

Second National Report on Biochemical Indicators of Diet and Nutrition in the U.S. Population

Brief description:

Research shows that good nutrition can help to lower people's risk for many chronic diseases, including heart disease, stroke, some cancers, diabetes, and osteoporosis. However, a large gap remains between recommended dietary patterns and what Americans actually eat. Although recommendations about diet have been made, it is important to have up-to-date information on biochemical levels of nutritional indicators – levels measured in people's blood or urine – because they represent the cumulative effect of intake from and exposure to various sources, bioavailability and metabolism. Using advanced laboratory science and innovative techniques, CDC's Environmental Health Laboratory in the Division of Laboratory Sciences at the National Center for Environmental Health has been in the forefront of efforts to assess the nutritional status of the U.S. population through monitoring nutritional indicators.

CDC's first *National Report on Biochemical Indicators of Diet and Nutrition in the U.S. Population, 1999-2002* was released in July 2008 and contained information on 27 biochemical indicators. This is the second report in a series. It will contain information on 56 indicators measured in people's blood or urine during all or part of the four-year period from 2003 through 2006. The biochemical indicators covered in this report include water- and fat-soluble vitamins and nutrients, iron-status indicators, trace elements, isoflavones and lignans, and acrylamide adducts. Data in the report will be displayed by age, sex, and race/ethnicity and will include:

- Tables and figures of descriptive statistics on the distribution of blood and urine levels for each biochemical indicator.
- Where data is available, tables and figures describing changes in biochemical indicator levels across survey cycles during all or part of the eight-year period from 1999 through 2006.
- Where accepted cutoff points are available, tables describing the prevalence of low and/or high levels of biochemical indicators during all or part of the eight-year period from 1999 through 2006.

This report will provide valuable information to public health officials, nutritionists, clinicians, and others and as a result, give them a powerful tool to address issues related to chronic disease. It will provide information about biochemical indicators of diet and nutrition that are found in people who participate in CDC's National Health and Nutrition Examination Survey (NHANES).

Charge to Reviewers:

In addition to answering specific questions about the report objectives, methods and analyses, results and conclusions (laid out in the comment form), we would appreciate it if the reviewers could state from

PEER REVIEW COMMENT FORM

their perspective how this report could be useful to public health scientists, nutritionists and clinicians and whether they find it easy to follow and to understand.

PEER REVIEW COMMENT FORM

**Second National Report on Biochemical Indicators of Diet and
Nutrition in the U.S. Population**

REPORT

March 2011

GUIDE TO REVIEWERS:

The objective of peer review conducted by the Office of Science is to ensure the highest quality of science for NCEH/ATSDR studies and results of research; therefore, your comments should be provided with this goal in mind. Unlike other peer review processes in which you may have participated, the questions to be addressed for NCEH/ATSDR are broadly based so that each reviewer may have a wide latitude in providing his/her comments. Any remarks you wish to make that have not been specifically covered by the General Questions section may be included under question # 2 in the Additional Questions section. Please note that your unaltered comments will be sent to the investigator for a response. You should receive a copy of the response to the peer review comments when they are available.

GENERAL QUESTIONS:

1. **Are the report objectives clearly stated and appropriate?**
Yes () No () Unsure ()

Why?

PEER REVIEW COMMENT FORM

2. **Is the overall report design appropriate for the report objectives?**
Yes () No () Unsure ()

Why?

3. **Are the methods and analyses appropriate for the report objectives?**
Yes () No () Unsure ()

Why?

PEER REVIEW COMMENT FORM

4. **Were the data analyzed in such a way to address appropriately the objectives of the report?**
Yes () No () Unsure ()

Why?

5. **Are the report results presented and interpreted appropriately and completely?**
Yes () No () Unsure ()

Why?

PEER REVIEW COMMENT FORM

6. **Are the report conclusions and recommendations appropriate and complete?**
Yes () No () Unsure ()

Why?

7. **Are there any overall comments on the manuscript? (How does the Report contribute to public health in ways not already noted? What persons/groups, in addition to those listed, will be interested in this Report? What channels of communication should be used to disseminate this Report?)**

PEER REVIEW COMMENT FORM

8. Select the appropriate category below:

(List recommended changes or reasons for not recommending)

A. Recommend ()

B. Recommend with Required Changes ()

C. Not Recommended ()

ADDITIONAL QUESTIONS:

1. Are there any comments on NCEH/ATSDR's peer review process?

2. Are there any other comments?