Documentation, Codebook, and Frequencies

Laboratory Component: Vitamin D

Survey Years: 2001 to 2002

SAS Export File: L06VID_B.XPT



First Published: September 2007

Last revised: N/A

NHANES 2001–2002 Data Release September 2007 Documentation for Laboratory Results

Laboratory 6 – Vitamin D

- (1) Documentation File Date January 2007
- (2) Documentation File Name Laboratory 6- Vitamin D
- (3) Survey Years Included in this File Release 2001–2002
- (4) Component Description

The objectives of this component are: 1) to provide data for monitoring secular trends in measures of nutritional status in the U.S. population; 2) to evaluate the effect of people's habits and behaviors such as physical activity and the use of alcohol, tobacco, and dietary supplements on people's nutritional status; and 3) to evaluate the effect of changes in nutrition and public health policies including welfare reform legislation, food fortification policy, and child nutrition programs on the nutritional status of the U.S. population. These data will be used to estimate deficiencies and toxicities of specific nutrients in the population and subgroups, to provide population reference data, and to estimate the contribution of diet, supplements, and other factors to serum levels of nutrients. Data will be used for research to further define nutrient requirements as well as optimal levels for disease prevention and health promotion.

(5) Sample Description:

5.1 Eligible Sample

Participants aged 6 years and older who do not meet any of the exclusion criteria are eligible.

(6) Description of the Laboratory Methodology

The Diasorin (formerly Incstar) 25-OH- Vitamin D assay consists of a two-step procedure. The first procedure involves an extraction of 25-OH-D and other hydroxylated metabolites from serum with acetonitrile. Following extraction, the treated sample is assayed by using an equilibrium RIA procedure. The RIA method is based on an antibody with specificity to 25-OH-D. The sample, antibody, and tracer are incubated for 90 min at 20-25 °C. Phase separation is accomplished after a 20-minute incubation at 20-25 °C with a second antibody-precipitating complex. A NSB buffer is added after this incubation and prior to centrifugation to aid in reducing non-specific binding. More detailed information about the

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Diasorin RIA method can be found on the NHANES Web site in the Laboratory Procedures Manuals.

(7) Laboratory Quality Control and Monitoring

The NHANES quality assurance and quality control (QA/QC) protocols meet the 1988 Clinical Laboratory Improvement Act mandates. Detailed QA/QC instructions are discussed in the NHANES Laboratory/Medical Technologists Procedures Manual (LPM). Read the LABDOC file for detailed QA/QC protocols.

A detailed description of the quality assurance and quality control procedures can be found on the NHANES website.

(8) Data Processing and Editing

Serum specimens are processed, stored, and shipped to the Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention for analysis.

Detailed specimen collection and processing instructions are discussed in the NHANES Laboratory/Medical Technologists Procedures Manual (LPM). Vials are stored under appropriate frozen (–20°C) conditions until they are shipped to National Center for Environmental Health for testing.

Detailed instructions on specimen collection and processing can be found at the NHANES web page.

(9) Data Access:

All data are publicly available.

(10) Analytic Notes for Data Users:

The analysis of NHANES 2001–2002 laboratory data must be conducted with the key survey design and basic demographic variables. The NHANES 2001–2002 Household Questionnaire Data Files contain demographic data, health indicators, and other related information collected during household interviews. The Household Questionnaire Data Files also contain all survey design variables and sample weights required to analyze these data. The Phlebotomy Examination file includes auxiliary information on duration of fasting, the time of day of the venipuncture, and the conditions precluding venipuncture. The Household Questionnaire and Phlebotomy Exam files may be linked to the laboratory data file using the unique survey participant identifier SEQN.

(11) References

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National Health and Nutrition Examination Survey Codebook for Data Production (2001-2002)

Vitamin D (L06VID_B) Person Level Data

First Published: September 2007 Last Revised: N/A



SEQN	Target			
	B(6 Yrs. to 150 Yrs.)			
Hard Edits	SAS Label			
	Respondent sequence number			
English Text: Respondent sequence number.				
English Instructions:				

LBXVID		Target				
		B(6 Yrs. to 150 Yrs.)				
Hard Edits		SAS Label				
		Vitamin D (ng/mL)				
English Text: Vitamin D (ng/mL)						
English Instructions:						
Code or Value	Description	Count	Cumulative	Skip to Item		
3 to 80	Range of Values	7807	7807			

Missing