

**MINUTES OF THE NUTRITION COORDINATING COMMITTEE (NCC)
MEETING, NATIONAL INSTITUTES OF HEALTH (NIH)
Rockledge 2, Conference Room 9100-9104, Bethesda, MD
December 3, 2009 2:00- 4:00 PM**

WELCOME

RADM Van Hubbard, Director, NIH Division of Nutrition Research Coordination (DNRC), convened the meeting at 2:02 PM and welcomed participants. Participating via phone were: Ms. Sanja Basaric, NIH NHGRI; Ms. Jean Charles-Azure, IHS; Dr. Rebecca Costello, NIH ODS; Dr. Linda Duffy, NIH NCCAM; Ms. Marguerite Klein, NIH ODS; Ms. Michele Lawler, HRSA; Dr. Iris Mabry-Hernandez, AHRQ; Dr. Douglas Sheeley, NIH NCCR; and Ms. Martina 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 NOVEMBER 5, 2009 NCC MEETING

Minutes from the November 5, 2009 NCC meeting had previously been sent to NCC members via email. RADM Van Hubbard asked if there were any other corrections to the minutes. There were none. Dr. Sharon Ross, NIH National Cancer Institute (NCI), made a motion to approve the minutes, and Ms. Jody Engel, NIH Office of Dietary Supplements (ODS), 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.

PROBING THE SPATIOTEMPORAL DYNAMICS OF CELL BIOCHEMICAL SIGNALING USING QUANTUM DOT NANOTECHNOLOGIES

Dr. Tania Vu, Assistant Professor in the Division of Biomedical Engineering, School of Medicine, Oregon Health and Science University, provided an overview of nanoscale technologies for imaging the structure and function of neurons at the size scale of single, dynamic molecules. While the specific focus of her work is the nervous system, the tools she described may be broadly-applied to other biological systems, which may be of keen interest to the nutrition community.

Dr. Vu presented specific examples of quantum dot-based technologies that her lab has developed to investigate cellular signaling. These included QD imaging probes for imaging protein trafficking and endocytic events in live cells and ultrasensitive QD assays for studying protein expression and specific protein-protein interactions in limited cell samples. These QD-based technologies offer investigators a means to probe specific inter-molecular mechanisms with significantly improved sensitivity and to relate these interactions with high-resolution in real-time, in live cells at the scale of single molecules.

Molecular/genomic technologies of the past two decades have allowed investigators to make major advances in identifying signaling molecules that are critical to regulating normal health. However, better tools are needed to further elucidate the functional role of identified signaling molecules. Nanotechnology can offer new capabilities that will

allow investigators to probe the function of key molecules using multiple modalities at the scale of single molecules in live cells.

REPORTS FROM NCC MEMBERS AND LIASONS

- Dr. Cindy Davis, NCI, reminded the NCC that on Thursday, January 14th there will be a STEP forum entitled, “Out of the Lab and Into Our Lunch: Nanotechnology and Food.” The event will take place from 8:30 to 12:30 in Lister Hill Auditorium, Building 38A.
- Due to recent activities related to front-of-pack (FOP) nutrition labeling, several updates were made on this topic. Dr. Cindy Davis, NCI, noted that the Smart Choices program has voluntarily been put on hold pending the outcome of FDA's FOP rulemaking process. This move follows an announcement by FDA in October, 2009 stating that the agency plans to develop an optimal, common approach to nutrition-related FOP and shelf labeling. CAPT Shirley Blakely, FDA, provided the link to this announcement, “Guidance for Industry.” <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodLabelingNutrition/ucm187208.htm>

FDA has also released a [notice](#) soliciting comments on a study that will be used to help the agency understand whether modifications to the Nutrition Facts label format could help consumers to make informed food choices. Comments are due by January 19, 2010.

- Dr. Sharon Ross announced that the summary of the Experimental Biology 2009 symposium entitled “Nanotechnology Research: Applications in Nutritional Sciences” is now available [<http://jn.nutrition.org/cgi/content/abstract/140/1/119>]. The paper provides a synopsis of the research opportunities and challenges in nanotechnology, foods, and health as well as recommendations for future applications of nanotechnology research in the nutritional sciences.

REPORT ON NATIONAL CANCER INSTITUTE WORKSHOP: CHANGING CONCEPTS IN CANCER ETIOLOGY: “THE ROLE OF THE HUMAN MICROBIOME”

Dr. Cindy Davis, NCI, provided a brief summary of a meeting entitled “Changing Concepts in Cancer Etiology: the Role of the Human Microbiome” that occurred on November 9-10. The meeting focused on three specific areas, each having a strong nutritional component: 1). Evaluating Microbiome/Host interactions, 2). Dietary effects on the Microbiome in Carcinogenesis, and 3). Dysregulated Immune Response to Microbiome/Host Cell Interactions. A summary is expected to be published and will be shared when available.

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

Ms. Kathryn McMurry, ODPHP, provided the following updates:

Dietary Reference Intakes (DRIs)

Vitamin D and Calcium

- Because of the many complexities involved with research and data analysis and interpretation, the IOM panel is requesting a 2-month, no-cost extension. The DRI report is now expected in July, 2010.
- The study is being cosponsored by multiple agencies and offices of Health Canada and the U.S. Departments of Agriculture (USDA), Defense (DoD), and Health and Human Services (HHS).

Omega-3 Fatty Acids (EPA/DHA)

- Recently, a petition was submitted to IOM requesting a panel be convened to establish DRIs for EPA and DHA. Currently, there are AIs and AMDRs established for ALA but not for EPA and DHA.
- A subgroup of the US and Canadian DRI Steering Committees is beginning to review whether the scientific basis of the petition is strong enough to consider initiating a review at this time.

Healthy People 2020

- The text of the proposed 2020 objectives (total 557) is now available for public comment online. Comments will be accepted through December 31.
- The timeline for the development of Healthy People 2020 objectives and Departmental clearance March/ April 2010. The launch is targeted for September, 2010.
- Guidance on target-setting and implementation strategies is being developed. A subgroup of the Federal Interest Group has recommended that targets be proposed reflecting a 10 percent improvement over baseline.
- General information, proposed objectives, and public comments are available at www.healthypeople.gov

Dietary Guidelines for Americans (DGA) 2010

- The Dietary Guidelines Advisory Committee (DGAC) charged with making recommendations for the 7th edition of the Dietary Guidelines for Americans is well underway.
- The Nutrition Evidence Library process is one of the primary resources for the Committee's deliberations, along with NHANES survey data. About 60 research questions were discussed at the last meeting and the remaining 100+ questions will be discussed at the next meeting.

- The committee also is considering how best to characterize the strength of evidence for recommendations carried forward from the 2005 Dietary Guidelines, as well as those based primarily on scientific reviews by other groups such as the IOM, AHRQ, and AICR.
- In addition, dietary pattern modeling is being used to address some DGAC questions, using USDA's MyPyramid food guidance system—which is based on the Dietary Guidelines, DRIs, and current food and nutrient intakes.
- The DGAC is interested in addressing chronic disease prevention throughout the lifespan. Historically, the DGAs have focused on ages 2 and above—and this approach will continue for the Federal 2010 *Dietary Guidelines for Americans*. It seems there is no complementary federal process for addressing nutritional guidance among children under age 2 aside from breastfeeding initiatives.
- The 4th meeting occurred via webcast November 4 & 5. An additional meeting will be held via webcast in early February, followed by a final meeting in late spring. Transcripts, minutes, audio recordings, slides from meetings and public comments are posted at www.dietaryguidelines.gov.
- The committee's report is expected in early summer of 2010, followed by agency and public review and publication of the 2010 *Dietary Guidelines for Americans* in late fall, 2010.

Ms. Rachel Hayes, ODPHP, provided additional updates on the DGA communication efforts and the review process for physical activity-related consumer materials.

- DGA 2010 communications planning is well underway. ODPHP staff members are working closely with USDA-CNPP staff to develop a coordinated, comprehensive plan for sustained DGA messaging. Formative research has been conducted by gaining insight from federal partners and MyPyramid partners via in-person meetings in September 2009. ODPHP staff also conducted eleven expert interviews with HHS staff (nutrition and communications) to assess needs and potential areas of collaboration. CNPP and ODPHP each have a research contract in place; CNPP also has a contract in place to develop a brand for the DGA.
- Secretary Sebelius signed a memo establishing the Physical Activity Guidelines as official Departmental policy, and simultaneously establishing an HHS-wide review process for any consumer materials that include information on physical activity. The review process is conceptual in nature, and will generally provide a 10-day turnaround time. Documents may be sent to Rachel.Hayes@hhs.gov. If documents contain both nutrition and physical activity information, the document can be submitted for the DG review (as usual); the PA review will be seamlessly included.

UPDATE FROM THE NIH OFFICE OF DIETARY SUPPLEMENTS (ODS)

Ms. Jody Engel, ODS, provided the following update:

- ODS is sponsoring a workshop entitled, *Economic Analysis of Nutrition Interventions for Chronic Disease Prevention: Methods, Research, and Policy*. This workshop will be held February 23-24, 2010 at the Bethesda North Marriott Hotel and Conference Center. The main objective of the workshop is to establish a health economic research agenda to foster the use of health economics in clinical and translational health science, ultimately to inform policy decision-making. More details including the workshop agenda and registration information will be posted on the ODS web site (<http://dietary-supplements.info.nih.gov/>) by early January 2010.
- Registration is still open for the *ODS Nutrient Biomarkers Analytical Methodology: Vitamin D Workshop* that will take place on December 16th at the Bethesda North Marriott. Please see the ODS web site for more details.
- ODS is excited to announce that consumer versions of their vitamin D and zinc fact sheets will soon be available on the ODS web site. There will be two new versions. The first is a Consumer Version that will be 4-6 pages long. This version is written for the educated, health-conscious layperson without a background in nutrition or biomedicine. There will also be a 2-page Quick Facts version which will provide a brief and basic overview of a nutrient. It will be very easy to read. Scientific terms will be highlighted in both of these versions and definitions will be provided. Additional consumer versions for our other fact sheets are in development, including Vitamins B-12, E, and C, and calcium.
- The next ODS seminar speaker will be Kevin Fritsche, from the University of Missouri on Wednesday, January 13th at 11:00 a.m. in EPN. Dr. Fritsche will speak on "N-3 PUFA and inflammatory immune responses: Why mice may be a poor model for humans."
- The next funding deadline for grants is February 10th.

UPDATE OF DNRC ACTIVITIES

Nutrition Education Subcommittee (NES). CAPT Margaret McDowell, DNRC, provided an update on the activities of the NIH-NCC NES.

For the calendar year 2009, the NES has reviewed 21 submissions. Thirteen documents were submitted by NIH groups: NHLBI (7), ODS (4), NCI (1), and the DNRC (1). Eight documents were submitted by non-NIH groups: FDA (3), CDC (2), ODPHP (2), and OWH (1). The NES has reviewed three submissions since the November 5th NCC meeting:

- HHS/OWH: Text4Baby
- NIH/DNRC: National Nutrition Month “Going Green with Nutrition” Brochure
- HHS/ODPHP: Calcium Shopping List

The DNRC listing of NIH nutrition education materials is available on the DNRC website (http://dnrc.nih.gov/nutrition_education/index.shtml). NCC members are requested to check the information on the website and provide any updates or other changes 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 Ms. Sharon Frazier, DNRC, Democracy 2, room 624A.

NATIONAL NUTRITION MONTH ACTIVITIES – MARCH 2010

Ms. Rachel Fisher, DNRC, asked NCC members and liaisons to let the DNRC know if their IC is planning any activities for National Nutrition Month in March. A comprehensive list of all activities will be disseminated when available. The DNRC is also in the process of developing a desk-to-desk flyer to be delivered in March on “Going Green with Nutrition.” It will highlight ways to not only improve one’s own health but also the health of the environment.

Dr. John Milner, NCI, shared two activities that are already planned for March:

1) *Stars in Nutrition and Cancer Lecture*

Dr. Jeremy Nicholson
 Chair, Biological Chemistry
 Imperial College London

Tuesday, March 16, 2010
 3 – 5 PM
 Lipsett Amphitheater

2) *Nutrition and Cancer Prevention Research Practicum*

NEXT NCC MEETING

The next meeting will be January 7, 2009

ADJOURNMENT

The meeting was adjourned at 4:11 PM

LIST OF APPENDICES

Appendix A: NIH NCC Meeting Agenda for December 3, 2009

Appendix B: NIH NCC Meeting Attendees for December 3, 2009

APPENDIX A: NIH NUTRITION COORDINATING COMMITTEE MEETING AGENDA

1. **Welcome**.....Van Hubbard
2. **Approval of Minutes of the November 5, 2009 meeting**..... Van Hubbard
3. **Scientific Presentation: Probing the Spatiotemporal Dynamics of Cell Biochemical Signaling Using Quantum Dot NanoTechnologies**
..... Tania Vu, Ph.D.,
Assistant Professor, Division of Biomedical Engineering
School of Medicine, Oregon Health and Science University
4. **Reports from NCC Members and Liaisons**..... NCC Members
5. **Report on the National Cancer Institute Workshop: Changing Concepts in Cancer Etiology – “The Role of the Human Microbiome”**Cindy Davis, NCI
6. **ODPHP Activities Update**.....Kathryn McMurry, ODPHP
7. **ODS Activities Update**.....Jody Engel, ODS
8. **National Nutrition Month Activities – March 2010**.....Rachel Fisher, &
Margaret McDowell, DNRC
9. **Current DNRC Update of Activities**DNRC Staff
 - Nutrition Education Subcommittee Update.....Margaret McDowell*
 - International Committee Information.....Pam Starke-Reed/Dan Raiten*
 - HNRIM Update.....Jim Krebs-Smith/Karen Regan
9. **Next Meeting**January 7, 2009

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

APPENDIX B: NCC MEETING ATTENDEES FOR DECEMBER 3, 2009

	Members Present	Members Absent	Alternates Present
<u>Chairperson:</u>	V Hubbard		P Starke-Reed
<u>NIH Members:</u>			
NCI	J Milner		
NHLBI	D Danford		
NIDCR		R Nowjack-Raymer	
NIDDK	C Miles		
NINDS		M Mitler	
NIAID	D Sawyer		
NIGMS		S Somers	
NICHD		G Grave	
NEI		N Kurinij	
NIEHS		E Maull	
NIA		J Hannah	
NIAMS		J McGowan	
NIDCD		B Wong	
NIMH		W Riley	
NIDA		G Lin	
NIAAA		R Breslow	P Gao
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	N Sheard
NLM		S Phillips	
OBSSR	L Bosco		
ODS		P Coates	R Costello
OD/ODP	B Portnoy		
OLPA			
ORWH			
PRCC	M Taylor		
<u>Agency Liaison Representatives:</u>			
AHRQ	I Mabry-Hernandez		
CDC/NCCDPHP		H Blanck	
CDC/NCHS		C Johnson	
FDA		K Ellwood	S Blakely
HRSA	M Lawler		
IHS		T Brown	J Charles-Azure
ODPHP	K McMurry		
USDA, ARS		D Klurfeld	
USDA, REE		M Kretsch	
DOD		K Friedl	

DNRC: N Bulger, R Fisher, S Frazier, C McDade-Ngutter, M McDowell, K Regan

Guests: S Cardin (TATRC/USAMRMC), C Davis (NCI), J Engel (ODS), A Ershow (NHLBI), S Grate (TATRC/USAMRMC), R Hayes (OS/ODPHP), C Peterson (TATRC/USAMRMC), M Klein (ODS), S Ross (NCI), E Trujillo (NCI), T Vu (OHSU), X Wang (NIAMS)