

# Office of Dietary Supplements Update

National Institutes of Health  
U.S. Department of Health and Human Services

## Conference on Multivitamin/Mineral Supplements to be Held May 15-17

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The National Institutes of Health will convene a 3-day state-of-the-science conference titled Multivitamin/Mineral [MVM] Supplements and Chronic Disease Prevention on May 15-17 in the Natcher Auditorium on its main Bethesda campus. Sponsored by ODS and the Office of Medical Applications of Research, the conference will assess the evidence available on the use of MVMs and outcomes for chronic disease prevention in adults and make recommendations for future research. Admission is free and there is still time to register.

- What is known about the dietary nutrient intake of MVM users versus non-users?
- What is the efficacy of single vitamin/mineral supplement use in chronic disease prevention?
- What is the efficacy of MVM in chronic disease prevention in the general population of adults?
- What is known about the safety of MVM for the generally healthy population?
- What are the major knowledge gaps and research opportunities regarding MVM use?

Specifically, the conference will explore the following key questions:

- What are the current patterns and prevalence of the public's use of MVM supplements?

The first two days of the conference will consist of presentations by experts in the field as well as public discussions. On day

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[HTTP://ODS.OD.NIH.GOV](http://ods.od.nih.gov)

## Value of Berries and B Vitamins for Neurodegenerative Disorders is Inconclusive, New Review Concludes

Alzheimer's and Parkinson's diseases are the two most common age-related neurodegenerative disorders. They and other disorders of the nervous system account for more long-term care, chronic suffering, and diminished quality of life than all other disorders combined.

systematically examined research to assess the effects, associations, mechanisms of action, and safety B vitamins and, separately, berries and their constituents to prevent and treat neurocognitive disorders. AHRQ evaluated human, animal, and in vitro studies on specific B vitamins (B1, B2, B6, B12, and folate) as well as a dozen types of berries (such as blueberries, strawberries, and cranberries)

A new evidence review by the federal government's Agency for Healthcare Research and Quality (AHRQ)

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## News for Researchers

ODS coordinates and collaborates on funding initiatives across NIH and with other agencies through mechanisms such as Requests for Applications (RFAs) and Program Announcements (PAs). Some of these initiatives are highlighted below. For further information about them and other ODS-funded opportunities, visit [http://dietary-supplements.info.nih.gov/Funding/PAs\\_and\\_RFAs.aspx](http://dietary-supplements.info.nih.gov/Funding/PAs_and_RFAs.aspx).

### ***Development of Disease Biomarkers (PA-06-146)***

This PA will provide resources to validate candidate biomarkers for well-defined human diseases (including those of the liver, kidney, urological tract, and digestive and hematologic systems), endocrine and metabolic disorders, diabetes and its complications, and obesity, for which there are no or very few biomarkers, or for which standard biomarkers are prohibitively invasive or expensive.

### ***Improving Diet and Physical Activity (PAR-06-104)***

The measurement of usual dietary intake or physical activity, over varying time periods or in the past, has by necessity relied on self-reports. Such subjective reporting instruments are cognitively diffi-

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## Dr. Joseph Betz Receives Botanical Research Award

We're happy to report that ODS' Joseph M. Betz, PhD is the first recipient of the Norman R. Farnsworth Botanical Research Award, given by the American Botanical Council, to honor "outstanding effort" that has advanced the knowledge of medicinal plants and natural products. We'll quote from the award announcement because it cogently describes Joe's work and its importance to better research on botanical dietary supplements and the manufacture of high-quality products.

"One of the major challenges facing medicinal plant scientists, health professionals, health writers, and members of industry, is how to interpret information in the scientific and medical literature related to herbs and medicinal plant preparations. All too often, published papers fail to accurately and adequately identify the botanical material used in a study or referenced in a case report. In addition, within the herb industry, determining the proper identity and qualities of botanical materials is of primary importance in issues of quality control, good manufacturing practices, herb safety and clinical efficacy. In order to help ensure proper identity, validated analytical methods must be established for each botanical and/or botanical preparation. This has been one of the primary areas of concern in the herb industry for over a decade.

"Dr. Joseph M. Betz stands out as a leader in this field... [A]t the Association of Official Analytical Chemists (AOAC), he helped establish the framework for the development of validating the analytical methods to be used for botanicals. Now in his role at the Office of Dietary Supplements, where he is the Director of the Dietary Supplements [Analytical] Methods and Reference Materials Program, he is the point man

in the government's attempts to foster and fund efforts to validate analytical methods and reference materials so that the analyses used by various parties are accurate, consistent and meaningful. Dr. Betz, a pharmacognosist by training, and a man committed to scientific research on medicinal plants, is eminently qualified and most deserving for this award."

The award is named for Norman R. Farnsworth, PhD, the world renowned medicinal plant scientist, who is a professor in the College of Pharmacy at the University of Illinois at Chicago. There he directs the ODS-funded Center for Botanical Dietary Supplements Research in Women's Health. The American Botanical Council is a nonprofit, international organization that educates professionals, consumers, and the media on the safe and effective use of herbs and botanical supplements.

## Recent Additions to the ODS Web Site

- Testimony of ODS Director Paul M. Coates, PhD before the Committee on Government Reform of the U.S. House of Representatives on March 9. It provides a cogent overview of ODS' work and mission. ([http://dietary-supplements.info.nih.gov/News/Congressional\\_Testimony\\_-\\_The\\_Mission\\_and\\_Work\\_of\\_the\\_ODS\\_at\\_NIH.aspx](http://dietary-supplements.info.nih.gov/News/Congressional_Testimony_-_The_Mission_and_Work_of_the_ODS_at_NIH.aspx))

## International Model for Nutrient Risk Assessment Established

People around the world have increased their intake of nutrient substances by eating more fortified and functional foods as well as by taking dietary supplements. In turn, there has been growing interest on an international level to determine levels of intake that may pose risk.

On May 2-6, 2005, a scientific workshop convened by the Food and Agriculture Organization/World Health Organization of the United Nations met in Geneva, Switzerland to develop a model for nutrient risk assessment. The model

combines information from dietary intake assessments with information from hazard identification and characterization to carry out risk characterization. The process is preceded by a problem formulation step.

The workshop report includes a complete description of the model and is available online at [http://www.who.int/ipcs/highlights/nutrientproject\\_may18/en/index.html](http://www.who.int/ipcs/highlights/nutrientproject_may18/en/index.html). ODS provided some financial support for the workshop. Dr. Elizabeth Yetley, ODS Senior Nutrition Research Scientist, participated in the workshop.

## Upcoming Conferences Co-sponsored by ODS

### ***North American Research Conference on Complementary & Integrative Medicine***

May 24-27

Edmonton, Alberta, Canada

<http://www.imconsortium-conference2006.com>

### ***Interventions in Aging and Age-Related Diseases: The Present and the Future (American Aging Association)***

June 2-5

Boston, MA

<http://www.americanaging.org/2006.html>

### ***News for Researchers (continued from page 1)***

cult for respondents. They are also prone to measurement errors that may vary among population sub-groups and depend on the time frame considered and the characteristics of the respondents. Innovative research to enhance the quality of measurements of dietary intake and physical activity are needed. Applications may include development of novel assessment approaches, better methods to evaluate instruments, assessment tools for culturally diverse populations (across various age groups, including older adults), improved technologies or applications of existing technology, or statistical methods to assess or correct for measurement errors or biases.

### ***Support for Conferences and Scientific Meetings (PA-06-041)***

A conference/scientific meeting is defined as a gathering, symposium, seminar, scientific meeting, workshop or any other organized, formal meeting where persons assemble to coordinate, exchange, and disseminate information or to explore or clarify a defined subject, problem, or area of knowledge. Eligible entities include: for-profit and non-profit organizations, public and private institutions (e.g., universities, colleges, hospitals, and laboratories), units of state and local governments, and faith- and community-based organizations.

### **Multivitamin/Mineral Supplements (continued from page 1)**

three, an impartial, independent panel of scientists will present a draft statement of its collective assessment of the evidence to answer the questions above. By that time, the panel will have reviewed the published literature, including a systematic

literature review commissioned through the Agency for Healthcare Research and Quality. A final statement will be released approximately one month after the conference.

Go to <http://www.consensus.nih.gov> to obtain further information about the conference, register for it, and view a

preliminary agenda of presentations and speakers. If you are unable to attend but interested in the topic, go to this Web site to pre-order a free copy of the expert panel's final statement. You may also view the draft statement on this site beginning late in the day of Wednesday, May 17.

### **Berries, B Vitamins, and Neurodegenerative Disorders (continued from page 1)**

and their constituents (e.g., tannins, anthocyanins, and phenolics). It found 85 human studies and 17 animal or in vitro studies pertinent to B vitamins, but only 1 human study and 18 animal and in vitro studies relevant to berries.

Overall, the research base is inadequate to judge whether B vitamins or berries may be of value in disorders of the brain. The majority of human studies were of poor quality; most used cross-sectional designs that, for example, failed to adjust for potential confounders and were not standardized for B-vitamin measurement techniques and tests of cognitive function. Animal studies typically failed to use well-established models for neurocognitive disorders and instead used severely vitamin-deficient rodents. And almost all the studies of berries have been performed in a single laboratory.

*B Vitamins and Berries and Age-Related Neurodegenerative Disorders* was prepared by the Tufts-New England Medical Center's Evidence-based Practice Center in Boston under AHRQ's sponsorship. ODS co-funded this effort together with the National Center for Complementary and Alternative Medicine (NCCAM). To access the full report, go to <http://www.ahrq.gov/clinic/evrptpdfs.htm#berry>.

## **Multivitamin/ Mineral Supplements** and Chronic Disease Prevention

NIH State-of-the-Science Conference

### **Date & Venue\***

**May 15-17**

**2006**

**National Institutes of Health**

**Natcher Conference Center**

\*National Institutes of Health, Natcher Conference Center, 9000 Rockville Pike, Building 45, Bethesda, Maryland 20892

### **Information/Registration**

Online	<a href="http://consensus.nih.gov">consensus.nih.gov</a>
E-mail	<a href="mailto:consensus@mail.nih.gov">consensus@mail.nih.gov</a>
Telephone	1-888-644-2667

### **Sponsored By**

ODS	Office of Dietary Supplements
OMAR	Office of Medical Applications of Research
NIH	National Institutes of Health

U.S. Department of Health & Human Services

## Recent Publications by ODS Staff

- *Joseph Betz and Rebecca Costello*. Letter to editor: studies on natural products. *Archives of Internal Medicine* 166(3):370-371, February 13, 2006.
  - *Johanna Dwyer*. Starting down the right path: nutrition connections with chronic diseases of later life. *American Journal of Clinical Nutrition* 83(2):415S-420S, February 2006.
  - Nancy Potischman, Barbara E. Cohen, and *Mary Frances Picciano*. Dietary recommendations and identified research needs for The National Children's Study. *Journal of Nutrition* 136(3):686-689, March 2006.
  - *Rebecca B. Costello* and George P. Chrousos. Other bioactive food components and dietary supplements. Pp. 289-307 in *Nutrient Composition of Rations for Short-Term, High-Intensity Combat Operations*. The National Academies Press, Washington, DC. 2006. 462pp.
  - *Johanna T. Dwyer*. Vegetarian diets: nutritional adequacy and practice. In: *Encyclopedia of Human Nutrition, Second Edition* (edited by Benjamin Caballero, Lindsay Allen, and Andrew Prentice). Academic Press, Burlington, MA. 2006. 2,000pp.
  - David Heber, George L. Blackburn, Vay Liang W. Go, and John Milner (editors). *Nutritional Oncology, Second Edition*. Academic Press, Burlington, MA. 2006. 822pp.
    - Chapter 28: Dietary supplements in cancer prevention and therapy. *Mary Frances Picciano*, Barbara E. Cohen, and *Paul R. Thomas*. Pages 507-519.
    - Chapter 47: Dietary guidelines in cancer prevention. *Johanna Dwyer*. Pages 757-778.
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