtable panel included 23 experts in folate and vitamin B12 assessment, epidemiology, clinical laboratory science, and biostatistics. Also attending were scientists from government agencies that generate or use

NHANES data and develop reference methods and materials for these measures. Roundtable experts came to a number of conclusions, including the following:

- The close agreement between the serum results for the microbiological assay and liquid chromatography-tandem mass spectrometry (LC-MS/MS) procedures supported the conversion to LC-MS/MS for serum folate in future NHANES.
- Differences in results of two different procedures used for NHANES between 1974 and 2010 for the measurement of methyltetrahydrofolate and folate concentrations in serum and red blood cells warranted a data adjustment for time-trend analyses.
- The continued use of the National Institute of Standards and Technology (NIST) reference materials in NHANES biomarker analyses, and further development of additional reference materials by NIST, were a high priority.

In Memoriam: Norman R. Farnsworth, Ph.D., Pharmacognosist

Dr. Norman Farnsworth, distinguished professor of pharmacognosy at the University of Illinois at Chicago (UIC), died on September 10 at the age of 81. He was a friend of ODS, most recently as principal investigator and director of the Botanical Dietary Supplements for the Women's Health Center at UIC, which is cofunded by ODS and NCCAM. Mentor to several dozen master's degree and doctoral students, and postdoctoral fellows, he was an internationally recognized scholar and researcher, author of hundreds of scientific articles, and a man of outsized personality and humor. The American Botanical Council has published a tribute to this iconic, larger-than-life figure.

News You Can Use



New Fact Sheets on Multivitamin/mineral Supplements Available and Others Updated

The new Multivitamin/mineral (MVM) Supplements fact sheet for health professionals is available; a QuickFacts version for consumers and busy health professionals, also is available. Both fact sheets represent a new type of fact sheet from ODS, one focused on a category of products rather than a specific dietary supplement ingredient. MVMs are dietary supplements containing a combination of several or many vitamins and minerals, sometimes with herbal or other specialty

ingredients. These products are commonly referred to as *multis*, *multiples*, and *MVMs*, and more than one-third of all people in the United States take one regularly. Because manufacturers determine which ingredients and the amount of each ingredient in an MVM, many formulations are available in the marketplace. This fact sheet describes research on the relationship between MVM use and health status and provides guidance on choosing an MVM.

ODS also has updated its fact sheets on <u>vitamins B6</u> and <u>B12</u> over the last several months. They are now available on the ODS Web site in two versions. The Health Professional version provides a comprehensive review directed to health care providers. The QuickFacts version provides an overview for consumers, also suited for busy health care providers.

New Funding Opportunities for Research

ODS collaborates on funding initiatives across NIH and with other agencies through mechanisms such as Requests for Applications (RFAs), Program Announcements (PAs), and notices. Over the past few months, ODS has signed onto several funding initiatives. Further details are available.

Highlight: A PA has been issued jointly by the National Institute of Nursing Research and ODS: mHealth Tools to Promote Effective Patient-Provider Communication, Adherence to Treatment, and Self-Management of Chronic Diseases in Underserved Populations. mHealth tools may facilitate more timely and effective patient-provider communication around goal setting, treatment reminders, feedback on patient progress, and may improve health outcomes. This announcement encourages the development, testing, and comparative effective analysis of interventions using mHealth technologies in underserved populations.

Highlight: A PA has been issued jointly by the National Institute of Mental Health and ODS: <u>Translational Research for the Development of Novel Interventions for Mental Disorders</u>. This funding opportunity encourages applications to speed the translation of emerging findings on the neuroscience of mental disorders into novel intervention approaches that will ultimately reduce symptoms and/or restore function. A range of nonpharmacologic treatment approaches will be accepted, including those based on neurophysiological, cognitive, affective, and/or social neuroscience models, basic behavioral science, and neurodevelopmental models.

ODS Staff News



Regan Bailey

Regan Bailey, Ph.D., R.D., was selected to attend the Dannon Nutrition Leadership Institute, held at the Aspen Wye River Conference Center in Queenstown, MD, in June 2011. The Dannon Nutrition Leadership Institute is an intensive 5-day training program designed to provide participants with strategies for improving their ability to lead others in both their place of employment and in the field of nutrition.

Jody Engel, M.A., R.D., completed the NIH Senior Leadership Program in July 2011. This program focuses on leadership competencies that are essential to the achievement of NIH's scientific goals.



Jody Engel

Recent ODS Staff Publications

- Barry MJ, Meleth S, Kreder KJ, Avins AL, Nickel JC, Roehrborn CG, Crawford ED, Foster HE, Kaplan SA, McCullough A, Andriole GL, Naslund MJ, Lee JY, Williams OD, Kusek JW, Meyers CM, Betz JM, McVary KT. Effect of increasing doses of saw palmetto on lower urinary tract symptoms. *JAMA*. 2011 Sep 28;306(12):1344–51.
- Wong JB, Coates PM, Russell RM, Dwyer JT, Schutting JA, Bowman BA, Peterson SA. Economic analysis of nutrition interventions for chronic disease prevention: methods, research, and policy. *Nutr Rev.* 2011 Sep:69(9):S33–49.
- Fulgoni VL 3rd, Keast DR, Bailey RL, Dwyer J. Foods, fortificants, and supplements: where do Americans get their nutrients? J Nutr. 2011 Oct; 141(10):1847–54.
- Yetley EA, Coates PM, Johnson CL. Overview of a roundtable on NHANES monitoring of biomarkers of folate and vitamin B12 status: measurement procedure issues. Am J Clin Nutr. 2011 Jul;94(1):297S–365S.
- Yetley EA, Pfeiffer CM, Phinney KW, Fazili Z, Lacher DA, Bailey RL, Blackmore S, Bock JL, Brody LC, Carmel R, Curtin LR, Durazo-Arvizu RA, Eckfeldt JH, Green R, Gregory III JF, Hoofnagle AN, Jacobsen DW, Jacques PF, Molloy AM, Massaro J, Mills JL, Nexo E, Rader JI, Selhub J, Sempos C, Shane B, Stabler S, Stover P, Tamura T, Tedstone A, Thorpe SJ, Coates PM, Johnson CL, Picciano MF. Biomarkers of folate status in NHANES: a roundtable summary. Am J Clin Nutr. 2011 July;94: 303S–312S.
- Yetley EA, Pfeiffer CM, Phinney KW, Bailey RL, Blackmore S, Bock JL, Brody LC, Carmel R, Curtin LR, Durazo-Arvizu RA, Eckfeldt JH, Green R, Gregory III JF, Hoofnagle AN, Jacobsen DW, Jacques PF, Lacher DA, Molloy AM, Massaro J, Mills JL, Nexo E, Rader JI, Selhub J, Sempos C, Shane B, Stabler S, Stover P, Tamura T, Tedstone A, Thorpe DJ, Coates PM, Johnson CL, Picciano MF. Biomarkers of vitamin B-12 status in NHANES: a roundtable summary. Am J Clin Nutr. 2011 July;94:313S–321S.
- Yetley EA, Johnson CL. Folate and vitamin B-12 biomarkers in NHANES: history of their measurement and use. *Am J Clin Nutr.* 2011 July;94:322S–331S.
- Betz JM. Monacolin levels in red yeast rice: methodological questions (letter). Arch Intern Med. 2011 171:950-51.
- Costello RB, Loria CM, Lau J, Sacks FM, Yetley EA. Update on nutrition research methodologies: a selective review.
 Nutr Today. 2011 May/Jun;46(3):116–20.
- Williams MT, Warnock BJ, Betz JM, Beck JJ, Gardner DR, Lee ST, Molyneux RJ, Colegate SM. Detection of high levels of pyrrolizidine-N-oxides in the endangered plant *Cryptantha crassipes* (Terlingua Creek Cat's-eye) using HPLC-ESI-MS. *Phytochem Anal*. 2011 Mar 24;doi: 10.1002/pca.1314.

Recent ODS Staff Presentations—Highlights

For a complete list, see the ODS Web site: Staff Presentations

Supply Side West

October 10-14, 2011, Las Vegas, NV

Joseph M. Betz moderated the presentation, *The Integrity of Botanicals and Reference Materials*. Leila G. Saldanha, moderated, *The Role of Genetic Variability in Determining the Metabolism and Impact of Polyunsaturated Fatty Acid found in Western Diets and Dietary Supplements—The Emergence of Personalized Nutrition*. Both presentations were part of Nutrition Track I of the Supply Side West Education Program, on October 11. ODS also had an exhibit booth at the meeting.

• American Dietetic Association Food & Nutrition Conference & Expo

September 24-28, 2011, San Diego, CA

Christine Taylor presented an overview of the recent Institute of Medicine report on vitamin D and calcium at an ODS-sponsored session titled, *Spotlight on Vitamin D*, on September 26.

Mobile Applications: Impacts on Agency Operations

August 31, 2011, Webinar

Jody Engel gave a presentation about MyDS, the mobile app developed by the Office of Dietary Supplements, as part of a webinar titled, *Mobile Applications: Impacts on Agency Operations*, sponsored by Government Executive.

• Consortium for Globalization of Chinese Medicine

August 26-28, 2011, Shanghai, China

Paul Coates gave opening remarks, acted as session chair, and presented a talk titled, *Current Status of Regulatory* and *Scientific Issues in Dietary Supplements in the United States*.

Shanghai University of Traditional Chinese Medicine

August 25, 2011, Shanghai, China

Paul Coates gave a talk titled, Issues and Resources in Dietary Supplements.

• Medicine in the Media

July 13-16, 2011, Hanover, NH

Paul Coates gave a talk titled, How About Those Supplements? on July 15 at Dartmouth College.

• ODS Dietary Supplement Research Practicum

June 6-9, 2011, Washington, DC

Many staff members made presentations at this ODS annual event. See the ODS Web site for a complete list: Staff Presentations.

• Clinical Nutrition Update: Recipe for Success

May 18, 2011, Camp Hill, PA

Jody Engel gave a talk titled, *Dietary Supplements: What You Need To Know*, to registered dietitians at this meeting sponsored by Sodexo Health Care.

• University of Wisconsin-Madison Department of Population Health Sciences Seminar Series

April 18, 2011, Madison, WI

Christopher Sempos gave a presentation titled, *Serum 25-Hydroxyvitamin D and Mortality: Results From the NHANES III Follow-up Study.*

• North Carolina Dietetic Association Annual Meeting

April 17-19, 2011, Winston-Salem, NC

Paul Thomas gave a lecture titled, *Dietary Supplements: Overview and Update*, to a group of nutrition professionals on April 19.

• Experimental Biology (EB)

April 9-13, 2011, Washington, DC

For a full listing of ODS staff presentations at EB, see the ODS Web site: Staff Presentations.

Upcoming Events

American Public Health Association 138th Annual Meeting and Expo

Social Justice: Public Health Imperative October 29–November 2, 2011, Washington, DC ODS will have an exhibit booth (#6079).

8th Workshop on the Assessment of Adequate and Safe Intake of Dietary Amino Acids

November 10, 2011, Washington, DC

Rob Russell will give a presentation titled, *Key Events Dose-Response Framework (KEDRF)* and *Its Application to Nutrients: Update on Vitamin A and Progress Reports on Other Nutrient Case Studies.*

ODS Update provides information on news, activities, and resources from the Office of Dietary Supplements (ODS). ODS is a program office within the Office of the Director of the National Institutes of Health (NIH). The mission of ODS is to strengthen knowledge and understanding of dietary supplements by evaluating scientific information, stimulating and supporting research, disseminating research results, and educating the public to foster an enhanced quality of life and health for the U.S. population.

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About ODS

The Office of Dietary Supplements (ODS) is part of the National Institutes of Health (NIH), the principal biomedical and behavioral research agency of the United States Government. NIH is a component of the U.S. Department of Health and Human Services.

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