

**MINUTES OF THE NUTRITION COORDINATING COMMITTEE (NCC)
MEETING, NATIONAL INSTITUTES OF HEALTH (NIH)
Rockledge 2, Conference Room 9100-9104, Bethesda MD
February 2, 2006 2:00-4:00 PM**

WELCOME

Dr. Pam Starke-Reed, Deputy Director, Division of Nutrition Research Coordination (DNRC) convened the meeting at 2:02 PM and welcomed participants. Participating via phone were Dr. Natalie Kurinij, NIH NEI; Dr. Deborah Olster, NIH OBSSR; Dr. Jenna Seymour, CDC NCCDPHP; Col. Dr. Karl Friedl, DOD; Dr. Shirley Gerrior, CSREES USDA; Dr. Deborah Galuska, CDC NCCDPHP; Dr. Suzana Petanceska, NIH NIA; Dr. Darla Danford, NIH NHLBI; Dr. Kathleen Koehler, DHHS OS; and Ms. Meredith Terpeluk, DHHS OPHS. 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 5, 2006 NCC MEETING

Minutes from the January 5, 2006 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. John Milner, National Cancer Institute (NCI), made a motion to approve the minutes, and Dr. Rebecca Costello, 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.

PROBIOTICS AND PREBIOTICS IN NUTRITION RESEARCH

Dr. Crystal McDade-Ngutter, from the DNRC, presented information on the nutritional and health benefits associated with probiotics. Probiotics are living microorganisms, which upon ingestion exert health benefits to their host. To be considered a probiotic, a microorganism must be viable and non-pathogenic, resistant to digestion, and associated with a health benefit. Dr. McDade-Ngutter explained that more research is needed in the area of probiotics for several reasons. Dr. McDade-Ngutter explained that there is not enough science to answer pressing questions. Some of the specific questions included: What is the dosage needed to benefit health? How long are bacteria viable?

In addition to probiotics, Dr. McDade-Ngutter explained that prebiotic research is also needed. Prebiotics are non-digestible food ingredients that beneficially affect their host. They are resistant to digestion, thus making them available for fermentation in the colon. In addition, prebiotics selectively stimulate the growth of "good" bacteria in the colon.

Dr. McDade-Ngutter presented two tables on the evidence of health benefits linked with the use of probiotics, prebiotics, and synbiotics (probiotics and prebiotics used in combination) in both animal model and human models. In animal studies, there is strong evidence that both probiotics and prebiotics may

help to reverse some of the effects of hypercholesterolemia. When studying the effects in humans, probiotics have been linked with improving aspects of diarrheal diseases and lactose intolerance. However, many of the relationships between probiotics, prebiotics, and synbiotics and disease are unknown.

In the past 30 years, NIH has funded 15 probiotic studies and 1 prebiotic study. NCCAM is currently sponsoring a Program Announcement: Probiotics in Pediatric Illnesses (<http://grants.nih.gov/grants/guide/pa-files/PA-05-035.html>), which expires November 2007. Dr. McDade-Ngutter emphasized the need for future research in this area. To encourage research, a workshop to review the current science of probiotics and evaluate the need for future research is currently in the planning stages and will be held in fiscal year 2007. Dr. McDade-Ngutter encourages input from NCC members regarding the planning of this workshop. If you are interested in helping with the planning of this workshop or would like more information concerning this workshop, please contact Dr. McDade-Ngutter (mcdade-ngutterc@mail.nih.gov).

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

Ms. Kathryn McMurry stated that ODPHP had no updates to share at this time.

NIH OFFICE OF DIETARY SUPPLEMENTS (ODS)

Dr. Rebecca Costello provided the NCC with several updates from ODS.

Joint FAO/WHO Model for Establishing Upper Levels of Intake for Nutrients and Related Substances

In 2004, FAO/WHO established a joint workshop to develop an internationally applicable approach that would address the scientific process of nutrient risk assessment. The workshop did not identify upper levels of intake, but rather, focused on developing a scientifically sound approach to assessing risks, if any, associated with intakes of nutrients and related substances. The final report from the Workshop is now available for comment. Interested persons and organizations are invited to comment electronically on or before February 20th. An overview of the workshop, background information, and the final report can be found at:

http://www.who.int/ipcs/highlights/nutrient_project_may18/en/index.html.

The FAO/WHO project was funded by Australia, New Zealand, Canada, South Korea, the European Commission, and the United States. U.S. funding was provided by the ODS, National Institutes of Health.

On March 29, 2006, ODS is sponsoring a seminar by Dr. Christine Taylor who is currently on assignment with WHO. The title of her presentation is "Overview of Joint FAO/WHO Workshop on a Model for Establishing Upper Levels of Intake for Nutrient Substances". The seminar will be held in EPN Room H, 6130

Executive Boulevard, Rockville at 10:30 AM. All interested persons are cordially invited to attend.

NIH Workshop on Diet, Nutrition and Dietary Supplement Use in Autism:

A synopsis of the discussions at the October 6, 2005 NIH Workshop on Diet, Nutrition, and Dietary Supplement Use in Autism: Evaluation of the Evidence was presented to the InterAgency Autism Coordinating Committee on November 18th. A copy of that presentation can be obtained by contacting Ken Fisher at ODS, FisherK@od.nih.gov.

Next Trans-NIH/Agency Meeting:

The spring 2006 meeting of the ODS Trans-NIH/Agency Work Group is scheduled for March 23, 2006 at 1:30-3:30 PM at the Neurosciences Center, 6001 Executive Boulevard, Conference Room D.

ODS/OMAR State of the Science Conference on Multivitamin/Mineral Supplements and Chronic Disease Prevention:

The goal of the conference is to assess the evidence available on use of multivitamin/mineral supplements and resultant health outcomes. The conference will be held May 15 -17, 2006 in Bethesda. In addition to reviewing the literature and an evidence-based report prepared by AHRQ, an expert panel will prepare a summary of the conference findings. The agenda and registration information can be found at <http://consensus.nih.gov> or via the link on the ODS Web page.

Upcoming at EB:

ODS will have an information booth at the upcoming EB Meeting in San Francisco. Information on ODS programs and activities as well as hands-on demonstration of Clinical IBIDS, a new database focused on clinical literature involving dietary supplement interventions that can be displayed by levels of evidence and to include consensus guideline documents from government entities as well as outside professional associations and societies. In addition, ODS has been developing a database to interface with NHANES data files, called NOADS, *NHANES ON LINE ANALYSIS OF DIETARY SUPPLEMENTS*. Both databases are in development and hopefully will be available for β testing and user feedback.

REVISING THE HEALTHY EATING INDEX: A TOOL FOR ASSESSING TOTAL DIET QUALITY

Dr. Patricia Guenther described USDA/CNPP's plan for revising the Healthy Eating Index (HEI). The purpose of the HEI is to measure compliance with Dietary Guidelines for Americans and to monitor overall diet quality. The original HEI was released in 1995 and was based on 3-day food intake data from the Continuing Survey of Food Intakes by Individuals, 1989-91. The purpose of the current project is to revise the HEI so that it conforms to the 2005 Dietary Guidelines and to evaluate psychometric properties. NHANES 2001-2002, 24-

hour recall data will be used for the revised HEI. The most important objectives of the revision are to reflect the 2005 Dietary Guidelines, maximize variation in individual scores, and standardize component scores.

Fruit (total and non-juice), vegetables (total and dark green/orange/legumes), grains (total and whole), milk, meat & beans, oils, calories from saturated fat, sodium, and calories from solid fat, alcohol, and added sugar (SoFAAS) are the proposed components of the revised index. The proposed scoring is based on a density approach, which expresses recommended amounts per 1000 calories. The adequacy components are given maximum points for meeting the standard, 0 points for none, and the intermediate amounts are prorated. The scoring of the moderation components is based on scientific standards for a maximum score, but there is no natural 0. The 2005 Dietary Guidelines Advisory Committee introduced "discretionary calories," which are difficult to measure. Nevertheless, a new component to address over-consumption was desired. The SoFAAS component addresses this need. The maximum score for this component is twice that of the other categories. Analyses to evaluate the HEI's validity and reliability are planned. The components and scoring system for the original and the draft revised indexes are attached. See Appendix C.

Dr. Patricia Guenther requested comments from NCC members, especially from anyone who feels the new HEI may be at odds with any programs or policies. Her e-mail address is Patricia.Guenther@cnpp.usda.gov.

UPDATE OF DNRC ACTIVITIES

Dr. Pamela Starke-Reed reminded the NCC that the Working Group formed after the January NCC meeting, pertaining to the issue of how MyPyramid should relay health messages and advice to adults who are over or under the healthy weight range, is underway. If anyone did not volunteer to be part of that group and would still like to participate, please contact Dr. Trish Britten (CNPP/USDA) directly (Patricia.Britten@cnpp.usda.gov) or e-mail Dr. Starke-Reed.

Nutrition Education Subcommittee (NES).

Dr. Jean Pennington, DNRC, has provided an update of the activities of the NIH NCC NES. For the calendar year 2006, the NES has reviewed 3 documents, which include one each from DHHS, the USDA Food and Nutrition Service (FNS), and the USDA Center for Nutrition Policy and Promotion (CNPP).

Materials reviewed since the last NCC meeting are:

- *Small Step Challenge Questions* (DHHS)
- *Empowering Youth with Nutrition and Physical Activity* (FNS)
- *Your Personal Path to Health: Steps to a Healthier You!* (CNPP)

A listing of reviewed and published NIH nutrition education materials is provided on the DNRC website. Needed updates from NCC members should be communicated to the DNRC.

Human Nutrition Research and Information Management (HNRIM) System Update.

Mr. Jim Krebs-Smith, DNRC, provided a status report of the HNRIM System. In response to the request for FY05 NIH data issued on January 9th, at least nine IC's have submitted data thus far. Data has been requested no later than Monday, February 6 -- NCC reps were asked to contact Mr. Krebs-Smith if additional time was needed. Any questions regarding data preparation, coding, or submission should be directed to Mr. Krebs-Smith or Ms. Karen Regan via e-mail or phone.

REPORTS FROM NCC MEMBERS AND LIAISONS

Dr. James Herrington, from the Fogarty International Center, expressed a concern regarding the major public health problem of arsenic in the drinking water in Bangladesh. Some research has shown that dietary supplements appear to increase urinary output of arsenic, and Dr. Herrington wanted to know if any of the ICs had interest in furthering this research. Dr. Herrington will be in Bangladesh later this month and would be happy to make the link between researchers at NIH and the scientists currently working in Bangladesh. Contact Dr. Herrington if interested (herringtonj@mail.nih.gov).

NEXT NCC MEETING

The next NCC Meeting is scheduled for March 2, 2006.

ADJOURNMENT

The meeting was adjourned at 3:15 PM.

LIST OF APPENDICES

Appendix A - NIH NCC Meeting Agenda for February 2, 2006

Appendix B - NCC Meeting Attendees for February 2, 2006

Appendix C – Original Health Eating Index and Healthy Eating Index-2005 Components and Standards for Scoring

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APPENDIX A. NIH NCC MEETING AGENDA FOR FEBRUARY 2, 2006
2:00-4:00 PM, Rockledge 2, Conference Room 9100-9104, Bethesda MD

1. **Welcome**.....Pam Starke-Reed
2. **Approval of Minutes of January 5, 2006 Meeting**.....Pam Starke-Reed
3. **Probiotics & Prebiotics in Nutrition Research**.....Crystal McDade-Ngutter
4. **ODPHP Update**.....Kathryn McMurry,
ODPHP/OS/HHS
5. **ODS Update**Paul Coates, ODS
6. **Revising the Healthy Eating Index:
A Tool for Assessing Total Diet Quality**.....Patricia M. Guenther,
CNPP, USDA
7. **Current DNRC Update of Activities**.....DNRC Staff
 - HNRIM Update.....Jim Krebs-Smith
 - Nutrition Education Subcommittee Update.....Jean Pennington*
 - International Committee Information.....Pam Starke-Reed/Dan Raiten *
8. **Reports from NCC Members and Liaisons**.....NCC Members
9. **Next Meeting:** March 2, 2006
10. **Old Business**
 - **Updates will be included in the minutes of the meeting only**

APPENDIX B. NCC MEETING ATTENDEES FOR February 2, 2006

	Members Present	Members Absent	Alternates Present
Chairperson:		V Hubbard	P Starke-Reed

NIH Members:

NCI	J Milner		
NHLBI	D Danford		
NIDCR		R Nowjack-Rayner	
NIDDK	C Miles		
NINDS		M Mitler	
NIAID	M Plaut		
NIGMS		S Somers	
NICHD		G Grave	
NEI	N Kurinij		
NIEHS	E Maull		
NIA		J Finkelstein	S Petanceska
NIAMS		J McGowan	
NIDCD		B Wong	
NIMH		P Muehrer	
NIDA		G Lin	
NIAAA	R Breslow		
NINR		Y Bryan	
NCCAM	M Klein		
NCCR		L Yager	
FIC		N Tomitch	
NHGRI		M Holohan	

NIH Liaison Members:

CC	N Sebring		
CIT		J Mahaffey	
CSR		S Kim	
NLM		S Phillips	
OBSSR	D Olster		
OC		M Stern	
ODS		P Coates	R Costello
OD/ODP	B Portnoy		
OLPA			
ORWH			
PRCC		M Vogel-Taylor	

Agency Liaison Representatives:

CDC/NCCDPHP	D Galuska		J Seymour
CDC/NCHS		V Burt	
FDA	K Ellwood		
HRSA	M Lawler		
IHS		T Brown	
ODPHP	K McMurry		
USDA	M Kretsch		D Klurfeld
DOD	K Friedl		
OPHS	M Terpeluk		

DNRC: J Krebs-Smith, C McDade-Ngutter, R Fisher, J Pennington, K Regan, L Somuah, W Johnson-Taylor, M Cannon

Guests: P Hans (NINDS), P Guenther (CNPP, USDA), R Kuczmarski (NIDDK), K Smith (CFSAN /FDA), N Sheard (CSR), A Jerkins (CSR), C Davis (NCI), J Herrington (FIC), P Cotton (NINR), J Huffman (CC), P Bastiosis (CNPP, USDA), K Koehler (OS, DHHS), S Krebs-Smith (NCI), S Gerrior (CREES, USDA)

Appendix C – Original Health Eating Index and Healthy Eating Index – 2005 Components and Standards for Scoring

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Original Health Eating Index and Healthy Eating Index-2005 components and standards for scoring

COMPONENT	SCORE			
	0	5	8	10 20
<i>points</i>				
<i>Original HEI</i>				
Total Grains	0 <			→ 6-11 servings (approx. 6-11 oz eq ^a)
Total Vegetables	0 <			→ 3-5 servings (approx. 1.5-2.5 c ^b)
Total Fruit	0 <			→ 2-4 servings (approx. 1-2 c ^b)
Meat & Beans	0 <			→ 2-3 servings (approx. 5.5-7.0 oz eq ^a)
Milk	0 <			→ 2-3 servings (approx. 2-3 c ^b)
Total Fat	≥ 45			→ ≤ 30% energy
Saturated Fat	≥ 15			→ ≤ 10% energy
Cholesterol	≥ 450			→ < 300 mg
Sodium	≥ 4.8			→ < 2.4 g
Variety	≤ 6			→ 16 different foods in 3 days
<i>HEI-2005</i>				
Grains ^c				
<i>Total Grains</i>	0 <	→ 3.0 oz eq/1000 kcal		
<i>Whole Grains</i>	0 <	→ 1.5 oz eq/1000 kcal		
Vegetables ^c				
<i>Total Vegetables</i>	0 <	→ 1.2 (1.0) ^d c/1000 kcal		
<i>Dark Green/Orange/Legumes</i>	0 <	→ 0.5 (0.3) ^d c/1000 kcal		
Fruit ^c				
<i>Total Fruits</i>	0 <	→ 0.8 c/1000 kcal		
<i>Non-juice Fruits</i>	0 <	→ 0.4 c/1000 kcal		
Meat & Beans	0 <			→ 2.7 (2.0) ^d oz eq/1000 kcal
Oils	0 <			→ 13 g/1000 kcal
Milk	0 <			→ 3.0 (2.0) ^d c
Sodium	≥ 5.0		→ 2.3	← 1.5 g
Saturated Fat	≥ 15		→ 10	← ≤ 7% of energy
Solid Fat, Alcohol, Added Sugar	≥ ?		→ ?	← 16% of energy

^aAccording to sex and age

^bAccording to age

^cComponent is made up of two subcomponents

^d(Standard for children age 2-8 years)

Send comments to Patricia.Guenther@cnpp.usda.gov