

**MICRONUTRIENT GLOBAL LEADERSHIP
(HNR-A-00-98-00027-00)**

Progress Report

Activities over the Past Six Months (1 April 2003 – 30 September 2003)

IVACG

- Organized and convened an IVACG Steering Committee meeting in Baltimore, Maryland on 25 August 2003 (IVACG Activity 1b, FY03 work plan).
- Issued an invitation to Dr. Chewe Luo to join the IVACG Steering Committee (IVACG Activity 1c, FY03 work plan).
- Drafted letters of invitation to experts from the iron, zinc, and reproductive health communities to join a Program Committee for the review of abstracts and design of the program for the XXII IVACG Meeting (IVACG Activity 1c, FY03 work plan).
- Planned and executed site visit to Peru from 9/14–9/28/03 to encourage the formation of a Local Organizing Committee and to tour potential venues for the joint XXII IVACG Meeting and 2004 INACG Symposium. A trip report will be submitted to USAID (IVACG Activity 1c, FY03 work plan).
- Continued follow-up from the XXI IVACG Meeting, including expense reports and reimbursements (IVACG Activity 2h, FY03 work plan).
- Published and disseminated the XXI IVACG Meeting report to each participant that attended the IVACG/INACG meetings in Marrakech (IVACG Activity 3b, FY03 work plan).
- Reprinted the first chapter of the proceedings of the XX IVACG Meeting, September 2002 supplement to *The Journal of Nutrition* and distributed these together with the proceedings of the XXI IVACG Meeting, to each participant that attended the IVACG/INACG meetings in Marrakech (IVACG Activity 3c, FY03 work plan).
- Circulated a draft of an IVACG statement describing the role of plant foods in meeting vitamin A requirements based on new conversion factors to the IVACG Steering Committee for review (IVACG Activity 3c, FY03 work plan). The

IVACG Steering Committee decided against publishing this statement and asked the Secretariat to develop an addendum to the 1999 IVACG statement instead (IVACG Activity 3a, FY04 workplan).

- Continued to distribute IVACG publications upon request (IVACG Activity 3d, FY03 work plan).

INACG

- Organized and held an INACG Steering Committee conference call on 28 August 2003 (INACG Activity 1c, FY03 work plan).
- Issued invitations to Mrs. Rosanna Agble and Dr. H.P.S. Sachdev to join the INACG Steering Committee (INACG Activity 1d, FY03 work plan). Both invitees accepted.
- Continued follow-up from the 2003 INACG Symposium, including expense reports and reimbursements (INACG Activity 2f, FY03 work plan).
- Published and distributed a publication based on the outcomes of the INACG workshop on strategic anemia communications (INACG Activity 4a, FY03 work plan).
- Published and distributed a French translation of “Anemia, Iron Deficiency, and Iron Deficiency Anemia” (INACG Activity 4e, FY03 work plan).
- Published and disseminated the 2003 INACG Symposium report to each participant that attended the IVACG/INACG meetings in Marrakech (INACG Activity 4f, FY03 work plan).
- Developed a statement clarifying the terms efficacy and effectiveness and what kinds of studies are needed to support claims for either (Publication Activity 4i, FY03 work plan). The document is awaiting final revisions.
- Continued to distribute INACG publications upon request (INACG Activity 4g, FY03 work plan).
- Dr. George Beaton, University of Toronto, submitted his report on “Estimation of Bioavailability of Endogenous and Added Iron and the Resulting Impact of Iron Fortification” (INACG Activity 4c, FY03 work plan). This work is a result of the Zurich workshop on “Defining Iron Concentration Levels in Fortified Staple Foods and Complementary Food Supplements” (October 21-22, 2002). His collaborator, Dr. Sean Lynch, is preparing manuscripts from the report for publication.

Targeted Operational Research (TOR)

- Final payment was made for the Ghana project (Randomized Double-blind Placebo Controlled Trial to Evaluate the Impact of Vitamin A Supplementation on Maternal Mortality in Ghana) (TOR Activity 1a, FY03 workplan). The project is not complete so only an interim progress report is available.
- Final payment made to ACC/SCN for the Fifth Report of the World Nutrition Situation (TOR Activity 1b, FY03 workplan).
- A no cost extension was requested by Dr. Harshi Sachdev to September 30, 2004, in order to complete work on the meta analysis of data on the health benefits of iron supplementation in children (TOR Activity 1c, FY03 workplan).
- Provided new award to Dr. Kathryn Dewey, University of California Davis for "Comparison of the Efficacy and Acceptability of Three Types of Micronutrient Supplements Added to Complementary Foods for Infants in Ghana" (TOR Activity 2a, FY03 workplan). The award provides partial funding for this project.
- Provided a new award to MOST to aid the Ghanaian Ministry of Health in implementing the Ghana Strategic Communication Plan developed at the INACG workshop in Cape Town, South Africa in September 2002 (TOR Activity 1a, FY04 work plan).

Expert Panel Consultations (EPC)

- Dr. Penelope Nestel worked with the Wellcome Trust to organize a consultation on a multidisciplinary research based initiative on mothers, infants, and their nutrition held in London on July 25, 2003 (EPC Activity 3b, FY03 workplan). The consultation included medical experts and representatives of agencies currently funding research in this area. A report is being reviewed, but will be an internal document only.
- Dr. Penelope Nestel presented a paper on nutrition interventions for women at the 2nd World Congress on Fetal Origins of Adult Disease (June 8-11, 2003). Her presentation was cited in an article in *The Economist*.

Publications

- A set of 14 Micronutrient Fact Sheets written by Dr. Penelope Nestel and Dr. Ritu Nalubola were printed and distributed (Publications Activity 4a, FY03 work plan).

- Dr. David Turnham's paper on interpretation of retinol values in infected populations has been accepted for publication by *The Lancet* (Publications Activity 4d, FY03). The paper is titled "A Meta-analysis of Data from 15 Studies to Quantify the Effects of Subclinical Infection on Plasma Retinol" and the authors are: D.I. Thurnham, G.P. McCabe, C.A. Northrop-Clewes, and P. Nestel.
- Proceedings of the USAID/Wellcome Trust meeting on Nutrition as a Preventive Strategy for Adverse Pregnancy Outcome (July 18-19, 2002 in Oxford, UK) were published as a supplement to *The Journal of Nutrition* in May, 2003 (Publication Activity 4h, FY03 work plan). A summary of the meeting was accepted for publication by the *Journal of Public Health and Nutrition* (Publication Activity 4e, FY03 work plan).
- A second manuscript ("The Use of Iron-fortified Wheat Flour to Reduce Anemia among the Estate Population in Sri Lanka") on data from the iron fortification efficacy trial in Sri Lanka (Publication Activity 4j, FY03 work plan) was accepted for publication in the *International Journal of Vitamin and Nutrition Research*. The authors are P. Nestel, R. Nalubola, R. Sivakaneshan, AR Wickramasinghe, S. Atukorala, T. Wickramanayake, and the flour fortification team in Sri Lanka.
- Dr. Penelope Nestel co-authored a Handbook of Nutrition and Immunity that will be published by Humana Press in 2004 (Other Activity 5, FY03 work plan).
- Dr. Penelope Nestel co-authored with Dr. Andre Briend a chapter titled "Malnutrition – Primary Causes, Epidemiology, and Prevention" that will be published in the Encyclopedia of Human Nutrition, 2nd Edition in 2005. Dr. Benjamin Caballero is the editor and Elsevier Science the publisher.
- Dr. Penelope Nestel and Dr. Ritu Nalubola co-authored a paper, "Food-based Approaches to Improving Micronutrient Status in Developing Countries" that will be published by the International Union of Food Scientists.

VITA

- No activities in this time period.

MGL Administration

- Quarterly financial report submitted on April 30, 2003 and July 31, 2003.
- Draft FY 04 work plan submitted on July 30, 2003.

Other Activities

- Dr. Penelope assisted the CHANGE Project in assembling a stakeholder analysis and "political mapping" of vitamin A and micronutrient advocacy efforts. Both

supporters and detractors were identified. Goals, communication strategies, key message points and materials were collected. They will be used by UNICEF and WHO in management of adverse events and will be incorporated into program development materials.

- Dr. Penelope Nestel provided technical assistance to the International Potato Center (CIP) Vitamin A for Africa Initiative for a sweet potato retention and efficacy trial (TOR Activity 1f, FY04 work plan). The trial has been completed.

Activities Planned for the Next Six Months (1 October 2003 – 31 March 2004)

IVACG

- Follow-up on invitation to Dr. Chewe Luo to join the IVACG Steering Committee (IVACG Activity 1c, FY04 work plan).
- Collect information on additional candidates for the IVACG Steering Committee (IVACG Activity 1c, FY04 work plan).
- Follow-up on feasibility of a FAO/WHO consultation on vitamin A availability in the world's food supply (IVACG Activity 1c, FY04 work plan).
- Select dates and venue for the micronutrient interactions meeting planned for spring 2005 (IVACG Activity 1c, FY04 work plan).
- Issue invitations to selected experts from the iron, zinc, and reproductive health communities to join a Program Committee for the XXII IVACG Meeting (IVACG Activity 1c, FY04 work plan).
- Send out formal call for abstracts for the XXII IVACG Meeting and collect abstracts (IVACG Activity 2a, FY04 work plan).
- Finalize contracts with hotels and venues for the XXII IVACG Meeting (IVACG Activity 2b, FY04 work plan).
- Begin fundraising efforts for the XXII IVACG Meeting (IVACG Activity 2j, FY04 work plan).
- Further investigate banking options for the next IVACG/INACG meetings (IVACG Activity 2l, FY04 work plan).
- Maintain continuous contact with the Local Organizing Committee for next IVACG/INACG meetings. Plan and execute a follow-up visit to Peru to continue

to work with the Local Organizing Committee to reach final agreement on who will have what responsibilities in planning the meetings, and to follow-up with hotels and service providers (IVACG Activity 2m, FY04 work plan).

- Publish and distribute an update addendum to the 1999 IVACG statement on the role of plant foods in meeting vitamin A requirements based on the new conversion factors (IVACG Activity 3a, FY04 work plan).
- Publish and distribute a revised statement on the strategic placement of IVACG (IVACG Activity 3b, FY04 work plan).
- Work with MOST to produce a joint IVACG/MOST publication on options for post-NIDS distribution of vitamin A (IVACG Activity 3c, FY04 work plan).
- Continue to monitor literature on vitamin A and bone loss (IVACG Activity 3d, FY04 work plan).
- Distribute IVACG publications upon request (IVACG Activity 3e, FY04 work plan).

INACG

- Draft and approve INACG bylaws for the INACG Steering Committee (INACG Activity 1d, FY04 work plan).
- Send out formal call for abstracts for the 2004 INACG Symposium and collect abstracts (INACG Activity 2a, FY04 work plan).
- Finalize contracts with hotels and venues for the 2004 INACG Symposium (INACG Activity 2b, FY04 work plan).
- Begin fundraising efforts for the 2004 INACG Symposium (INACG Activity 2j, FY04 work plan).
- Maintain continuous contact with the Local Organizing Committee for the next IVACG/INACG meetings (INACG Activity 2m, FY04 work plan).
- Plan and convene an INACG workshop on iron and child development (INACG Activity 3a, FY04 work plan).
- Publish, and distribute the HemoCue standardization document (INACG Activity 4a, FY04 work plan).

- Publish and distribute fortification levels brief based on output of the Zurich workshop (INACG Activity 4b, FY04 work plan).
- Publish and distribute the efficacy/effectiveness statement (Publication Activity 4i, FY03 work plan).
- Other publications as identified by the INACG Steering Committee (INACG Activity 4d, FY04 work plan):
 - Portuguese and Spanish translations of “Anemia, Iron Deficiency, and Iron Deficiency Anemia”
 - Publications survey
- Distribute INACG publications upon request (INACG Activity 4e, FY04 work plan).

Targeted Operational Research (TOR)

- Close out agreement with the Kintampo Health Research Centre for the Ghana maternal mortality trial (TOR Activity 1a, FY03 work plan)
- Monitor ongoing research agreements (TOR Activity xx, FY04 work plan) with:
 - Dr. Harshi Sachdev, Indian Academy of Pediatrics (TOR Activity 1c, FY03 work plan)
 - Dr. Kathryn Dewey, University of California Davis (TOR Activity 1b, FY04 work plan)
 - MOST Project for Ghana Anemia Communication Strategy implementation (TOR Activity 1a, FY04 work plan)
- Implement new research agreements with:
 - Centre for the Study of Social Change (Mumbai Maternal Nutrition Project)
 - Factors influencing acceptability and feasibility of fortified spreads in Malawi and Ghana (TOR 1c-d, FY04 work plan)
 - Cambodia – Creation of a structure for a vitamin A program (TOR 1e, FY04 work plan)
 - Association Liaison Office for University Cooperation in Development (ALO) – to explore and develop models for investing in improving the nutrition of health

care workers, thereby making them more effective at improving outcomes at the community level

Expert Panel Consultations (EPC)

- Plan and convene a consultation on retinol losses in sugar fortification – December 4-5 at the ILSI Office in Washington, DC (EPC Activity 2a, FY04 work plan).
- Co-sponsor a consultation with NIH to develop an initiative to promote integrated research, development, and implementation in the field of nutrition and health of women of reproductive and pre-reproductive age and their children (EPC Activity 3c, FY03 work plan). A working group will meet on January 26-27, 2004 at NIH to plan a larger consultation in late 2004.
- Organize a consultation on the role of riboflavin, antioxidants and malaria anemia with WHO's Roll-Back Malaria Programme (EPC Activity 2b, FY04 work plan).
- Co-sponsor with the International Atomic Energy Agency (IAEA) an expert consultation on the application of stable isotope techniques to assess vitamin A status and provitamin A bioefficacy in early 2004.

Publications

- Based on the December 2003 EPC on retinol losses in fortified sugar, develop recommendations for retinol overages for sugar fortification (Publication Activity 3a, FY04 work plan).
- Prepare a state-of-the-art report on ferritin as a source of iron and its application to improving iron status, using a consultant, Dr. Elizabeth Theil, CHORI (Publications Activity 3c, FY04 work plan).
- Prepare and submit a paper describing the model developed by Dr. George Beaton for estimating iron bioavailability from fortified food to a peer-reviewed journal for publication (Publication Activity 3d, FY04 work plan).
- Develop a monograph describing how to use the Beaton model for estimating iron bioavailability from fortified foods in program design.
- Develop a consensus statement on the safety of administering iron in malarious regions (generally and during a malarial episode with and without transfusion) with the WHO Roll-Back Malaria Programme (Publication Activity 3e, FY04 work plan).

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- Develop and distribute a report from the EPC on role of riboflavin and antioxidants in malarial areas (Publications Activity 3g, FY04 work plan).
- Prepare a review on animal feed industry's use of bioavailability data in developing animal feeds and possible application to humans using a consultant, Dr. Ritu Nalubola.

VITA

- Provide assistance requested by USAID (Other Activity XX, FY04 work plan)

MGL Administration

- Finalize FY04 work plan.
- Submit quarterly financial reports to USAID.
- Submit progress report for October 1, 2003 through March 2004 to USAID (Other Activity XX, FY04 work plan).

Other Activities

- Dr. Penelope Nestel will provide technical assistance to the International Potato Center (CIP) for the VITAA Program (TOR 1f, FY04 work plan).