

ICPSR 29282

## **Midlife in the United States (MIDUS 2): Biomarker Project, 2004-2009**

Description

Inter-university Consortium for  
Political and Social Research  
P.O. Box 1248  
Ann Arbor, Michigan 48106  
[www.icpsr.umich.edu](http://www.icpsr.umich.edu)

## **Bibliographic Description**

ICPSR Study No.: 29282

Title: Midlife in the United States (MIDUS 2): Biomarker Project, 2004-2009

Principal Investigator(s): Carol D. Ryff, University of Wisconsin-Madison

Teresa Seeman, University of California-Los Angeles

Maxine Weinstein, Georgetown University

Series: Midlife in the United States (MIDUS) Series

Funding Agency: United States Department of Health and Human Services. National Institutes of Health. National Institute on Aging

Grant Number: P01-AG020166

Bibliographic Citation: Ryff, Carol D., Teresa Seeman, and Maxine Weinstein. Midlife in the United States (MIDUS 2): Biomarker Project, 2004-2009. ICPSR29282-v6. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2013-12-20. <http://doi.org/10.3886/ICPSR29282.v6>

## **Scope of Study**

Summary: The Biomarker study is Project 4 of the MIDUS longitudinal study, a national survey of more than 7,000 Americans (aged 25 to 74) begun in 1994. The purpose of the larger study was to investigate the role of behavioral, psychological, and social factors in understanding age-related differences in physical and mental health. With support from the National Institute on Aging, a longitudinal follow-up of the original MIDUS samples [core sample (N = 3,487), metropolitan over-samples (N = 757), twins (N = 957 pairs), and siblings (N = 950)] was conducted in 2004-2006. Guiding hypotheses, at the most general level, were that behavioral and psychosocial factors are consequential for health (physical and mental). A description of the study and findings from it are available on the MIDUS Web site. The Biomarker Project (Project 4) of MIDUS II contains data from 1,255 respondents. These respondents include two distinct subsamples, all of whom completed the Project 1 Survey: (1) longitudinal survey sample (n = 1,054) and (2) Milwaukee sample (n = 201). The Milwaukee group contained individuals who participated in the baseline MIDUS Milwaukee study, initiated in 2005. The purpose of the Biomarker Project (Project 4) was to add comprehensive biological assessments

on a subsample of MIDUS respondents, thus facilitating analyses that integrate behavioral and psychosocial factors with biology. The broad aim is to identify biopsychosocial pathways that contribute to diverse health outcomes. A further theme is to investigate protective roles that behavioral and psychosocial factors have in delaying morbidity and mortality, or in fostering resilience and recovery from health challenges once they occur. The research was not disease-specific, given that psychosocial factors have relevance across multiple health endpoints. Biomarker data collection was carried out at three General Clinical Research Centers (at UCLA, University of Wisconsin, and Georgetown University). The biomarkers reflect functioning of the hypothalamic-pituitary-adrenal axis, the autonomic nervous system, the immune system, cardiovascular system, musculoskeletal system, antioxidants, and metabolic processes. Our specimens (fasting blood draw, 12-hour urine, saliva) allow for assessment of multiple indicators within these major systems. The protocol also included assessments by clinicians or trained staff, including vital signs, morphology, functional capacities, bone densitometry, medication usage, and a physical exam. Project staff obtained indicators of heart-rate variability, beat to beat blood pressure, respiration, and salivary cortisol assessments during an experimental protocol that included both a cognitive and orthostatic challenge. Finally, to augment the self-reported data collected in Project 1, participants completed a medical history, self-administered questionnaire, and self-reported sleep assessments. For respondents at one site (UW-Madison), objective sleep assessments were also obtained with an Actiwatch(R) activity monitor.

Subject Term(s): adults, biomarkers, disease prevention, health, health behavior, human behavior, medical evaluation, medications, physical condition, psychological evaluation, psychological wellbeing, psychosocial assessment

Smallest Geographic Unit: No geographic information is included other than for the Milwaukee cases.

Geographic Coverage: United States

Time Period: • July 30, 2004 - May 31, 2009

Date(s) of Collection: • July 30, 2004 - May 31, 2009

Unit of Observation: individual

Universe: Adult non-institutionalized population of the United States.

Data Type: clinical data

experimental data

survey data

Data Collection Notes: All data files in the MIDUS study (both longitudinal and cross-sectional) can be linked using a key variable called M2ID.

Data users should be aware that due to a limitation in SPSS, the character @, found in select variable names, has been replaced by an \_ . This change was made to ensure consistency across all of the data files. Some of the documentation associated with this study will reference the original variable names which include the @ character. A total of 43 variables have been affected by this change.

The MIDUS produced DDI codebook (PDF file) and the XML file (contained in a .zip package) were not changed in any way by ICPSR. These original files do not reflect any of the processing done by ICPSR. Minor technical changes have been performed.

The MIDUS produced codebook is named cb29282-0001\_DDI.pdf.

Minor formatting changes were made to allow for processing use.

The Acknowledgement for MIDUS II Biomarker Project (P4) Publications and the M2\_P4 Biomarker IRB Approval and Certificate of Confidentiality were added to the collection.

The title of this study was changed from National Survey of Midlife Development in the United States (MIDUS II): Biomarker Project, 2004-2009, to Midlife in the United States (MIDUS 2): Biomarker Project, 2004-2009, on May 9, 2017.

## Methodology

Sample: All respondents participating in MIDUS II (ICPSR 4652) or the Milwaukee study (ICPSR 22840) who completed Project 1 were eligible to participate in the Biomarker assessments.

Mode of Data Collection: face-to-face interview

mixed mode

on-site questionnaire

Response Rates:	The response rate was 39.3 percent for each of the 2 samples (longitudinal survey sample, and Milwaukee).
Presence of Common Scales:	Data users interested in the scales used for this study should refer to the scaling documentation provided on both the ICPSR and NACDA Web site.
Extent of Processing:	Created variable labels and/or value labels.  Created online analysis version with question text.  Checked for undocumented or out-of-range codes.

## Access and Availability

Note:	A list of the data formats available for this study can be found in the <a href="#">summary of holdings</a> . Detailed file-level information (such as record length, case count, and variable count) is listed in the <a href="#">file manifest</a> .
Original ICPSR Release:	2010-09-24
Version History:	<p>The last update of this study occurred on .</p> <p>2013-12-20 - Variable formats were edited per P.I. request; the data files have been updated.</p> <p>2013-05-02 - The Acknowledgement for MIDUS II Biomarker Project (P4) Publications and the M2_P4 Biomarker IRB Approval and Certificate of Confidentiality were added to the collection</p> <p>2013-04-23 - Technical corrections were made to data formats.</p> <p>2013-01-11 - The study documentation has been updated, in particular, details about new variables have been added to: (1) the Blood, Urine, and Saliva documentation; (2) the Documentation of Scales and Constructed Variables; (3) the Psychophysiology Protocol Documentation; and (4) the DataFile Notes. New variables have been added to the data file including: (1) new biomarkers Insulin, Glucose, and Insulin-like Growth Factor 1 (IGF-1) along with an indicator of insulin resistance (HOMAIR); (2) a set of filter variables for the Psychophysiology data; (3) a new administrative Bone Scan variable; and (4) newly coded additional prescription, over-the-counter, and alternative medication data. Further details about the new variables and changes to documentation can be found in the README document available for download from the ICPSR and NACDA Web sites. The data and documentation files that have been uploaded are intended to replace</p>

the existing versions at ICPSR. Extant files that are not being replaced should remain available.

2011-10-25 - The document titled DDI codebook has been renamed Codebook. Question text has been incorporated with this study and is included in the updated SDA for this study. Lastly, a number of undocumented missing values codes have been updated and included within this data release.

Dataset(s):

- DS1: Midlife in the United States (MIDUS 2): Biomarker Project, 2004-2009