

**MINUTES OF THE NUTRITION COORDINATING COMMITTEE (NCC)
MEETING, NATIONAL INSTITUTES OF HEALTH (NIH)
Rockledge 2, Conference Room 9100-9104, Bethesda, MD
October 2, 2008 2:00- 4:00 PM**

WELCOME

Dr. Pam Starke-Reed, Deputy Director, NIH Division of Nutrition Research Coordination (DNRC), convened the meeting at 2:04 PM and welcomed participants. Participating via phone were Dr. Krishan Arora, NIH NCRR; COL Gaston Bathalon, USARIEM; Ms. Jean Charles-Azure, IHS; Dr. Darla Danford, NIH NIDDK; Dr. Deborah Galuska, CDC; Dr. Shirley Gerrior, USDA CSREES; Dr. Judy Hannah, NIH NIA; Dr. David Klurfeld, USDA; Dr. Molly Kretsch, USDA; Ms. Michele Lawler, HRSA; Dr. Marya Levintova, NIH FIC; Dr. Elizabeth Maull, NIH NIEHS; Dr. James McClung, USARIEM; CAPT Margaret McDowell, CDC NCHS; Dr. John Milner, NIH NCI; Dr. Deborah Olster, NIH OBSSR; Dr. Marshall Plaut, NIH NIAID; Dr. Daniel Raiten, NIH NICHD; Dr. Sharon Ross, NIH NCI; Dr. Derrick Tabor, NIH, NCMHD; and Ms. Martina Vogel-Taylor, NIH ODP. The agenda for the meeting is provided as Appendix A, and the list of attendees is provided as Appendix B.

APPROVAL OF MINUTES FROM THE SEPTEMBER 4, 2008 NCC MEETING

Minutes from the September 4, 2008 NCC meeting had previously been sent to NCC members via email. Dr. Starke-Reed asked if there were any other corrections to the minutes. There were none. Dr. Paul Coates, NIH Office of Dietary Supplements (ODS) made a motion to approve the minutes, and Dr. John Milner, NIH National Cancer Institute (NCI), seconded the motion. The minutes were thus approved and will be posted on the DNRC website, <http://www.dnrc.nih.gov>, along with the minutes from previous NCC Meetings.

NUTRITION RESEARCH PROGRAMS SUPPORTING THE WARFIGHTER

COL Karl Friedl, PhD and two of his colleagues, Dr. James McClung and COL Gaston Bathalon, PhD, RD presented an overview of the nutrition research programs at the U.S. Army Research Institute of Environmental Medicine (USARIEM) located in Natick, Massachusetts. The Institute's mission is to conduct basic and applied research to determine how exposure to extreme heat, severe cold, high terrestrial altitude, occupational tasks, physical training, deployment operations, and nutritional factors affect the health and performance of military personnel. USARIEM, which employs almost 200 researchers and support staff, actively engages in collaborative efforts with other agencies to accomplish their mission. The Military Nutrition Division (MND), one of the 4 divisions of USARIEM, has 6 investigators, 5 dietitians, approximately 15 technicians and a 3.2 million dollar budget. MND's main focus areas include bioenergetics and metabolism, healthy weight management, and combat ration testing.

Dr. McClung discussed details pertaining to iron deficiency and female soldiers, which is one of the current MND research areas. Iron deficiency is the most prevalent micronutrient deficiency in the world and affects 16% of American women between the ages of 12 and 49. Since iron deficiency impacts immune function, cognitive function, energy metabolism, and performance, it is a significant concern for soldiers. MND research has indicated that iron deficiency can occur over the course of basic combat training and that it can have a detrimental impact on performance. As a result, efforts to identify iron deficient soldiers prior to training as well techniques to prevent/treat iron deficiency during training have been employed.

Another area of ongoing MND research is healthy weight management, which was discussed by COL Bathalon. Per AR 600-9, the Army Weight Control Program, all soldiers, regardless of rank, are weighed at 6-month intervals to demonstrate that they are below tabled height-weight limits. If a soldier exceeds fat standards prescribed by gender and age, the unit commander must enter the individual in the Army Weight Control Program. In order to assist soldiers needing to lose weight, the MND conducted research about the efficacy of a Weigh to Stay (WTS) and a meal replacement (MR) program for promoting weight and body fat loss in U.S. army soldiers. It was determined that neither group (WTS or WTS+MR) was more effective at reducing body weight and %body fat, though one reason for this may have been the high rate of attrition. Another recent study examining the efficacy of over-the-counter orlistat for weight loss in active duty soldiers has provided some positive results.

COL Friedl provided several additional updates pertaining to areas of nutrition research within the Department of Defense.

1) The Food and Nutrition Board of the National Academy of Sciences has a standing Committee on Military Nutrition Research that continues to provide guidance for nutrition research within the DoD. Most recently, the Institute of Medicine was requested to convene an ad hoc expert committee under the oversight of the Committee on Military Nutrition Research in order to provide recommendations on an approach to manage the use of dietary supplements by military personal. This report has been completed and is available online at http://www.nap.edu/catalog.php?record_id=12095. The final version of this book has not yet been published.

2) A new website on the history of military research will be available soon. For more information about this site, contact COL Friedl (Karl.Friedl@us.army.mil).

3) On September 27-28, 2008 a very successful workshop, “Mathematical Modeling of Human Metabolism & Body Weight Regulation,” was held in Bethesda. The meeting was sponsored by NIH, the Department of Defense, BioSim, and MITACS. More information can be found on the following website: <http://www.mitacs.ca/conferences/HMBW/>.

ENVIRONMENTAL SYSTEMS OF PUBLIC HEALTH WORKSHOP

Dr. Daniel Raiten, NICHD, presented a summary of the “Environmental Systems of Public Health Workshop” that took place on September 26, 2008. The purpose of the workshop was to determine how system science may inform three complex environmentally related health issues that predominantly affect children in the developing world. These issues include indoor air pollution, nutritional deficiencies and obesity. Current understanding and research gaps were presented. Additionally, there were presentations about the evolving area of mathematical modeling and system science to address complex environmentally related health problems and a moderated discussion among experts to gain insights about areas of consensus and areas of need for future research. An agenda for this meeting can be found in Appendix C. A summary report from the meeting will be available in the future.

NANOTECHNOLOGY AND NUTRITIONAL SCIENCES

Dr. Pam Starke-Reed and Dr. Crystal McDade-Ngutter, DNRC, provided several updates relating to nanotechnology.

- 1) On September 8, 2008 the Food and Drug Administration held a public meeting on nanotechnology in Rockville, MD in order to gather information that will assist FDA in implementing the recommendations of the Nanotechnology Task Force Report. One of the breakout sessions pertained to food and color additives, including food contact substances and dietary supplements. The full proceedings from this meeting are available at <http://www.fda.gov/nanotechnology2008/>.
- 2) The [Trans-NIH Nanotechnology Task Force](#), which is charged with developing an NIH-wide scientific and policy vision for nanotechnology including a trans-NIH plan to determine the fundamental interactions of engineered nanomaterials with biological systems, will be hosting a Nanotech Week in April 2009. Both Dr. Van Hubbard, DNRC, and Dr. Paul Coates, ODS, have had an active role in this Task Force. As of now, nutrition is not on the agenda for nanotech week, but the 1st day will provide a general overview of nanotechnology that may be very beneficial for those interested in the topic. For more information, contact Dr. Starke-Reed (starkep@mail.nih.gov).
- 3) Dr. McDade-Ngutter reminded the NCC about the upcoming December 10th Food Forum Workshop on Nanotechnology in Food Products. The workshop

will examine the impact that nanotechnology has on food science, nutrition, and the consumer, both currently and in the future. The planning group has added additional speakers to the program, and they are in the process of putting final touches on the agenda. Dr. McDade-Ngutter will notify NCC members when registration begins.

- 4) Dr. McDade-Ngutter also noted that the Food Industry Summit on Nanotechnology scheduled for October 27th & 28th and sponsored by USDA has been postponed. The planning committee is reconfiguring the program and recently rescheduled the meeting for spring of 2009.
- 5) The NIH Nanotechnology Subgroup sent a proposal to EB for a late breaking session scheduled for April 2009 in New Orleans. The title of this proposal is Nanotechnology Research: Applications in Nutritional Science. It will highlight emerging nanotechnologies and encourage collaboration between various disciplines with and interest in Nanotechnology. Subsequent to the NCC meeting, NIH has received notification that the symposium has been accepted and will be held on the afternoon of Tuesday, April 21, 2009.

REPORTS FROM NCC MEMBERS AND LIASONS

Dr. Deborah Galuska, CDC, announced that a special supplement containing 16 papers on infant feeding practices was recently published in Pediatrics. Dr. Galuska raised the possibility of presenting some of the supplement content to the NCC at a future meeting. The supplement can be found at http://pediatrics.aappublications.org/content/vol122/Supplement_2/

Dr. Kathy Ellwood, FDA, announced that the FDA Final Rule allowing new vitamin D and calcium health claims has been published in the Federal Register. The osteoporosis risk reduction health claim was amended to reflect the importance of vitamin D, in combination with calcium, in promoting long-term bone health. The amended labeling provides for simplified model claim language that eliminates requirements to reference the mechanism or sex, race, and age that were part of the existing calcium and osteoporosis health claim. The FDA Final Rule can be found at <http://www.fda.gov/OHRMS/DOCKETS/98fr/E8-22730.pdf>

Ms. Jean Charles-Azure, Indian Health Service, announced that a small working group met in August to begin the preparation for the IHS Strategic Plan on Obesity, which is a follow-up to the 2005 plan. A framework is being included to capture input from various tribes. The new plan will be completed by the end of October.

UPDATE FROM THE DHHS OFFICE OF DISEASE PREVENTION AND HEALTH PROMOTION (ODPHP)

Ms. Kathryn McMurry provided several updates from ODPHP:

Physical Activity Guidelines: The Physical Activity Guidelines for Americans Launch and Partnership Forum will be held on October 7, 2008 from 2:30-4:00 PM in the Great Hall of the U.S. Department of Health and Human Services, Hubert H. Humphrey Building. For more information about the Physical Activity Guidelines, visit www.health.gov/paguidelines.

2010 Dietary Guidelines Advisory Committee: The Chair and Vice Chair for the 2010 Dietary Guidelines Advisory Committee (DGAC) have been confirmed. All other committee members have been invited. Once all members have accepted the position, the 2010 DGAC will be announced.

Healthy People 2020: The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020 will hold its sixth meeting October 15, 2008 from 2:00 p.m. to 4:00 p.m. EDT. on the Internet via WebEx. The purpose of the meeting is to allow the full committee to continue its work on its Report to the Secretary. More information about Healthy People 2020 is available at www.healthypeople.gov.

ODPHP Staff: Ms. McMurry introduced Dr. Teka McKnight, who has recently joined the Office of Disease Prevention and Health Promotion to do a rotation focusing on preventive medicine.

UPDATE FROM THE NIH OFFICE OF DIETARY SUPPLEMENTS

Dr. Paul Coates updated the NCC on several ODS activities.

Vitamin D: The American Journal of Clinical Nutrition published a supplement in August 2008 which contains the proceedings of last year's "Vitamin D and health in the 21st Century" conference held at NIH. Federal employees who would like a print copy of the supplement may request one from Claudia Faigen in ODS (Faigenc@mail.nih.gov). Also, the next meeting of the Vitamin D Federal Working Group will be held on October 14 from 1:00-3:30 PM at EPN, Room G; the major topic of that meeting will be the discussion of two emerging grant initiatives on vitamin D.

ODS Seminar: The next monthly seminar will be given on October 15 from 11-12 at EPN, Room J, by Dr. Kenneth Setchell (University of Cincinnati). His topic is: "Unique equol metabolites of soy isoflavones – biological properties, physiological behavior, and clinical significance".

Trans-NIH/Agency Working Group on Dietary Supplements: This group, which meets twice a year, will gather on October 23 from 1:00-3:30 PM at the Neuroscience Center, Room C. Topics to be discussed include: the Dietary Supplement Label Database project, a collaboration between ODS and NLM; emerging issues in vitamin D; ODS strategic planning; and a presentation by Christopher Sempos from ODS.

One Expert Leaves and Another Expert Joins ODS Staff: Dr. Patsy Brannon, Professor at Cornell, has completed her one-year stay at ODS, during which time she was a major force in focusing our efforts on vitamin D. We are pleased to announce that Dr. Robert Russell, Emeritus Director of the Tufts-USDA Human Nutrition Research Center on Aging, will join ODS as an Expert for one year to work with us on implementing systematic reviews for nutrition research and policy applications.

UPDATE OF DNRC ACTIVITIES

Nutrition Education Subcommittee (NES). CAPT Jean Pennington, DNRC, provided an update of the activities of the NIH NCC NES. Since January 2008, the NES has reviewed (or forwarded for joint DHHS/USA review) 19 documents, 11 from NIH (1 each from ODS and WIN; 2 each from NHLBI, NICHD, and NCI; and 3 from NIA), 5 from other DHHS agencies, and 3 from USDA. Materials reviewed/forwarded since the last NCC meeting are:

- *Helping Your Overweight Child* (Spanish version) (WIN)
- *MyPyramid for Preschoolers* (USDA/NES)

The DNRC listing of NIH nutrition education materials is available on the DNRC website (http://dnrc.niddk.nih.gov/nutrition_education/index.shtml). NCC members are requested to check the information on the website and provide any needed changes or new materials to Ms. Karen Regan, DNRC. The DNRC would appreciate receiving 10-20 copies of newer NIH nutrition-related publications for display in the DNRC Office. Please send them through interoffice mail to CAPT Pennington, Democracy 2, room 629.

NEXT NCC MEETING

The next meeting will be December 4, 2008

ADJOURNMENT

The meeting was adjourned at 3:50 PM

LIST OF APPENDICES

Appendix A: NIH NCC Meeting Agenda for October 2, 2008

Appendix B: NIH NCC Meeting Attendees for October 2, 2008

Appendix C: Environmental Systems of Public Health Workshop - Agenda

**APPENDIX A: NIH NUTRITION COORDINATING COMMITTEE MEETING
AGENDA**

1. **Welcome**.....Pam Starke-Reed

2. **Approval of Minutes of the September 4, 2008 meeting**.....Pam Starke-Reed

3. **Overview: Nutrition Research Programs Supporting the Warfighter**.....COL Karl Friedl & other USARIEM Staff, DoD

4. **Environmental Systems of Public Health Workshop**.....Dan Raiten, NICHD

5. **Nanotechnology and Nutritional Sciences**.....Pam Starke-Reed and
Crystal McDade-Ngutter, DNRC

6. **Reports from NCC Members and Liaisons**.....NCC Members

7. **ODPHP Activities Update**.....Kathryn McMurry, ODPHP/OS

8. **ODS Activities Update**.....Paul Coates, ODS

9. **Current DNRC Update of Activities**.....DNRC Staff
 - Nutrition Education Subcommittee Update.....Jean Pennington*
 - International Committee Information.....Pam Starke-Reed/Dan Raiten*
 - HNRIM Update.....Jim Krebs-Smith/Karen Regan

Next Meeting - December 4, 2008

*** Updates will be included in the minutes of the meeting only**

APPENDIX B: NCC MEETING ATTENDEES FOR OCTOBER 2, 2008

	Members Present	Members Absent	Alternates Present
<u>Chairperson:</u>		V Hubbard	P Starke-Reed
<u>NIH Members:</u>			
NCI	J Milner		S Ross
NHLBI	D Danford		
NIDCR		R Nowjack-Rayner	
NIDDK		C Miles	
NINDS		M Mitler	
NIAID	M Plaut		
NIGMS		S Somers	
NICHD		G Grave	D Raiten
NEI		N Kurinij	
NIEHS	E Maull		
NIA	J Hannah		
NIAMS		J McGowan	T Smith
NIDCD		B Wong	
NIMH		W Riley	
NIDA		G Lin	
NIAAA		R Breslow	
NINR		P Cotton	
NCCAM		L Duffy	
NCMHD	D Tabor		
NCRR	K Arora		
FIC	M Levintova		
NHGRI		S Basaric	
<u>NIH Liaison Members:</u>			
CC		N Sebring	
CIT		J Mahaffey	
CSR		S Kim	
NLM		S Phillips	
OBSSR	D Olster		
OC			
ODS	P Coates		
OD/ODP		B Portnoy	
OLPA			
ORWH			
PRCC	M Vogel-Taylor		
<u>Agency Liaison Representatives:</u>			
AHRQ		I Mabry-Hernandez	
CDC/NCCDPHP	D Galuska		
CDC/NCHS	M McDowell		
FDA	K Ellwood		S Blakely
HRSA	M Lawler		
IHS		T Brown	J Charles-Azure
ODPHP	K McMurry		
USDA	M Kretsch		D Klurfeld
DOD	K Friedl		

DNRC: R Fisher, S Frazier, W Johnson-Askew; J Krebs-Smith, C McDade-Ngutter, K Regan

Guests: G Bathalon (USARIEM); C Davis (NCI), M Donovan (NCI/ODPHPI), P Hans (NINDS); J McClung (USARIEM); T McKnight (ODPHP)

APPENDIX C

Environmental Systems of Public Health Workshop
September 26, 2008

National Institutes of Health, The Cloisters
1 Cloister Court
Bethesda, MD 20814-1460

Sponsored by

Eunice Kennedy Shriver National Institute of Child Health and Human Development,
National Institute of Environmental Health Sciences
Office of Behavioral and Social Sciences Research
National Cancer Institute

Purpose:

To determine how system science may inform three complex environmentally related health issues that predominantly affect children in the developing world including indoor air pollution, nutritional deficiencies and obesity. Current understanding and research gaps will be presented. Subsequently, there will be presentations about the evolving area of mathematical modeling and system science to address complex environmentally related health problems, and a moderated discussion among experts to gain insights about areas of consensus and areas of need for future research.

Agenda

- 8:15 – 8:25 Welcoming Remarks
Yvonne Maddox
- 8:25 - 8:35 Overview of Workshop
Speakers: William J. Martin, NIEHS
Dan Raiten, NICHD
Terry Huang, NICHD
Patty Mabry, OBSSR
- 8:35 - 9:00 Health effects of bio mass fuel use
Speaker: Kirk Smith, Berkeley
- 9:00 – 9:25 A systems approach to indoor air pollution
Speaker: Majid Ezzati, Harvard
- 9:25 – 9:35 Discussion
- 9:35 – 9:45 Break
- 9:45 – 10:10 Nutritional indicators of childhood outcome in the developing world
Speaker: Chris Duggan, Harvard

- 10:10–10:35 Impact of iron on cognition and behavioral development
Speaker: Betsy Lozoff, University of Michigan
- 10:35–10:50 Discussion
- 10:50 – 11:15 Contribution of the built environment to obesity
Speaker: Andy Dannenberg, CDC
- 11:15 – 11:40 Preventing childhood obesity: a solution oriented research paradigm
Speaker: Thomas Robinson, Stanford
- 11:40-11:50 Discussion
- 11:50–12:05 Lunch
- 12:05–12:45 Overview of system science methodologies
Speaker: Hazhir Ramandad, Virginia Tech
- 12:45-1:10 Utility of systems science methodology vs. epidemiology
Stephen Marcus, NCI
- 1:10-1:35 Agent Based Modeling of the Obesity Epidemic
Speaker: Ross Hammond, Brookings Institution
- 1:35-2:45 Response by discussants (Jon Samet, Herman Mitchell, Abhik Das,
Patty Mabry, Robert Goldenberg, Gerald Combs)
Moderated by Gilman Grave, NICHD
- 2:45-3:00 Break
- 3:00-4:30 Open discussion - Moderated by Gilman Grave, NICHD
- 4:30-4:45 NIH initiative on system science
Patty Mabry, OBSSR
Terry Huang, NICHD
- 4:45-5:00 Next steps and wrap up – led by William Martin, NICHD