



What is BOND?

The *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) of the National Institutes of Health (NIH)/U.S. Department of Health and Human Services, in collaboration with partners representing the breadth of the global food and nutrition enterprise, created the Biomarkers of Nutrition for Development (BOND) Program to meet the growing need for discovery, development, and implementation of reliable and valid biomarkers to assess nutrient exposure, status, function, and effect. One of the primary goals of the BOND project is to harmonize the processes for making decisions about what biomarkers are best for use in support of research, program development and evaluation, and generation of evidence-based policy.

This initiative responds to the need to examine the scientific basis for choosing appropriate methodologies to:

- Assess the role and impact of diet and nutrition in health promotion and disease prevention in populations and individuals
- Support the development and evaluation of programs and policies to improve diet and nutrition.

How will BOND approach activities to achieve its goals?

The Program will have two separate but complementary tracks:

- The **Translational Track** will develop processes to inform various user groups about appropriate biomarker selection and use. The first phase of this process will include the development of an interactive web-based resource and “Query-based System” (QBS) to provide evidence based advice to users about specific nutrients of interest. The eventual goal will be to include all essential nutrients, high-priority bioactive components of food and relevant markers of health. The first set of nutrients to be posted on the QBS will be iodine, vitamin A, iron, zinc, folate, vitamin B12. The development and use of the translational materials will then generate a research agenda that will support the research track.
- The **Research Track** will support the discovery of biomarkers and development of their use.

Both tracks ultimately lead to evidence-based guidance specific to the needs of specific users, communities, and contexts.

Who should use the BOND Program information?

The information generated by the BOND process is intended to support activities represented by the food and nutrition community, including (but not limited to) users who:

- Conduct nutrition surveys
- Make policies related to nutrition and/or nutritional status
- Implement food/nutrient programs
- Intend to include nutritional components in their research projects or clinical protocols
- Seek careers in nutrition, dietetics, or medicine or in education fields focused on these topics
- Fund research on or programs related to food/nutrition

More information about the BOND Program is available at -

http://www.nichd.nih.gov/global_nutrition/programs/bond/

Who are our partners?

World Health Organization (WHO), United Nations Children's Fund (UNICEF), United Nations World Food Program (WFP), National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), United States Agency for International Development (USAID), United States Department of Agriculture (USDA), U.S. Food and Drug Administration (FDA), International Atomic Energy Agency (IAEA), Global Alliance for Improved Nutrition (GAIN), The Micronutrient Initiative, HarvestPlus, Helen Keller International, Bill and Melinda Gates Foundation, PepsiCo, Sight and Life, International Life Sciences Institute (ILSI), EURRECA and Micronutrients Genomics Project (MGP).