MINUTES OF THE NUTRITION COORDINATING COMMITTEE (NCC) MEETING, NATIONAL INSTITUTES OF HEALTH (NIH)

Rockledge 2, Conference Room 9100-9104, Bethesda, MD November 3, 2011 2:00 – 4:00 PM

WELCOME

Dr. Van Hubbard, Director, NIH Division of Nutrition Research Coordination (DNRC), convened the meeting at 2:10 PM and welcomed participants. Phone participants included the following: Dr. Krishan Arora, NIH NCRR; Ms. Jean Charles-Azure, IHS; Dr. Linda Duffy, NIH NCCAM; Dr. Judy Hannah, NIH NIA; Dr. Sarah Johnson, NIH OBSSR; Dr. Lyndon Joseph, NIH NIA; Ms. Michelle Lawler, HRSA; Ms. Holly McPeak, OASH ODPHP; Dr. Daniel Raiten, NIH NICHD; and Dr. Derrick Tabor, NIH NIMHD. 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 1, 2011 NCC MEETING

Minutes from the September 1, 2011 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. Regan Bailey, NIH Office of Dietary Supplements (ODS), made a motion to approve the minutes, and Dr. Robert Kuczmarski, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), 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 the previous NCC meetings.

SCIENTIFIC PRESENTATION: ENVIRONMENTAL INDUCTION OF EPIGENETIC TRANSGENERATIONAL INHERITANCE OF DISEASE – ANCESTRAL GHOSTS IN YOUR GENOME

Dr. Michael Skinner, a professor at the Center for Reproductive Biology at the Washington State University School of Biological Sciences, gave an overview on how modifications of paternal sperm DNA due to exposure to environmental factors might be related to transgenerational inheritance and may impact the epigenetics of future generations. While somatic-cell effects do not have a transgenerational impact, this does not seem to be the case with the germ line. In a series of studies, it has been shown that exposure to certain environmental compounds can cause alterations in epigenetic programming of sperm and its precursors that lead to reproducible phenotypes. Epigenetics are molecular factors/processes around the DNA that regulate genome activity, independent of DNA sequence and are mitotically stable. Mechanisms of epigenetic gene regulation include DNA methylation, histone modification, chromatin

structure, DNA organization into domains (loops), nuclear compartmentalization (eg nuclear matrix), and noncoding functional RNAs. Among epigenetic modifications, DNA methylation patterns are predominantly altered in and transmitted through the germ line. The vast majority of alterations also appear to be species and tissue specific.

The predominant environmental factor in the literature to show a transgenerational phenomena is nutrition. Examples include the human famines in Sweden and Holland, which impacted three generations; obesity in the Agouti mouse, which also impacted three generations; rat calorie restriction which impacted glucose metabolism in three generations; mouse father fasting, which impacted glucose metabolism for two generations; and mouse paternal diet with impacted metabolism for two generations. These observations along with emerging studies support a role for environmental factors and generational effects in contributing to metabolic disease. Epigenetics provides a molecular mechanism for environmental factors such as diet to affect health and to influence subsequent generations through the germ line.

More information can be found at www.skinner.wsu.edu.

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

Ms. Rachel Hayes provided the following updates from ODPHP:

- The Healthy People 2020 Leading Health Indicators (LHI) were released on October 31. The LHIs are composed of 26 indicators organized under 12 topic areas; these indicators have been selected to communicate high-priority health issues and actions that can be taken to address them.
 http://www.healthypeople.gov/2020/LHI/default.aspx
- ODPHP is currently pilot testing a community-based workshop series centered on the Dietary Guidelines for Americans and Physical Activity Guidelines. Ten sites are testing the six-part series; both instructor and participant evaluations will be analyzed.
- ODPHP has recently received multiple FOIA requests surrounding the Dietary Guidelines (peer review process; sodium recommendations).
- Discussions on updating both the Physical Activity Guidelines and the Dietary Guidelines for Americans are underway. ODPHP had an initial meeting with USDA last week to discuss the 2015 Dietary Guidelines for American and will submit a Charter by January, 2012. For the Physical Activity Guidelines, it is

possible that a full update will not be necessary but rather an addendum on specific questions.

Ms. Holly McPeak, ODPHP, also provided information regarding the Healthy People 2020 National Promotion Summit, which will take place April 10-11, 2012 at the Omni Shoreham Hotel in Washington D.C.

Registration for the Summit will open in January. The registration fee schedule for the Summit is set as follows:

\$120 early bird

\$175 late (after March 10, 2012)

\$225 at the door

One presenter for each selected abstract and plenary speakers – free (note: one per abstract)

More information can be found on the following website: www.aptrweb.org/2012summit.html

UPDATE FROM THE OFFICE OF DIETARY SUPPLEMENTS (ODS)

Dr. Regan Bailey provided information about the following activities:

- Johanna Dwyer encourages everyone to submit abstracts to the National Nutrient Databank Conference, which will be held in Houston March 25 – 28, 2012.
 Link: https://editorialexpress.com/cgi-bin/conference/conference.cgi?action=login&db name=NNDC2012
- Dr. Rebecca Costello would like to invite the group to attend a conference, Health Outcomes Among Children and Families Living in Rural Communities, which will be held on December 1-2, 2011. The purpose of this two-day conference is to bring together community members, researchers, health professionals, educators, policymakers, and members of professional organizations to identify research needs regarding the differences between health outcomes for children and families living in rural communities compared to those in urban areas. Conference organizers (several NIH Institutes and Centers, other DHHS Agencies and Offices, the Department of Agriculture, and the National Rural Health Association) seek to stimulate collaborative research on the impact of high-risk health behaviors, negative health indicators, and limited access to high-quality care on the short- and long-term health of children and their families living in rural areas. Registration for this event is required but free and open to the public.

Location: Masur Auditorium, Clinical Research Center (Building 10), NIH Main Campus, Bethesda, Maryland. The meeting agenda and more information can be found at: http://www.nichd.nih.gov/about/meetings/2011/120211.cfm

- ODS has collaborated with DoD and the Human Performance Resource Center at the Uniformed Services University of the Health Sciences, Bethesda, MD in developing two educational materials on dietary supplements: A dietary supplement risk and benefits classification table, http://humanperformanceresourcecenter.org/dietary-supplements/dietary-supplements/2013risks-and-benefits, and an interactive training module for military health care professionals developed in conjunction with the Department of Nutrition, University of North Carolina, Chapel Hill in fashion similar to the Nutrition and Medicine series developed for medical schools. [The module is accessible through the HPRC website for .mil users]. Both educational and communication products follow from recommendations outlined in the IOM Report entitled, Use of Dietary Supplments by Military Personnel (IOM, 2008).
- The dates of the Mary Frances Picciano Dietary Supplement Research Practicum will be June 4 – 9, 2012. Complete details can be found on the webpage, http://odspracticum.od.nih.gov/
- ODS now has a health-professional and a consumer-focused fact sheet on <u>Multivitamin/mineral Supplements</u> or website: http://ods.od.nih.gov/factsheets/list-all/MVMS
- 8th Workshop on the Assessment of Adequate and Safe Intake of Dietary Amino Acids (Co-sponsored by ICAAS and ILSI Research Foundation)

The Ritz-Carlton Hotel Georgetown

November 10 and 11, 2011

Rob Russell and Chris Taylor of ODS will be presenting. The meeting is closed, but abstracts of the presentations will be posted and available after the workshop.

REPORTS FROM NCC MEMBERS AND LIAISONS

Dr. Pam Starke-Reed, DNRC, informed everyone that the workshop, *Using Nanotechnology to Improve Nutrition through Enhanced Bioavailability and Efficacy*, taking place on November 29th and 30th is completely full. The planning committee is attempting to arrange videocasting so that more people can participate and so that the presentations can be archived. Contact Dr. Starke-Reed (<u>starkep@mail.nih.gov</u>) if your IC is interested in contributing funds for the webcast.

Ms. Kathryn McMurry, NHLBI, provided several updates:

Clinical Guidelines

- At a plenary session at the American Heart Association Scientific Sessions on November 14, 2011, chairs of the expert panels for each of the three adult cardiovascular guidelines -- hypertension, cholesterol, and obesity –will present, for the first time, the critical questions that their respective panels are addressing. They will describe how the evidence is being identified and evaluated. In a separate session, leaders of the risk assessment, lifestyle, and implementation work groups will provide a status update and describe their methods.
- The draft adult guidelines are expected to be available for public review and comment in 2012. The five reports (hypertension, cholesterol, obesity, risk assessment, lifestyle) will be released one at a time throughout the year, as they are completed. Public comment will last one month for each report.
- Frequently Asked Questions (FAQs) about the adult cardiovascular guidelines are posted at http://www.nhlbi.nih.gov/guidelines/cvd_adult/faq.htm
- The chair of the pediatric panel will present the pediatric guidelines recommendations at the plenary session at the American Heart Association Scientific Sessions on November 14, 2011.
- The Summary Report of the Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents will be published in *Pediatrics* on December 1, 2011. At the same time, the full report, which was cleared by HHS agencies, will be available on the NHLBI website: http://www.nhlbi.nih.gov/guidelines/cvd_ped/index.htm
- The Expert Panel members will present their recommendations at the AHA meeting on Sunday Nov. 13 at 5:30pm.

Active Nutrition-Related Program Announcements (examples)

- Frequently Asked Questions (FAQs) about Funding Opportunity
 Announcements in Virtual Reality Technologies for Research and Education in Obesity and Diabetes (http://www.nhlbi.nih.gov/funding/inits/faq-foa-vr.htm)
- Nutrition and Diet in the Causation, Prevention, and Management of Heart Failure (R21) - http://grants.nih.gov/grants/guide/pa-files/PA-11-166.html
- Nutrition and Diet in the Causation, Prevention, and Management of Heart Failure (R01) - http://grants1.nih.gov/grants/guide/pa-files/PA-11-165.html

Rural Communities

NHLBI plans to issue an RFA in FY 2013 titled "Cardiovascular Risk Reduction in Underserved Rural Communities." They would like involvement and potential funding support from other ICs. Nutrition interventions could be considered in this RFA. Please address any questions to Charlotte Pratt (301-435-0382).

Medical (and Allied Health) Nutrition Education

NHLBI is considering revamping the Nutrition Academic Award Program—http://www.nhlbi.nih.gov/funding/training/naa/index.htm and would like to focus on Medical and Allied Health, starting with a workshop (pending availability of funds). Please address any questions to Charlotte Pratt (301-435-0382).

We Can!

NHLBI has issued an RFP for registered *We Can!* Community sites to begin or continue implementation of its parent and youth curricula, along with promotion of the program's messages. Proposals are due to Maureen.collins@ogilvy.com by 5:00p.m. EST on Nov. 14, 2011.

UPDATE OF DNRC ACTIVITES

Nutrition Education Subcommittee (NES)

Dr. Margaret McDowell, DNRC, reported that since the September NCC meeting, the NES received seven dietary guidance review requests. The NES reviews materials for consistency with the *Dietary Guidelines for Americans (DGAs), 2010.* The NES completed 7 reviews since the September meeting:

- 1) USDA/CNPP "Eat Seafood Twice a Week-Tip Messages" which will appear on the www.choosemyplate.gov website.
- 2) DHHS/Office on Women's Health submitted materials for "BodyWorks," an 8-week healthy lifestyle program for parents or caregivers with youth 9 14 years and BodyWorks Program trainers. BodyWorks utilizes a parent-focused approach to improve family eating and physical activity habits. The program focuses on parents as role models and provides them with practical tools and information materials to make specific behavior changes to improve eating and physical activity habits. The NES reviewed the Body Basics magazine-style guide for parents who participate in a BodyWorks program; two separate magazine-style guides for boys and girls; and a DVD insert for Let's Shop, Cook, and Eat Together which is part of the family resource toolkit.

- 3) NIH, Office of Dietary Supplements (ODS): A Multivitamin/Mineral Consumer QuickFacts information sheet.
- 4) USDA/Center for Nutrition Policy Promotion (CNPP) Weight Management and Calories section of the ChooseMyPlate.gov website. Link: http://www.choosemyplate.gov/. The content of the Weight Management and Calories submission focuses on the principles for promoting calorie balance and weight management based on Chapter 2 of the Dietary Guidelines for American, 2010.
- 5) The HHS Office on Women's Health web content entitled, "Your Guide to Preventing Heart Disease and Stroke." The information is designed to educate and motivate women to become aware of their personal risk level for cardiovascular disease, identify the factors that are contributing to this risk, and take steps to reduce their risk. Once finalized, the information will be published on the National Women's Health Information Center (NWHIC) web site (www.womenshealth.gov). Supplemental materials will be made available for downloading and printing via the web site.
- 6) NIH, Office of Dietary Supplements (ODS): *Vitamin B*⁶ *Consumer QuickFacts* information sheet.
- 7) HHS/Office of Disease Prevention and Health Promotion (ODPHP) Sodium Tools: "Sodium-Quicktips 2011" and "Sodium-Shopping List 2011"

Current Reviews:

The NES is reviewing factsheets and web site content developed by the NIH, National Heart, Lung and Blood Institute (NHLBI). The materials are based on recommendations from NHLBI's Expert Panel on Integrated Pediatric Guidelines for Cardiovascular Health and Risk Reduction for health professionals (to be released in November 2011). The target audience is parents of children birth to 21 years of age who are at elevated cardiovascular risk, with a special focus on African American, Hispanic, and low-income persons.

The materials under review are:

 "Young Hearts. Strong Starts" Web site. The web site provides detailed heart health information and resources for parents, health professionals, and partners. The Web site promotes heart health in childhood and provides age-specific recommendations and questions for parents to ask their child's doctor, and materials:

- "Your Child's Heart Health: What You Need to Know", a factsheet that explains the importance of promoting heart health in childhood, the risk factors for heart disease, and what parents can do now to encourage heart healthy behaviors. It also provides questions for parents to ask their child's doctor, lists essential screenings, and provides information about the new pediatric heart health guidelines. The factsheet will available for download on the Web site, as well as for purchase through the NHLBI clearinghouse;
- A factsheet entitled, "Your Child's Heart Health: A Checklist for Heart Disease
 Risk Factors." The factsheet provides an overview of the risk factors for heart
 disease, along with a checklist that helps parents determine if their child is at risk.
 Parents can use the checklist as a guide for talking to their child's doctor at their
 child's next appointment. The factsheet will available for download on the Web
 site, as well as for purchase through the NHLBI clearinghouse.

International Subcommittee Information

Dr. Dan Raiten provided several updates as a follow-up to the Sub-Committee on International Nutrition Research (SCINR) meeting held on October 6th.

- USAID is interested in establishing a more formal relationship with NIH. There
 are several approaches for how this could be done. One approach would be to
 set up a collaborating center with WHO. This center would be well-positioned to
 lead coordinated efforts on the topics of critical importance to the global
 community, including the first "1000 days," which is currently a focal point for
 WHO.
- The Micronutrient Forum, which was established in 2006 to reflect the scientific and programmatic evolution in the field of micronutrients, is being reinvigorated by the Secretariat. A meeting will be held next week. More information will be shared as it becomes available.
- As was requested at the SCINR meeting in October, if you are aware of
 individuals within your IC who would be interested in participating in SCINR
 efforts, please have them contact Dr. Raiten (raitend@mail.nih.gov). Also, if
 your IC has identified a critical question pertaining to the global nutrition crisis
 that it would like to see addressed, please share this information with Dr. Raiten
 as well.

HNRIM Update

Redesign and pilot testing of the new HNRIM coding module has been completed. A number of improvements were made based on feedback from testers. One significant

change: HNRIM codes have been mapped to NIH spending categories to the extent possible. As a result, mapped codes will be applied by the system in advance of institute/center coding, resulting in a more streamlined and consistent coding process. An email to announce the site and transmit the new URL will be sent during the week of November 7th. Coders are encouraged to contact Jim Krebs-Smith or Karen Regan with questions or feedback.

NEXT NCC MEETING

The next NCC meeting will be on December 1, 2011.

ADJOURNMENT

The meeting was adjourned at 4:00 PM

LIST OF APPENDICES

Appendix A: NIH NCC Meeting Agenda for November 3, 2011
Appendix B: NIH NCC Meeting Attendees for November 3, 2011

APPENDIX A: NIH NUTRITION COORDINATING COMMITTEE MEETING AGENDA

1. WelcomeVan Hubbard						
2. Approval of September 1, 2011 Meeting MinutesVan Hubbard						
3. Scientific Presentation Introduction						
"Environmental Induction of Epigenetic Transgenerational Inheritance of Disease: Ancestral Ghosts in Your Genome"						
Michael K. Skinner Professor Center for Reproductive Biology School of Biological Sciences Washington State University Pullman, WA						
4. ODPHP Update						
5. ODS Update						
6. Reports from NCC Members and LiaisonsNCC Members						
7. Current DNRC Update of Activities						
8. Next Meeting - December 1, 2011						

^{*} Updates will be included in the minutes of the meeting only

1) APPENDIX B: NCC MEETING ATTENDEES FOR NOVEMBER 3, 2011

				Present
	V Hubbard			
DNRC Deputy-	P Starke-Reed			
Director				
NIH MEMBERS				
NCI		J Milner		
	K McMurry	• • • • • • • • • • • • • • • • • • • •		A Ershow
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
NIDCR		R Nowjack-Raymer		
NIDDK	R Kuczmarski	,		J Karimbakas
NINDS		M Mitler		
NIAID		P Sato		
NIGMS		S Somers		
NICHD		G Grave	D Raiten	A Bodnar
NEI		N Kurinij	Ditailen	A Bouriai
NIEHS		E Maull		
	J Hannah	Liviadii	L Joseph	
NIAMS	o Haman	J McGowan	Соосрп	X Wang
NIDCD		B Wong		Avvarig
NIMH		M Chavez		
	D Tabor	IVI OHAVEZ		
NIDA	D Tabol	G Lin		
NIAAA		R Breslow		Bill Dunty
NIZVA		IV DIESIOW		=
				Dale Herald
				Andras Orosz
NINR		P Cotton		
	L Duffy	1 0011011		
	K Arora			
FIC	11711010	M Levintova		
NHGRI		S Basaric		
1110111		o Basans		
NIH LIAISONS				
CC		A Courville		
CIT		J Mahaffey		
CSR		S Kim		
NLM		M Corn		
OBSSR :	S Johnson			
ODS		P Coates		R Bailey
OD/ODP		B Portnoy		
PRCC		•		
AGENCY LIAISONS				
AHRQ		I Mabry-Hernandez		
CDC/NCCDPHP		H Blanck		
CDC/NCHS		C Johnson		
FDA		M Poos	S Blakely	
	M Lawler			
	J Charles-Azure	T Brown		
ODPHP		R Hayes	H McPeak	K Butner

		A Hutson
USDA/ARS	D Klurfeld	
USDA/NIFA	S Welsh	
DOD	K Friedl	

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