

# National Health and Nutrition Examination Survey 2005–2006

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## Documentation, Codebook, and Frequencies

### Vitamin D

Laboratory

Survey Years:  
2005 to 2006

SAS Transport File:  
VID\_D.XPT



July 2008

# NHANES 2005–2006 Data Documentation

## Laboratory Assessment: Vitamin D (VID\_D)

First Published: July 2008

Last Revised: N/A

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### Component Description

#### Vitamin D

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.

### Eligible Sample

Participants aged 1 year and older who do not meet any of the exclusion criteria are eligible

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

There was no change to the equipment, method, or laboratory site from NHANES 2003-2004.

A detailed description of the laboratory method used can be found at NHANES web page in the Laboratory Procedures Manuals.

### **Laboratory Quality Control and Monitoring**

The NHANES quality control and quality assurance protocols (QA/QC) meet the 1988 Clinical Laboratory Improvement Act mandates. Detailed quality control and quality assurance 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 laboratory method used can be found at NHANES web page.

### **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 ( $-20^{\circ}\text{C}$ ) 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.

### **Analytic Notes**

The analysis of NHANES 2005–2006 laboratory data must be conducted with the key survey design and basic demographic variables. The NHANES 2005–2006 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.

## References

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## Locator Fields

**Title:** Vitamin D

**Contact Number:** 1-866-441-NCHS

**Years of Content:** 2005–2006

**First Published:** July 2008

**Revised:** N/A

**Access Constraints:** None

**Use Constraints:** None

**Geographic Coverage:** National

**Subject:** Vitamin D

**Record Source:** NHANES 2005–2006

**Survey Methodology:** NHANES 2005–2006 is a stratified multistage probability sample of the civilian non-institutionalized population of the U.S.

**Medium:** NHANES Web site; SAS transport files

**National Health and Nutrition Examination Survey  
Codebook for Data Production (2005-2006)**

**Vitamin D (VID\_D)  
Person Level Data**

July 2008



<b>SEQN</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Respondent sequence number
<b>English Text:</b> Respondent sequence number.	
<b>English Instructions:</b>	

<b>LBXVID</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Vitamin D (ng/mL)
<b>English Text:</b> Vitamin D (ng/mL)	
<b>English Instructions:</b>	

Code or Value	Description	Count	Cumulative	Skip to Item
2 to 77	Range of Values	8306	8306	
.	Missing	1134	9440	