

**MINUTES OF THE NUTRITION COORDINATING COMMITTEE (NCC)  
MEETING, NATIONAL INSTITUTES OF HEALTH (NIH)  
Rockledge 2, Conference Room 9100-9104, Bethesda, MD  
February 1, 2007 2:00- 4:00 PM**

**WELCOME**

Dr. Van Hubbard, Director, Division of Nutrition Research Coordination (DNRC), convened the meeting at 2:05 PM and welcomed participants. Participating via phone were Ms. Tammy Brown IHS; Dr. Nancy Emenaker, NIH NCI; COL Karl Friedl, DoD; Dr. Deborah Galuska, CDC; Dr. Patricia Guenther, USDA CNPP; Dr. Judy Hannah, NIH NIA; Dr. James Herrington, NIH FIC; Dr. Cliff Johnson, CDC NCHS; Ms. Michele Lawler, HRSA; Dr. Elizabeth Maull, NIH NIEHS; Dr. Linda Nebeling, NIH NCI; Dr. Deborah Olster, NIH OBSSR; Dr. Marshall Plaut, NIH NIAID; Dr. Dan Raiten, NIH NICHD; Dr. Rick Troiano, HHS ODPHP; Ms. Martina Vogel-Taylor, NIH ODP; Dr. Susan Welsh, USDA CRSEES; and Dr. Elizabeth Yetley, NIH ODS. 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 JANUARY 4, 2007 NCC MEETING**

Minutes from the January 4, 2007 NCC meeting had previously been sent to NCC members via email. Dr. Hubbard asked if there were any other corrections to the minutes. There were none. Dr. Christine Swanson, Office of Dietary Supplements (ODS), made a motion to approve the minutes, and Dr. Sharon Ross, National Cancer Institute (NCI), seconded the motion. The minutes were thus approved and will be posted on the DNRC website, <http://dnrc.nih.gov>, along with the minutes from previous NCC Meetings.

**ADAPTING MYPYRAMID FOR PREGNANT AND BREASTFEEDING WOMEN**

Dr. Patricia Britten, CNPP, USDA, presented CNPP's plans to create a new web page on the MyPyramid.gov web site for pregnant and breastfeeding women. This site will include information to help this audience use the MyPyramid food intake patterns, provide links to other government sites that give information for pregnancy and lactation, and include cautions and suggestions that are identified as important for pregnant and breastfeeding women.

The process of developing the website is currently underway, and a draft of proposed procedures and content has been developed. An ad hoc group has been established to provide expert advice through email-based discussion. A list of the members of this group can be seen in Appendix C. After all topics have been adequately discussed, the content will be revised and finalized. CNPP will submit the final content for formal review and clearance through USDA and HHS Dietary Guidance Review Groups.

Content has been divided up into four distinct topics for discussion. The topics include adequacy of existing MyPyramid food intake patterns in meeting DRI nutrient recommendations for pregnant and breastfeeding women; energy needs in pregnancy and while breastfeeding, and translation into recommendations for

food intake patterns at specific calorie levels; and information on food safety, supplement use, herbals, and health care cautions for the webpage. The first two topics have already been sent out for discussion and feedback has been received.

The new web page will most likely not be available on MyPyramid.gov for at least 1 year. In addition to the time to develop appropriate content, capacity issues on the MyPyramid.gov website are currently being addressed. Due to the huge volume of visitors since the launch of MyPyramid.gov in April 2005, the server capacity is in need of an upgrade. Once the capacity issue is resolved, it will be possible to add new information to the site.

In addition to providing information pertaining to the website for pregnant and breastfeeding women, Dr. Britten directed the NCC's attention to the November 2006 supplement of the Journal of Nutrition Education & Behavior, which provides an in depth look into the development of the MyPyramid Food Guidance System. If anyone is interested in obtaining a copy of this supplement, please contact Dr. Britten ([Patricia.Britten@cnpp.usda.gov](mailto:Patricia.Britten@cnpp.usda.gov)).

#### **RESEARCH, CONDITIONS, AND DISEASE CATEGORIZATION (RCDC).**

Ms. Deborah Kassilke, the Executive Coordinator for the Research, Conditions, and Disease Categorization project, presented information about RCDC's background as well as the fingerprinting process. The RCDC was previously known as Knowledge Management for Disease Coding but has undergone a name change to more adequately reflect the information provided by the Office of Budget to Congress. The Office of Budget is required to report financial figures to Congress pertaining to these specific areas. Because the ICs use different methods for classifying projects and assembling data, there is a need for standardization. NIH leadership concurred that NIH must adopt a robust, consistent, and defensible approach to disease coding. To do this, NIH-wide definitions called fingerprints (FP) will be used.

The fingerprint is designed as a single method for coding data that uses consistent definitions. It is a list of concepts from the thesaurus that are selected by NIH scientific experts to define a particular disease category. The concepts can be weighted to fine-tune the system. The category fingerprints are then matched to the grant concepts to produce disease reporting.

There is a specific process used in the development of category fingerprints. In the first step, a Thesaurus Expert creates a trial fingerprint. This draft is then sent to IC experts for review. A fingerprinting session is then scheduled in which the FP Team assigned to the category works directly with the IC experts, using the system tool to experiment, edit and refine the draft fingerprint. Following the session, a sample of 50 grants from the test data set are reviewed by IC experts to determine if they should be related to that category or not. An agreement score of 75% or higher is considered "good." If the score is lower than that, the

FP Team revises the fingerprint in order to improve agreement between the system and the experts. Once the score is high enough, the fingerprint is applied to the complete data set (approximately 55,000 grants). The results are examined for face validity and mechanism distribution. Once the qualities of the results are verified and any follow-up steps are completed, the fingerprint is complete for this round. In 2007, all fingerprints will go through another review period, both by the FP teams and the IC experts. If needed, further fingerprinting sessions will be held. For categories where the original session was contentious, sessions will definitely be held during this next review period.

The creation of the Nutrition Fingerprint has required many, many thesaurus additions. There were 415 term additions from CaBIG into the Dietary Supplement FP. All of these roll into Nutrition. In addition, there were 312 terms from CARDS and 40+ additional terms requested.

By creating the fingerprinting system, there will be consistency across ICs for coding centrally-collected categories for grants, R&D Contracts and Intramural projects. There will also be consistent definitions, methods, and business rules for categorizing and applying dollar amounts. The system will increase transparency of the process, category definitions, and the projects that fall within each category. All these changes, however, will cause different total dollar amounts to be computed for categories than previously reported by NIH. Reporting of grants will begin in FY07. Intramural projects and R&D Contracts will not be reported with the FP system until FY08.

If you would like more information on RCDC, please contact Deb Kassilke ([Kassilked@mail.nih.gov](mailto:Kassilked@mail.nih.gov)) or Timothy Hays ([thays@od.nih.gov](mailto:thays@od.nih.gov)). You can also visit the RCDC portal at <https://my.nih.gov>. If you would like an electronic copy of the Power Point slides from this presentation, please email Sharon Frazier ([fraziers@mail.nih.gov](mailto:fraziers@mail.nih.gov)) at the DNRC and she will send you a copy.

#### **FOLLOW-UP ON RCDC FOR THE NUTRITION CATEGORY**

Ms. Karen Regan, DNRC, a member of the Nutrition Fingerprint IC expert team, notified the NCC that the second FP team/IC expert review session will take place on Friday, February 9<sup>th</sup>. Before the Nutrition Fingerprint is finalized, it will come back to the NCC for review.

Ms. Regan reminded the NCC that the fingerprinting process happens before HNRIM. The fingerprint will only replace how the initial nutrition project list is generated. Each IC will still need to complete the specific HNRIM coding as it has been done in the past. HNRIM provides a much more detailed breakdown of nutrition-related grants. The fingerprinting process is not designed to accommodate this level of detail.

## **ODS ACTIVITIES UPDATE**

Dr. Christine Swanson provided the following updates from ODS.

### ODS Grant Co-funding:

The ODS deadline for receipt of grants for co-funding consideration was January 31<sup>st</sup>. Grants will be reviewed by ODS on February 14<sup>th</sup>. The next deadline for submission of grants to ODS is May 1<sup>st</sup> for review on May 16<sup>th</sup>. Please contact Dr. Becky Costello ([Becky.Costello@nih.hhs.gov](mailto:Becky.Costello@nih.hhs.gov)) for details.

### ODS Seminar Series:

The next seminar is scheduled for February 21, 2007 (11am – 12 pm, 6130 Executive Blvd., EPN, Room E/F. The speaker is Dr. Joseph Kehayias (Director of the Body Composition Laboratory) from the USDA Human Nutrition Research Center on Aging at Tufts University. The title of his presentation is “*Monitoring Lean Body Mass by Dual Energy Absorptiomer.*” For more information contact Dr. Mary Frances Picciano ([Mary.Picciano@nih.hhs.gov](mailto:Mary.Picciano@nih.hhs.gov)) or see the handout attached in Appendix D. For the complete ODS Spring Seminar Schedule, see Appendix E.

### Meeting Announcement:

The Food and Nutrition Board of the IOM has announced a meeting entitled “*Dietary Supplement Use by Military Personnel.*” The conference will be held at the National Academy of Science Lecture room February 12-13.

The goal of the workshop is to identify information gaps regarding dietary supplement use by military personnel and recommend processes and designs by which current and future usage of supplements (including dosages, quality, and forms of supplement) should be monitored, surveyed, analyzed, reported, and shared.

Pre-registration is recommended. The website is <http://iom.edu/CMS/3788/39647/39656.aspx>. For further information, contact Dr. Costello.

### ODS TransNIH/Agency Work Group:

The ODS TransNIH/Agency Work Group will meet March 23, 2007 at 1:30 PM in the Neuroscience Center, 6001 Executive Blvd. Information on the agenda will be forwarded early next month.

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

Ms. Kathryn McMurry provided the NCC with several updates from ODPHP:

### New campaign advocating physical activity for children:

The U.S. Department of Health and Human Services (HHS) and the Ad Council joined with DreamWorks Animation SKG to launch a new series of public service

advertisements (PSAs) designed to help address childhood obesity. Featuring characters from the movie Shrek, the PSAs are an extension of HHS' ongoing "Small Step" Childhood Obesity Prevention campaign, which encourages children and families to lead healthy lifestyles. HHS Secretary Mike Leavitt unveiled the ads at a press conference in Washington, D.C. earlier in the day.

Update on Interagency Federal DRI Steering Committee:

The Committee is moving forward to plan two workshops that will be held in September 2007 to identify lessons learned through the DRI process. The IOM has established a workshop planning committee, though they have yet to identify the last member who will be a biostatistician. As mentioned at the last meeting, the committee will be chaired by Dr. John Suttie (retired) from the University of Wisconsin, Madison. The identification of speakers is also taking place for the two meetings.

HP2010 Update:

The Midcourse Review has been completed and pdf files are now available. The printed copies will be available by the end of the month. If anyone is interested in joining Healthy People 2010 Interagency Workgroup for Focus Area 19 (Nutrition and Overweight), please contact Dr. Crystal McDade-Ngutter ([mcdadengutterc@mail.nih.gov](mailto:mcdadengutterc@mail.nih.gov)).

Ms. McMurry also mentioned that it is almost time to start planning for Healthy People 2020. ODPHP has contracted NORG to look at objectives that will form the foundation for HP2020.

National Nutrition Month Activity:

On March 7, the cafeteria at the Humphrey Federal Building will be hosting a demonstration from a guest chef from Restaurant Nora in honor of National Nutrition Month.

**UPDATE OF DNRC ACTIVITIES**

*Nutrition Education Subcommittee (NES).* Dr. Jean Pennington, DNRC, provided an update of the activities of the NIH NCC NES. For the calendar year 2007, the NES received 4 documents for review. These documents include two from NIH (NICHD and ORS) and two from the USDA Food and Nutrition Service (FNS).

Materials reviewed since the last NCC meeting are:

- *Decide What You Will Eat Poster* (FNS, USDA)
- *Milk Matters Online Teacher Lesson Activities* (NICHD, NIH)
- *Balanced Choices Vending and Snack Criteria* (ORS, NIH)
- *Power of Choice* (FNS, USDA)

The DNRC is updating the nutrition education materials on its website ([http://dnrc.niddk.nih.gov/nutrition\\_education/index.shtml](http://dnrc.niddk.nih.gov/nutrition_education/index.shtml)), and NCC members were requested to provide updates at the last meeting. So far, we have heard

from the NCI, NCCAM, and NIA. We would appreciate response from the other NCC Institute, Center, and Office representatives.

*HNRIM Update:* Mr. Jim Krebs-Smith, DNRC, provided a status report of the Human Nutrition Research Information Management (HNRIM) System. He reminded NIH members that the due date for Institute/Center submission of nutrition research data for the HNRIM system is this coming Monday, February 5<sup>th</sup>. Email reminders will be sent out next week. Members were asked to contact the DNRC if additional time is needed for data preparation. After receiving final data concurrence, the Office of Dietary Supplements (ODS) will again review dietary supplement related coding and communicate their recommendations for additions or changes to IC's for consideration.

*Pre and Probiotic Working Group Update:* PPWG, Pre and Probiotic Working Group, is planning a probiotics conference for 2007. This conference will investigate gut microflora and new developments in the area of pre and probiotic research. The dates, times, and location for this conference have not been determined; however, two co-chairs for this meeting have been selected. The co-chairs will be Drs. Jeff Gordon from Washington University in St. Louis and Jon Vanderhoof from University of Nebraska Medical School and Mead Johnson Nutritionals. Dr. Crystal McDade-Ngutter will update the NCC on more conference details as they are determined. For more information on PPWG or this probiotic conference, please contact Dr. McDade-Ngutter by email at [mcdadengutterc@mail.nih.gov](mailto:mcdadengutterc@mail.nih.gov).

*Obesity Network Mapping Activity:* The Division of Nutrition Research Coordination has undertaken a project to map obesity research/program participation across the Department of Health and Human Services. Key players involved with obesity-related activities have been identified, some of which are NCC members. Soon a survey will be administered to these individuals in order to characterize their interactions. Ultimately, a series of diagrams will be produced that will enable us to examine the expanse of the DHHS obesity network in its entirety. Specifically, this project will illuminate areas of expertise and will allow us to determine who the critical connectors are in DHHS. In addition, it will alert us to gaps in communication and identify how these channels might be improved. This effort is responsive to a request from the Secretary of DHHS to improve awareness and interactions of obesity-related activities across the agencies within DHHS.

Dr. Van Hubbard reported that the DNRC will be pursuing efforts related to nutritional genomics as part of a larger Roadmap activity. If anyone in the NCC has any interest in participating, contact the DNRC and you will be added to the effort.

Dr. Hubbard also encouraged the IC reps to alert the DNRC to any developments within their IC that more time should be focused on. The DNRC can work with

the IC to further these activities or to bring them up as a topic of discussion at a future NCC meeting. If necessary, the DNRC can help to develop a subgroup to move the activity along.

In preparation for National Nutrition Month this March, Dr. Hubbard encouraged the NCC members to bring any ideas to the DNRC regarding a program that could be directed either to the scientific community or the general employee. The DNRC would like to sponsor several special events throughout March.

There will not be an NCC meeting in March due to a scheduling conflict. The National Academies of Science, IOM, and Food Forum Workshop – “Nutritional Risk Assessment: Bridging Perspectives, Sharing Methodologies, Identifying Data Challenges” will be taking place on February 28 and March 1, 2007.

#### **REPORTS FROM NCC MEMBERS AND LIASONS:**

Dr. John Milner, NCI, informed the NCC about a recent program announcement regarding nutrient, nutrient interactions. Contact Dr. Cindy Davis, NCI, for more information ([Cindy.Davis@nih.hhs.gov](mailto:Cindy.Davis@nih.hhs.gov)).

Dr. Milner also described two research opportunities that will be emerging soon. One is an R21 related to novel bioactive food components. The other has to do with nutrition and immunity. Contact Young Kim, NCI, for more information regarding both topics ([Young.Kim2@nih.hhs.gov](mailto:Young.Kim2@nih.hhs.gov)).

Due to concern about excess exposure to bioactive components, a new working group, headed by Dr. Nancy Emenaker at NCI, will look at biomarkers to identify vulnerable populations. Contact Dr. Emenaker for more information ([Nancy.Emenaker@nih.hhs.gov](mailto:Nancy.Emenaker@nih.hhs.gov)).

The next STARS in Nutrition and Cancer series will take place on March 15, 007 at 2:00 PM in the Lipsett Amphitheater, Building 10. Dr. Peter Gillies, a Senior Research Fellow from Central Research and Development E.I. DuPont de Nemours & Co., will be giving a lecture entitled, “Omega-3 Fatty Acids in the Dietary Management of Pro-Inflammatory States: A Nutrigemonic Model.”

February is American Heart Month, and Dr. Darla Danford, NHLBI, reminded the NCC to wear red on February 2<sup>nd</sup>, National Wear Red Day. This is a day when Americans nationwide will wear red to show their support for women's heart disease awareness. To celebrate American Heart Month, several events will be occurring throughout February. The “Day of Dance for Cardiovascular Health” will take place on February 24<sup>th</sup>. In more than 50 cities across the country people will be donning red dresses and dancing. Visit <http://www.dayofdance.org/> for more information.

Dr. Cindy Davis, NCI, informed the NCC that there will be a conference sponsored by NCI and ODS on “Vitamin D and Cancer: Current Dilemmas/ Future Needs” on May 7-8, 2007 at the Lipsett Hill Auditorium. Registration is not yet available, but anyone who is interested can contact Dr. Davis (Cindy.Davis@nih.hhs.gov) for more information. See Appendix F for the preliminary agenda.

### **NEXT NCC MEETING**

The next meeting will be Thursday, April 5, 2007

### **ADJOURNMENT**

The meeting was adjourned at 4:10 PM.

### **LIST OF APPENDICES**

Appendix A: NIH NCC Meeting Agenda for February 1, 2007

Appendix B: NIH NCC Meeting Agenda for February 1, 2007

Appendix C: MyPyramid for Pregnancy and Breastfeeding – Ad Hoc Advisory Group Members

Appendix D: ODS Spring 2007 Seminar Series: “Monitoring Lean Body Mass by Dual Energy Absorptiometer”

Appendix E: ODS Spring 2007 Seminar Series Schedule

Appendix F: “Vitamin D and Cancer: Current Dilemmas/ Future Needs” Tentative Agenda



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

Thursday, February 1, 2007  
2:00-4:00pm  
Rockledge 2, CR#9100-9104

1. **Welcome.....** Van Hubbard
2. **Approval of Minutes of the January 4, 2007 meeting.....**Van Hubbard
3. **Adapting MyPyramid for Pregnant and Breastfeeding Women...** Patricia Britten,  
USDA
4. **Research, Conditions and Disease Categorization (RCDC) ....** Deborah Kassilke  
OER/OPERA/ERA
5. **Follow-up on RCDC for the Nutrition Category.....**Karen Regan, DNRC
6. **ODS Activities Update .....**Christine Swanson, ODS
7. **ODPHP Activities Update.....**Kathryn McMurry, ODPHP/OS
8. **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
  - HHS Obesity Related Activities.....Van Hubbard
9. **Reports from NCC Members and Liaisons.....**NCC Members
10. **Next Meeting - April 5, 2007**
11. **Old Business**

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

**APPENDIX B: NCC MEETING ATTENDEES FOR FEBRUARY 1, 2007**

	Members Present	Members Absent	Alternates Present
<u>Chairperson:</u>	V Hubbard		P Starke-Reed
<u>NIH Members:</u>			
NC	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	
NIDCD		B Wong	
NIMH		P Muehrer	
NIDA		G Lin	
NIAAA		R Breslow	
NINR		Y Bryan	
NCCAM	M Klein		
NCRR		L Yager	
FIC	J Herrington		
NHGRI		M.K. Holohan	
<u>NIH Liaison Members:</u>			
CC		N Sebring	
CIT		J Mahaffey	
CSR		S Kim	N Sheard
NLM		S Phillips	
OBSSR	D Olster		
OC		M Stern	
ODS	P Coates		
OD/ODP	B Portnoy		
OLPA			
ORWH			
PRCC	M Vogel-Taylor		
<u>Agency Liaison Representatives:</u>			
CDC/NCCDPHP	D Galuska		
CDC/NCHS		V Burt	
FDA		K Ellwood	S Blakely
HRSA	M Lawler		
IHS	T Brown		
ODPHP	K McMurry		
USDA			D Klurfeld
DOD	K Friedl		
OPHS		M Terpeluk	

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

Guests: P Cotton (NINR), C Davis (NCI), N Emanaker (NCI), C Kaefer (NCI), D Kasillke (OD), Y Kim (NCI), S Krebs-Smith (NCI), P Hans (NINDS), K Loughrey (AoA), A Pfeffer (OD), C Swanson (ODS), R Troiano (ODPHP/OS), E Trujillo (NCI), B Yetley (ODS)

## Appendix C: Pyramid for Pregnancy and Breastfeeding—Ad Hoc Advisory Group Members

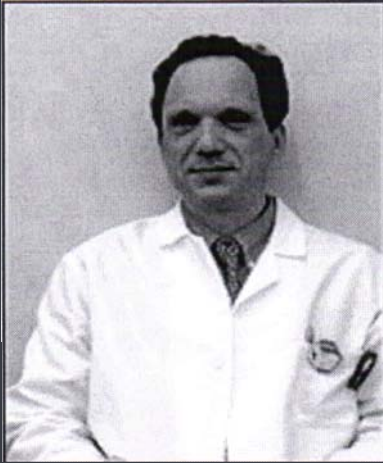
Name	Affiliation	Email address
Michelle Lawler	HHS Health Resources and Services Administration /Maternal and Child Health	<a href="mailto:mlawler@hrsa.gov">mlawler@hrsa.gov</a>
Leila Beker	HHS Food and Drug Administration	<a href="mailto:leila.beker@fda.hhs.gov">leila.beker@fda.hhs.gov</a>
David Meyers	HHS Agency for Healthcare Research and Quality/Perinatal Unit	<a href="mailto:David.Meyers@ahrq.hhs.gov">David.Meyers@ahrq.hhs.gov</a>
Daniel J. Raiten	HHS/NICHD/Center for Research for Mothers and Children	<a href="mailto:raitend@mail.nih.gov">raitend@mail.nih.gov</a>
Caroline Signore	HHS/NICHD Center for Developmental Biology and Perinatal Medicine	<a href="mailto:signorec@mail.nih.gov">signorec@mail.nih.gov</a>
Elaine Little	HHS Indian Health Service	<a href="mailto:Elaine.Little@ihs.gov">Elaine.Little@ihs.gov</a>
Chris Reinold	HHS Centers for Disease Control and Prevention	<a href="mailto:Cor4@cdc.gov">Cor4@cdc.gov</a>
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Anne Bartholome	USDA Food and Nutrition Service, WIC	<a href="mailto:anne.bartholome@fns.usda.gov">anne.bartholome@fns.usda.gov</a>
Marilyn Swanson	USDA Cooperative State Research, Education, and Extension Service	<a href="mailto:mswanson@bcm.edu">mswanson@bcm.edu</a>
Nancy Butte	USDA/ARS Children's Nutrition Research Center at Baylor College of Medicine	<a href="mailto:Nbutte@bcm.tmc.edu">Nbutte@bcm.tmc.edu</a>
Judy Hopkinson	USDA/ARS Children's Nutrition Research Center at Baylor College of Medicine	<a href="mailto:judyh@bcm.tmc.edu">judyh@bcm.tmc.edu</a>
Robyn Sadagursky	USDA/FSIS, Food Safety Education Staff	<a href="mailto:robyn.sadagursky@fsis.usda.gov">robyn.sadagursky@fsis.usda.gov</a>
Jaime Stang	University of Minnesota	<a href="mailto:stang@epi.umn.edu">stang@epi.umn.edu</a>
Janet King	Children's Hospital Research Center/Oakland	<a href="mailto:jking@chori.org">jking@chori.org</a>
Chris Olson	Cornell University	<a href="mailto:cmo3@cornell.edu">cmo3@cornell.edu</a>
Patsy Brannon	Cornell University	<a href="mailto:pmb22@cornell.edu">pmb22@cornell.edu</a>
Madeleine Sigman-Grant	University of Nevada Las Vegas	<a href="mailto:sigman-grantm@unce.unr.edu">sigman-grantm@unce.unr.edu</a>
Trish Britten	USDA Center for Nutrition Policy and Promotion	<a href="mailto:Patricia.britten@cnpp.usda.gov">Patricia.britten@cnpp.usda.gov</a>
<b>cc list</b>		
Kathryn McMurry	HHS Office of Disease Prevention and Health Promotion	<a href="mailto:kmcmurry@osophs.dhhs.gov">kmcmurry@osophs.dhhs.gov</a>
Holly McPeak	HHS Office of Disease Prevention and Health Promotion	<a href="mailto:holly.mcpeak@hhs.gov">holly.mcpeak@hhs.gov</a>
Barbara Schneeman	HHS Food and Drug Administration	<a href="mailto:barbara.schneeman@cfsan.fda.gov">barbara.schneeman@cfsan.fda.gov</a>
Camille Brewer	HHS Food and Drug Administration	<a href="mailto:camille.brewer@fda.hhs.gov">camille.brewer@fda.hhs.gov</a>
Molly Kretsch	USDA Agricultural Research Service	<a href="mailto:Molly.Kretsch@ars.usda.gov">Molly.Kretsch@ars.usda.gov</a>
Carole Davis	USDA Center for Nutrition Policy and Promotion	<a href="mailto:carole.davis@cnpp.usda.gov">carole.davis@cnpp.usda.gov</a>
Joan Lyon	USDA Center for Nutrition Policy and Promotion	<a href="mailto:joan.lyon@cnpp.usda.gov">joan.lyon@cnpp.usda.gov</a>
Kellie O'Connell	USDA Center for Nutrition Policy and Promotion	<a href="mailto:kellie.o'connell@cnpp.usda.gov">kellie.o'connell@cnpp.usda.gov</a>

## Appendix D

### Office of Dietary Supplements Spring 2007 Seminar Series

#### "Monitoring Lean Body Mass by Dual Energy Absorptiometer"

Joseph J. Kehayias, Ph.D.  
Director, Body Composition Laboratory  
USDA Human Nutrition Research Center on Aging at Tufts University, Boston, MA



**Date:** February 21, 2007

**Time:** 11:00 am — 12:00 pm

**Location:** 6130 Executive Blvd.  
Executive Plaza North (EPN)  
Room E/F, Rockville, MD

**Hosted by:** Office of Dietary Supplements,  
National Institutes of Health

Joseph Kehayias, PhD, is currently the Director of the USDA Human Nutrition Research Center Body Composition Laboratory. For the last 14 years, he also directed the Body Composition Core of the NIHfunded Boston Obesity/Nutrition Research Center. He has worked on the development of new techniques in the field of body composition analysis which include neutron activation, neutron inelastic scattering, isotope kinetics and small portable nutrition assessment devices. He has designed most of these facilities presently in use at his Institution and holds three US patents

Dr. Kehayias was trained in physics and physical chemistry at the Indiana University Cyclotron Facility where he received a Ph.D. in physics. As an investigator at Brookhaven National Laboratory, he applied nuclear techniques to body composition, starting with the use of neutrons for the assessment of osteoporosis. He developed the neutron inelastic scattering technique for low radiation exposure measurements of body carbon. This development led to the refinement of total body fat measurement techniques and recently its evolution to regional body fat measurements with fast neutrons. Dr. Kehayias is currently working in the area of the depletion of lean body mass with age or disease, its physiological implications and its biological origins. He is also examining body composition and hydration changes in field studies using portable instruments developed in his laboratory.

#### Selected Peer Reviewed Publications

- Walsmith J, Abad L, Kehayias JJ, Roubenoff R. Tumor necrosis factor- $\alpha$  production is associated with less body cell mass in women with rheumatoid arthritis. *J Rheumatology* 2004; 31:1; 23-29.
- Kehayias JJ. Use of D-T produced fast neutrons for in vivo body composition analysis: a reference method for nutrition assessment in the elderly. *Anal Bioanal Chem* 2004; 379: 188-191.

- Das SK, Saltzman E, McCrory MA, Hsu LKG, Shikora SA, Dolnikowski G, Kehayias JJ, Roberts SB. Energy expenditure is very high in extremely obese women. *J Nutr* 2004; 134:1412-1416.
- Prelack K, Dwyer J, Sheridan R, Yu YM, Lydon M, Petras L, Dolnikowski G, Kehayias JJ. Body Water in Children During Recovery from Severe Burn Injury Using a Combined Tracer Dilution Method. *J Burn Care Rehabil*. 2005; 26(1):67-74.

## **Appendix E: National Institutes of Health Office of Dietary**

## Supplements 2007 Spring Seminar Schedule

### Wednesday, January 17, 2007

#### **W. Craig Byrdwell, Ph.D.**

Food Composition Research Chemist, Agriculture Research Service  
United States Department of Agriculture, Beltsville, MD

**Topic:** "Vitamin D: Background and Current Analytical Methods"

**Location:** Executive Plaza North (EPN), 6130 Executive Blvd., Room J

**Time:** 11:00 a.m. -12:00 p.m.

### Wednesday, February 21, 2007

#### **Joseph J. Kehayias, Ph.D.**

Director, Body Composition Laboratory, USDA Human Nutrition Research Center on Aging  
Tufts University, Boston, MA

**Topic:** "Monitoring Lean Body Mass by Dual Energy Absorptiometer"

**Location:** Executive Plaza North (EPN), 6130 Executive Blvd., Room E/F

**Time:** 11:00 a.m. -12:00 p.m.

### Wednesday, March 14, 2007

#### **Alfred J. Lewy, M.D., Ph.D.**

Professor, Departments of Psychiatry, Pharmacology and Ophthalmology  
Oregon Health and Science University, Portland, OR

**Topic:** "Circadian Uses of Melatonin in Humans"

**Location:** Executive Plaza North (EPN), 6130 Executive Blvd., Room J

**Time:** 11:00 a.m. -12:00 p.m.

### Wednesday, April 18, 2007

#### **Kelly Anne Tappenden, Ph.D., R.D.**

Associate Professor of Nutrition and Gastrointestinal Physiology

Department of Food Science and Human Nutrition

Associate Dean, Graduate College, University of Illinois at Urbana-Champaign, Urbana, IL

**Topic:** "Pre and Pro-biotics: Rationale for Regular Consumption"

**Location:** Executive Plaza North (EPN), 6130 Executive Blvd., Room J

**Time:** 11:00 a.m. -12:00 p.m.

### Thursday, May 3, 2007

#### **Teri Manolio, M.D., Ph.D.**

Senior Advisor to the Director of Population Genomics

National Human Genome Research Institute, National Institutes of Health, Bethesda, MD

**Topic:** "Study Designs to Enhance Identification of Genetic Factors Related to Complex Diseases"

**Location:** Executive Plaza North (EPN), 6130 Executive Blvd., Room J

**Time:** 11:00 a.m. -12:00 p.m.

## Appendix F: Tentative Agenda

**Vitamin D and Cancer: Current Dilemmas/ Future Needs**  
**May 7-8, 2007**  
**Lipsett Hill Auditorium**

7:30-8:00	Registration	
8:00-8:05	Welcome	<i>Cindy Davis, National Cancer Institute</i>
8:05-8:10	Introduction	<i>John Niederhuber, Director, National Cancer Institute</i>
8:10-8:25	Opening Remarks	<i>Peter Greenwald, DCP, National Cancer Institute</i> <i>Robert Croyle, DCCPS, National Cancer Institute</i> <i>Joseph Fraumeni, DCEG, National Cancer Institute</i> <i>Paul Coates, Office of Dietary Supplements</i>

**I. Setting the Stage: How strong is the evidence that vitamin D status is related to cancer risk?** Moderator: Virginia Hartmuller

8:25-8:45	Setting the stage: what are the critical factors for evaluating sunlight and dietary vitamin D and cancer risk?	<i>Gary Schwartz, Wake Forest University</i>
8:45-8:55	Discussion	
8:55-9:15	What are the strengths/limitations of current epidemiologic studies of vitamin D intake/status as a modifier of colon and prostate cancer risk?	<i>Ed Giovannucci, Harvard</i>
9:15-9:25	Discussion	
9:25-9:45	What are the strengths/limitations of current epidemiologic studies of vitamin D intake/status as a modifier of breast cancer risk?	<i>Thomas Rohan, Albert Einstein School of Medicine</i>
9:45-9:55	Discussion	
9:55-10:15	What are the strengths/limitations of current assessment tools for sunlight exposure in populations?	<i>Margaret Tucker, NCI</i>
10:15-10:25	Discussion	
10:25-10:45	Break	

- 10:45-11:05 What are the strengths/limitations of current assessment tools for vitamin D status in populations? *Bruce Hollis, Medical University of South Carolina*
- 11:05-11:15 Discussion
- 11:15-11:30 What is the dose response relationship between vitamin D status and cancer? *Cedric Garland, University of California, San Diego*
- 11:30-11:35 Discussion
- 11:35-12:05 **Group Discussion:** How strong is the evidence and what are the current research gaps? *Moderator: Arthur Schatzkin*
- 12:05-1:00 Lunch

**II. How has nutrigenetics advanced our understanding of the relationship between vitamin D and cancer risk?** Moderator: Michal Freedman

- 1:00-1:20 What are the frequency, distribution and functional effects of vitamin D receptor polymorphisms as related to cancer risk? *Richard Strange, Keele University Medical School, United Kingdom*
- 1:20-1:30 Discussion
- 1:30-1:50 What is the evidence that genetic polymorphisms in the vitamin D receptor influence cancer risk? Are there ethnic differences in these polymorphisms and are they related to cancer risk? *Martha Slattery, University of Utah*
- 1:50-2:00 Discussion
- 2:00-2:20 Can diet and/or sunlight exposure influence the relationship between vitamin D receptor polymorphisms and cancer risk? *Sue Ingles, University of Southern California*
- 2:20-2:30 Discussion
- 2:30-2:50 **Group Discussion:** What are the current research gaps? *Moderator: Walter Willett, Harvard*
- 2:50-3:10 Break

**III. What other genes determine the response to vitamin D?** Moderator: Patricia Hartge



- 3:10-3:30 What is the role of extra-renal vitamin D hydroxylase expression and activity in normal and malignant cells? How is this modified by epigenetic mechanisms and dietary factors? *Heide Cross, Medical University of Vienna*
- 3:30-3:40 Discussion
- 3:40-4:00 What is the role of vitamin D mediated inhibition of prostaglandin metabolism on cancer risk? *David Feldman, Stanford University*
- 4:00-4:10 Discussion
- 4:10-4:30 What is the role of the androgen receptor in mediating the effects of vitamin D? *Nancy Weigel, Baylor College of Medicine*
- 4:30-4:40 Discussion
- 4:40-5:00 What is the molecular basis of vitamin D receptor and  $\beta$ -catenin cross regulation? *Stephen Byers, Georgetown University*
- 5:00-5:10 Discussion
- 5:10-5:30 **Group Discussion:** What are the current research gaps? *Moderator: Hector DeLuca, University of Wisconsin-Madison*
- 5:30 **Adjourn**

***Draft Agenda- Day 2***

**IV: What are the important dietary components that modify the effect of Vitamin D?** Moderator: Mary Frances Picciano

- 8:00-8:20 How do dietary calcium, folate and soy regulate colonic vitamin D synthesis? *Martin Lipkin, Rockefeller University (subject to availability)*
- 8:20-8:30 Discussion
- 8:30-8:50 What is the molecular mechanism whereby genistein potentiates the growth inhibitory effects of vitamin D? *Aruna Krishnan, Stanford University*
- 8:50-9:00 Discussion

- 9:00-9:20 How do body fat and exercise modulate vitamin D status? Do ethnic differences modify this relationship? *Ann Looker, National Center for Health Statistics*
- 9:20-9:30 Discussion
- 9:30-9:50 **Group Discussion:** What are the current research gaps? *Moderator: Margherita Cantorna, Penn State University*
- 9:50-10:10 **Break**

**V. What information have preclinical models provided about the relationship between vitamin D, calcium and cancer?** Moderator: Cindy Davis

- 10:10-10:30 What have genomic and proteomic approaches told us about vitamin D and cancer? *James Fleet, Purdue University*
- 10:30-10:40 Discussion
- 10:40-11:00 What is the role of dietary calcium and vitamin D in vitamin D receptor knockout animals? *JoEllen Welsh, University of Notre Dame*
- 11:00-11:10 Discussion
- 11:10-11:30 What are the molecular targets for calcium and vitamin D in mouse genetic models for cancer? *Len Augenlicht, Albert Einstein Cancer Center*
- 11:30-11:40 Discussion
- 11:40-12:00 **Group Discussion:** What are the current research gaps? *Moderator: Anthony Norman, University of California-Riverside*
- 12:00-1:00 **Lunch**

**VI. Future Directions: Setting research priorities.** Moderator: Peter Greenwald

- 1:00-1:45 **Group Discussion:** What are the critical issues for future studies investigating vitamin D and cancer? *Session Moderators*
- 1:45-2:00 Summary comments. *Cindy Davis and Virginia Hartmuller*
- 2:00 **Adjourn**

**Specific questions that might be addressed during panel discussions:**

**Group Discussion 1:** What portion of circulating vitamin D comes from diet versus sunlight, in various populations? What aspects of sunlight (average, intensity, cumulative) control the level of circulating vitamin D?

**Group Discussion 2:** Can genetic polymorphisms predict who will respond to dietary interventions? What is the influence of genetic polymorphisms on cellular and molecular targets for vitamin D? What does a polymorphism mean functionally when there is no change in the amount/activity of the vitamin D receptor? There are more than 180 SNPs in the vitamin D receptor, what is the best haplotype analysis? How do we get these answers to these questions?

**Group Discussion 2:** What other genes are important in modulating the effect of vitamin D?

**Group Discussion 3:** What is the role of supplements versus foods with respect to.....? How long of interventions are needed? Can there be interactions between vitamin D and other constituents of the diet that may affect cancer risk?

**Group Discussion 4:** How appropriate are the animal models? Are the same molecular mechanisms important in different tissues? Can biomarkers for vitamin D and calcium signaling at the cellular level be identified that can be used to define optimal vitamin D status and intakes necessary to achieve such status? What are the current research gaps?