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

Rockledge 2, Conference Room 9100-9104, Bethesda, MD June 3, 2010 2:00 – 4:00 PM

WELCOME

Dr. Pamela Starke-Reed, Deputy Director, NIH Division of Nutrition Research Coordination (DNRC), convened the meeting at 2:05 PM and welcomed participants. Phone participants included the following: Dr. Sanja Basaric, NIH NHGRI; Dr. Lynn Bosco, NIH OBSSR; CAPT Shirley Blakely, FDA; Dr. Paul Cotton, NIH NINR; Ms Kristina Davis, OS ODPHP; Ms. Janet DeJesus, NIH NHLBI; Ms. Marguerite Klein, NIH ODS; and Ms. Holly McPeak, OS ODPHP. 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 MAY 6, 2010 NCC MEETING

Minutes from the May 6, 2010 NCC meeting had previously been sent to NCC members via email. Dr. Starke-Reed asked if there were any other corrections to the minutes. There were none. Dr. Paul Coates, NIH Office of Dietary Supplements (ODS), made a motion to approve the minutes, and Dr. John Milner, NIH National Cancer Institute (NCI), seconded the motion. The minutes were thus approved and will be posted on the DNRC website, http://www.dnrc.nih.gov, along with the minutes from the previous NCC meetings.

SCIENTIFIC PRESENTATION: "PLANT BIOLOGY RESEARCH FOR HUMAN HEALTH AND NUTRITION"

Dr. Sarah M. (Sally) Assmann, Waller Professor of Biology, Penn State University and Immediate Past-President, American Society of Plant Biologists (ASPB) shared several research projects highlighting common interests of both NIH and ASPB. These projects shed light on how plant science may be used to further the NIH mission to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce the burdens of illness and disability.

The American Society of Plant Biologists was founded in 1924 to promote the growth and development of plant biology, to encourage and publish research in plant biology, and to promote the interests and growth of plant scientists in general. It publishes two highly respected journals, *The Plant Cell* and *Plant Physiology* and has over 5,000 members who are engaged in a wide diversity of fundamental and applied plant biology research efforts.

An example of a project led by ASPB scientists that relates to the NIH mission is the BioCassava Plus Program, a scientific collaboration between U.S. and African scientists to produce improved, biofortified varieties of cassava for African farmers. Malnutrition is a serious health concern in developing countries. More than one billion people are now estimated to be undernourished. Malnutrition is often associated with crises in subsistence farming due to a heavy reliance on manual labor, lack of fertilizers, lack of irrigation, limited pest control, and limited land ownership. Biofortified cassava, however, can help improve food security. Cassava is the major source of calories for 800 million people world-wide. Cassava grows in poor soil, is drought tolerant, requires minimal labor, and the roots can be banked in the soil for up to 2-3 years. Although cassava provides a rich source of calories, it does not provide complete nutrition, which is the issue that BioCassava Plus is addressing. The objectives of this project are to create cassava varieties that are markedly higher in zinc, iron, vitamin A, vitamin E, and protein as well as resistant to gemini virus, with no cyanogens, and an increased shelf life. Thus far, all of these objectives have been met in new varieties of cassava already tested in field trials in Puerto Rico. Field trials in Nigeria are now in progress.

Another area of ASPB research that would be of interest to NIH is the study of biomedical materials from plants. Plants synthesize an estimated 100,000 – 1 million metabolites. Research on plant metabolomics will ultimately provide the basis for the development of personalized nutrition and functional foods. Study of plant compounds can also illuminate the mechanisms for certain drug actions and lead to the discovery of new pharmaceuticals. According to the World Health Organization, 11% of the 252 drugs considered as basic and essential are exclusively of flowering plant origin. In addition to drugs, a number of fundamental discoveries are first made in plants. For example, the blue light photoreceptor cryptochrome was first discovered in plants and subsequently the mammalian cryptochrome was identified and found to function in circadian rhythm.

Plant research could also be used to further the NIH mission through collaborations with human geneticists on the identification of tissue-preferential gene expression and function. New systems biology methods were recently developed to identify a genecentric tissue network for Arabidopsis (a species in the family Brassicaceae that is the premier model organism used for studying plant biology and the first plant to have its entire genome sequenced). Application of this same method of analysis to the human genome resulted in the identification of numerous new candidate disease-related genes that await study.

In summary, Dr. Assmann identified several ways that researchers from ASPB could collaborate with NIH. Dr. Assmann suggested the development of a plant-based small molecule research program to benefit human nutrition (biofortification, personalized

health, nutragenomics, and nutraceuticals) and facilitate the prevention and treatment of genetic and infectious diseases. Such a program could be well-suited for inter-agency development.

If you have questions for Dr. Assmann or would like to discuss potential collaboration, please contact her at: sma3@psu.edu.

NIH HEALTH AND WELLNESS COUNCIL

CAPT Margaret McDowell, DNRC, shared information about the development of an NIH Health and Wellness Council. The project is spearheaded by Mr. Chris Gaines and Dr. Michael Donovan in the Office of Research Services under the direction of Dr. Alfred Johnson, Associate Director for Research Services. Mr. Gaines has also been able to interact successfully with Ms. Colleen Barros, Deputy Director for Management and Chief Financial Officer, to gain formal recognition of this endeavor. The primary purpose of the NIH Health and Wellness Council will be to provide advocacy, leadership, and support to protect and improve the health of all NIH employees.

A Charter for the NIH Health and Wellness Council is under development, but ORS hopes to have it finalized soon. They are also working on an action plan and implementation steps. The NIH Child Care Board has been used as a model for the Council. Additional input has come from individuals identified by the WellCheck survey to be already engaged in wellness activities at their respective ICs. Formal membership of the Council has yet to be established, but each IC will be asked to have one voting member and additional alternates.

ORS and those working on the Council have identified an "NIH Wheel of Health" that includes 8 spokes where attention will be focused. These spokes include: Physical Activity; Diet and Nutrition; Stress Management, Mental Health, and Addiction; Health Literacy/Know Your Numbers; Access to the Preventive and Diagnostic Screenings, Quality Treatment, and Clinical Trials; Financial Wellness; and Environmental and Occupational Health.

CAPT Margaret McDowell, Ms. Rachel Fisher, and Ms. Karen Regan from the DNRC have been working closely with Mr. Gaines and Dr. Donovan to provide guidance on the development of the "Diet and Nutrition" spoke and would welcome support from any members of the NCC. If you are interested in learning more about the Council and if someone from your IC has been involved, please contact Mr. Gaines or Dr. Donovan directly or feel free to contact one of the DNRC staff members mentioned above. There

have been three Council meetings so far, and the next one is scheduled for July though the date has not yet been determined. Meetings are open for anyone to attend.

A wellness section has been added to the ORS website, and there are plans to expand this site at a later date. http://dats.ors.od.nih.gov/wellness/index.htm

ACTION ITEM: The NIH Health and Wellness Council hopes to have an active speakers' bureau. To ensure that it is well represented by individuals with a credible nutrition background, please contact Ms. Rachel Fisher (Rachel.Fisher@nih.hhs.gov) at the DNRC if you are interested in being a part of this bureau. Also, indicate topics you would be willing to present. We would also appreciate it if you would pass this request on to other dietitians and nutrition professionals in your office.

REPORTS FROM NCC MEMBERS AND LIASONS

- COL Karl Friedl, DoD, announced that the IOM workshop: Nutrition and Neuroprotection in Military Personnel is now open for registration. The workshop will take place June 23-24, 2010 at the Venable LLP Conference Center in Washington DC. For more information and to register for the workshop, please visit www.iom.edu/tbinutrition or contact Gui Liu at gliu@nas.edu.
- Dr. John Milner, NCI, directed the attention of the NCC to a meta-analysis published earlier this year regarding the association of saturated fat and cardiovascular disease. He requested that the NCC discuss this analysis at a future meeting. The full paper can be viewed at http://www.ajcn.org/cgi/rapidpdf/ajcn.2009.27725v1. Several experts on the topic were identified as potential discussants to attend the next NCC meeting.
- Dr. Pam Starke-Reed, DNRC, attended a meeting hosted by the National Institute of Food and Agriculture (NIFA) on June 2 with the purpose of receiving public comments pertaining to the Agriculture and Food Research Initiative (AFRI). Comments will be considered as the Fiscal Year 2011 AFRI program solicitations are developed. Written comments were also accepted through June 7th. For more information, visit www.nifa.usda.gov.
- Dr. Kathy Ellwood, FDA, announced that FDA recently lost a court case –
 Alliance for Natural Health, et al. vs. Kathleen Sebelius, et al. regarding the

use of selenium-cancer risk reduction claims. FDA is still deliberating next steps.

 Dr. Ellwood, FDA, also announced that a Biomarkers Discussion Forum will take place on June 21-22, 2010. The goal of the forum is to provide an opportunity for stakeholders to learn about, react to, and discuss the IOM report, Evaluation of Biomarkers and Surrogate Endpoints in Chronic Disease. For more information, visit http://www.iom.edu/Activities/Research/BiomarkersChronDisease/2010-JUN-21.aspx

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

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

Dietary Reference Intakes (DRI)

- The IOM committee's report on vitamin D and calcium is expected to be publically available by the end of September or beginning of October, 2010.
- ODPHP has been working to develop a timeline for additional DRI updates and whether the IOM should revisit a DRI for eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA)

Healthy People 2020

- The Departmental Clearance process is underway. In total, there are 1300 measures for review. The review format includes only limited information on each objective (baseline, target, target method, and data source).
- General information, proposed objectives, and public comments are available at www.healthypeople.gov

2010 Dietary Guidelines for Americans

The 6th and final meeting was held via webcast on May 12, 2010.
 Transcripts, minutes, audio recordings, slides from meetings, and public comments are posted at www.dietaryguidelines.gov.

- The final report from the Dietary Guidelines Advisory Committee is 600 pages, not including the tables available on the Nutrition Evidence Library (NEL). All of the NEL evidence tables and abstracts, as well as NHANES analyses and modeling reports, will be available for public access upon submission of the DGAC report.
- The Committee's report is now under review by both the Secretary of Health and Human Services and the Secretary of Agriculture. The report will be released mid-June for a 30-day agency and public review/comment period.
- As mentioned at previous NCC meetings, since 1985, the Departments have relied upon an expert committee's review of the scientific literature as the primary basis for the Federal Dietary Guidelines for Americans. Any departure from its recommendations would need to have a robust scientific and/or public health basis.

2010 Dietary Guidelines for Americans Communications Effort

Ms. Rachel Hayes, ODPHP, invited HHS partners in Dietary Guidelines communications to a briefing by the American Institutes for Research (AIR) on June 15th. AIR, with whom ODPHP has contracted for research and development services, will present the results of their recent focus group research and will discuss the array of options available for DGA communication products that could be released by ODPHP. After hearing AIR's presentation, input will be welcomed pertaining to the various options presented and how they may best complement already planned activities. Invitations have already been extended, but if you did not receive one and are interested in participating, please contact Ms. Hayes (Rachel-Hayes@hhs.gov) and she would be happy to send you the information.

UPDATE FROM THE NIH OFFICE OF DIETARY SUPPLEMENTS (ODS)

Dr. Paul Coates, ODS, shared some sad news with the NCC. Dr. James Joseph, the Director of the Neuroscience Laboratory at the USDA Human Nutrition Research Center on Aging at Tufts, recently passed away. Further details were not available.

Dr. Regan Bailey, ODS, provided the following report:

 Economic Analysis of Nutrition Interventions Workshop: A detailed report of the workshop (sponsors: ODS, NCCAM, NINR, NCI) held earlier this year is being prepared and will be posted on the ODS website. A manuscript summarizing the workshop proceedings is also being prepared for publication. NCC members will be informed when these are available.

- The next grant review cycle will begin in July; the receipt deadline is July 12.
 Grant review will take place on July 28th, and notification of funding to the IC will be no later than August 6th.
- The annual Dietary Supplement Research Practicum will take place June 14-18th. We are at full capacity but will try to accommodate any federal partners who may be interested. Please contact Dr. Bailey if this is the case (baileyr@mail.nih.gov).
- ODS hosted Dr. Michael Zimmerman on May 14th. Representatives from various ICs and federal agencies attended. A preliminary summary of the seminar is below:
 - CDC data (NHANES) indicate iodine status among pregnant women in US may be a problem
 - Additional data are needed
 - NIST expressed interest in working on analytical methods and reference materials relevant to the assessment of iodine status
 - Thyroglobulin (NIST interested in developing a reference method)
 - T3 and T4 (NIST has reference methods, which could work on detection limits if there is a need)
 - ODS is also developing an Iodine Fact Sheet for health professionals

UPDATE OF DNRC ACTIVITES

Nutrition Education Subcommittee (NES):

CAPT Margaret McDowell, DNRC, provided an update on NIH-NCC NES activities.

The NES has reviewed 7 documents since January 2010. All of the requests received this year were submitted by NIH agencies (4 from ODS and 3 from NHLBI). No new submissions have been received since the May NCC meeting. The DNRC appreciates receiving 10-20 copies of recent NIH nutrition-related publications for display in the DNRC Office. Please send them through interoffice mail to CAPT McDowell, Democracy 2, Room 629.

HNRIM UPDATE

Ms. Karen Regan reminded everyone that the deadline for HNRIM coding of FY09 nutrition projects was May 31st. Only 50% of the ICs made this deadline. If your IC has not submitted codes, please feel free to contact Mr. Jim Krebs-Smith (Krebsj@mail.nih.gov) or Ms. Karen Regan (regank@mail.nih.gov) if you have questions or need assistance.

NEXT NCC MEETING

The next NCC meeting will be July 1, 2010

ADJOURNMENT

The meeting was adjourned at 3:40 PM

LIST OF APPENDICES

Appendix A: NIH NCC Meeting Agenda for June 3, 2010

Appendix B: NIH NCC Meeting Attendees for June 3, 2010

APPENDIX A: NIH NUTRITION COORDINATING COMMITTEE MEETING AGENDA

1.	WelcomePam Starke-Reed			
2.	Approval of Minutes of the May 6, 2010 meetingPam Starke-Reed			
3.	Scientific Presentation: "Plant Biology Research for			
4.	Human Health and NutritionSally Assmann			
5.	NIH Health and Wellness Council			
	Margaret McDowell, Rachel Fisher, & Karen Regan			
6.	Reports from NCC Members and LiaisonsNCC Members			
7.	ODPHP Activities UpdateKathryn McMurry			
8.	ODS Activities UpdateRegan Bailey			
9.	Current DNRC Update of ActivitiesDNRC Staff			
	 Nutrition Education Subcommittee UpdateMargaret McDowell International Committee InformationPam Starke-Reed/Dan Raiten HNRIM UpdateJim Krebs-Smith/Karen Regan 			
10	.Next MeetingJuly 1, 2010			

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¹ Updates will be included in the minutes of the meeting only

APPENDIX B: NCC MEETING ATTENDEES FOR JUNE 3

	Members Present	Members Absent	Alternates Present
Chairperson		V Hubbard	P Starke-Reed
NIH MEMBERS			
NCI	J Milner		S Ross
NHLBI	J DeJesus		
NIDCR		R Nowjack-Raymer	
NIDDK		, ,	R Kuczmarski
NINDS		M Mitler	
NIAID		R Sawyer	
NIGMS		S Somers	
NICHD		G Grave	
NEI		N Kurinij	
NIEHS		E Maull	
NIA		J Hannah	
NIAMS		J McGowan	
NIDCD		B Wong	
NIMH		M Chavez	
NIDA		G Lin	
NIAAA		R Breslow	
NINR	P Cotton		
NCCAM	· Comon	L Duffy	
NCMHD	D Tabor	2 2 4	
NCRR	K Arora		
FIC	11711010	M Levintova	
NHGRI	S Basaric	III Zovintova	
14.1614	o Badano		
NIH LIAISONS			
CC	N Sebring		
CIT		J Mahaffey	
CSR		S Kim	
NLM		M Corn	
OBSSR	L Bosco	com	
ODS	P Coates		
OD/ODP	B Portnoy		
PRCC	B i citiloy	M Vogel-Taylor	
1100		W voger rayler	
AGENCY LIAISONS			
AHRQ		I Mabry-Hernandez	
CDC/NCCDPHP		H Blanck	
CDC/NCHS		C Johnson	
FDA	K Ellwood	0 0011110011	S Blakely
HRSA	M Lawler		- Dianoiy
HIS	.vi Laviloi	T Brown	
ODPHP	K McMurry	I DIOWII	H McPeak
USDA	TO IVICIVICITY	K Klurfeld	TI WOI GAN
DOD	K Friedl	KRIGHEIG	
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DNRC: N Bulger, R Fisher, W Johnson-Askew, M McDowell, K Regan

Guests: S Assmann (ASPB/Penn State), R Bailey (ODS), K Davis (ODPHP), E Froyd (Lewis-Burke Associates), R Hayes (ODPHP), M Klein (ODS), M Miller (NIDDK), C Taylor (ASPB), E Trujillo (NCI), and P Trumbo (FDA/ODPHP)