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IMP4.DOC

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IMP4.PDF

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NHANES III Multiply Imputed Data Set  
File Index for Imputed Data File IMP4.DAT

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NHANES III Multiply Imputed Data Set  
File Index for Imputed Data File IMP4.DAT

Description	Variable Name	Positions
<b>BODY MEASUREMENTS</b>		
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NHANES III Multiply Imputed Data Set  
 File Index for Imputed Data File IMP4.DAT

Description	Variable Name	Positions
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K1, systolic, for 1st BP (mmHg) .....	PEP6G1MI	228-230
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K4, diastolic, for 3rd BP (mmHg) .....	PEP6I2MI	249-251
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NHANES III Multiply Imputed Data File

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FILENAME=IMP4

VERSION 1.0

N=33994  
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GENERAL INFORMATION  
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Positions		Item description	
SAS name	Counts	and code	Notes
	1-5	Sample person identification number	
SEQN	33994	00003-53623	











NHANES III Multiply Imputed Data File

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 FILENAME=IMP4                                  VERSION 1.0                                  N=33994  
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BONE DENSITOMETRY

Positions		Item description	
SAS name	Counts	and code	Notes
50-54		Bone mineral density of femur neck	See note
BDPFNDMI		region (gm/cm squared)	
	15169	-0009 Not applicable	
	18825	0.231-1.841	
55-59		Bone mineral density of intertrochanter	See note
BDPINDMI		region (gm/cm squared)	
	15169	-0009 Not applicable	
	18825	0.331-2.408	
60-64		K value for scan	See note
BDPKMI			
	15169	-0009 Not applicable	
	18825	1.174-1.295	
65-69		Bone area of total region (cm squared)	See note
BDPTOAMI			
	15169	-0009 Not applicable	
	18825	15.61-60.86	
70-74		Bone mineral density of total region	See note
BDPTODMI		(gm/cm squared)	
	15169	-0009 Not applicable	
	18825	0.157-1.983	
75-79		Bone mineral density of trochanter	See note
BDPTRDMI		region (gm/cm squared)	
	15169	-0009 Not applicable	
	18825	0.084-1.542	
80-84		Bone mineral density of Ward's triangle	See note
BDPWTDMI		region (gm/cm squared)	
	15169	-0009 Not applicable	
	18825	0.047-1.812	



3446	-009	Not applicable
30548	02.0-50.0	

NHANES III Multiply Imputed Data File

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FILENAME=IMP4                                  VERSION 1.0                                  N=33994  
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BODY MEASUREMENTS

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Positions SAS name	Counts	Item description and code	Notes
129-132 BMPTR1MI	33994	First triceps skinfold (mm) (2 months and over) 01.2-49.8	See note
133-136 BMPTR2MI	33994	Second triceps skinfold (mm) (2 months and over) 02.8-49.0	See note
137-141 BMPWSTMI	3446 30548	Waist circumference (cm) (2 years and over) -0009 Not applicable 034.5-179.7	See note
142-147 BMPWTMI	33994	Weight (kg) 002.80-241.80	See note

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NHANES III Multiply Imputed Data File

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FILENAME=IMP4                               VERSION 1.0                               N=33994
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                                      BLOOD AND URINE ASSAY ITEMS
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Positions                                Item description
SAS name      Counts                    and code                               Notes
-----
    148-150                                Serum iron (ug/dL)                               See note
FEPMI
      2107                                -09      Not applicable
      31887                               000-338

    151-154                                Serum ferritin (ng/mL)                           See note
FRPMI
      2107                                -009     Not applicable
      31887                               0002-3059

    155-157                                Serum HDL cholesterol (mg/dL)                     See note
HDPMI
      5982                                -09      Not applicable
      28012                               007-196

    158-162                                Hemoglobin (g/dL)                                 See note
HGPMI
      2107                                -0009    Not applicable
      31887                               04.95-19.60

    163-167                                Hematocrit (%)                                   See note
HTPMI
      2107                                -0009    Not applicable
      31887                               16.60-57.60

    168-172                                Mean cell hemoglobin: SI (pg)                     See note
MCPSIMI
      2107                                -0009    Not applicable
      31887                               13.60-53.60

    173-177                                Mean cell hemoglobin concentration                See note
MHPMI                                (g/dL)
      2107                                -0009    Not applicable
      31887                               24.66-52.35

    178-183                                Mean cell volume: SI (fL)                         See note
MVPSIMI
      2107                                -00009   Not applicable
      31887                               051.20-122.80

    184-189                                Lead (ug/dL)                                       See note
PBPMI
      2107                                -00009   Not applicable
      31887                               000.19-071.80

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190-194	Computed number of hours since last	See note
PHPFSTMI	ate or drank	
2107	-0009 Not applicable	
31887	00.00-39.13	

195-199 PXPMI		Serum transferrin saturation (%)	See note
	2107	-0009 Not applicable	
	31887	000.0-098.5	
200-203 RCPMI		Red blood cell count	See note
	2107	-009 Not applicable	
	31887	1.69-6.84	
204-208 RWPMI		Red blood cell count	See note
	2107	-0009 Not applicable	
	31887	07.80-31.95	
209-211 SEPMI		Serum selenium (ng/mL)	See note
	11728	-09 Not applicable	
	22266	039-622	
212-214 TCPMI		Serum cholesterol (mg/dL)	See note
	5982	-09 Not applicable	
	28012	059-702	
215-218 TGPMI		Serum triglycerides (mg/dL)	See note
	5982	-009 Not applicable	
	28012	0013-3616	
219-221 TIPMI		Serum TIBC (ug/dL)	See note
	2107	-09 Not applicable	
	31887	069-866	







25976	-09	Not applicable
8018	002-106	



MULTIPLY IMPUTED DATA FILE: NOTES

DMPPIRMI: Poverty income ratio (or poverty index) Multiply Imputed Version

The poverty income ratio (PIR) was computed as a ratio of two components. The numerator was the midpoint of the observed family income category in the Family Questionnaire variable:HFF19R. The denominator was the poverty threshold, the age of the family reference person, and the calendar year in which the family was interviewed.

Poverty threshold values (in dollars) are produced annually by the Census Bureau (Series P-60). These threshold values are based on calendar years and adjusted for changes caused by inflation between calendar years. Reports for each of the calendar years in the survey (1988-94) were used in the calculation of PIR. For the years 1991 and 1994, data from preliminary reports were used. The poverty income ratio allows income data to be analyzed in a comparable manner across the six years of the survey and with previous NHANES.

Persons who reported having had no income and were assigned a zero value for PIR. A substantial proportion of persons refused to report their income or income category during the Family Questionnaire, resulting in a missing value for PIR.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable DMPPIRIF in the data file CORE.DAT.

HFF1MI: Anyone living here smoke cigs in home  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HFF1IF in the data file CORE.DAT.

HAB1MI: Self-rating of health status  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAB1IF in the data file CORE.DAT.

HAM5MI: Reported height without shoes (inches)  
Multiply Imputed Version

This variable was standardized to inches using the conversion factors 0.3937 inches per centimeter, and 12 inches per foot.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAM5IF in the data file CORE.DAT.

HAM6MI:      Reported weight without clothes (lbs)  
              Multiply Imputed Version

This variable was standardized to weight in pounds using the conversion factor 2.2046 pounds per kilogram.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAM6IF in the data file CORE.DAT.

HAN6SRMI:    Beer, wine, and liquor per month (recode)  
              Multiply Imputed Version

This variable was derived from HAN6HS, HAN6IS, and HAN6JS. Respondents were asked how often over the past month they had consumed beer and lite beer (HAN6HS), wine, wine coolers, sangria, and champagne (HAN6IS), and hard liquor such as tequila, gin, vodka, scotch, rum, whiskey and liqueurs, either alone or mixed (HAN6JS). It is important to note that portion sizes were not defined, and responses represent 'number or times' as determined by the respondent. The frequencies of consumption were standardized as 'times per month' using the conversion factors 4.3 weeks/month and 30.4 days/month rounded to the nearest whole number. If the frequency of consumption was reported as 'never,' the value was recorded as zero. The variable HAN6SRMI is a categorization of HAN6HS, HAN6IS, and HAN6JS into three levels representing zero times in the past month, 1-10 times in the past month, and 11 or more times in the past month.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAN6SRIF in the data file CORE.DAT.

HAQ1MI:      Condition of sampled person's natural teeth  
              Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAQ1IF in the data file CORE.DAT.

HAR3RMI:      Smoke cigarettes now? (recode)  
              Multiply Imputed Version

This variable was derived from variables HAR1 and HAR3. It records the response to the question 'Do you smoke cigarettes now?' Subjects who indicated earlier that they had not smoked at least 100 cigarettes

in their lifetime were assigned the response 'No'.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAR3RIF in the data file CORE.DAT.

HAT28MI: Compare own activity level to others  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAT28IF in the data file CORE.DAT.

HAZAK1MI: K1 for first BP measurement (home interview)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAZAK1IF in the data file CORE.DAT.

HAZAK5MI: K5 for first BP measurement (home interview)  
Multiply Imputed Version

Zero was considered a valid observation for diastolic (K5) measurements when pulse sounds continue to be heard down to 0 mm Hg.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAZAK5IF in the data file CORE.DAT.

HAZBK1MI: K1 for second BP measurement (home interview)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAZBK1IF in the data file CORE.DAT.

HAZBK5MI: K5 for second BP measurement (home interview)  
Multiply Imputed Version

Zero was considered a valid observation for diastolic (K5) measurements when pulse sounds continue to be heard down to 0 mm Hg.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAZBK5IF in the data file CORE.DAT.

HAZCK1MI: K1 for third BP measurement (home interview)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAZCK1IF in the data file CORE.DAT.

HAZCK5MI: K5 for third BP measurement (home interview)  
Multiply Imputed Version

Zero was considered a valid observation for diastolic (K5) measurements when pulse sounds continue to be heard down to 0 mm Hg.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HAZCK5IF in the data file CORE.DAT.

HYD1MI: How is health of SP in general  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HYD1IF in the data file CORE.DAT.

HYF2MI: Condition of SP's natural teeth  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HYF2IF in the data file CORE.DAT.

BDPFNDMI: Bone mineral density femur neck-gm/cm sq  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BDPFNDIF in the data file CORE.DAT.

BDPINDMI: BMD of intertrochanter region-gm/cm sq  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BDPINDIF in the data file CORE.DAT.



BDPKMI: K value for scan  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BDPKIF in the data file CORE.DAT.

BDPTOAMI: Bone area of total region - cm sq  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BDPTOAIIF in the data file CORE.DAT.

BDPTODMI: Bone mineral density total region-gm/cm sq  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BDPTODIF in the data file CORE.DAT.

BDPTRDMI: Bone mineral density trochanter region-gm/cm sq  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BDPTRDIF in the data file CORE.DAT.

BDPWTDMI: Bone mineral density Ward's triangle region-gm/cm sq  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BDPWTDIF in the data file CORE.DAT.

BMPBUTMI: Buttocks circumference (cm)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPBUTIF in the data file CORE.DAT.

BMPHEAMI: Head circumference (cm)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPHEAIF in the data file CORE.DAT.

BMPHTMI: Standing height (cm)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPHTIF in the data file CORE.DAT.

BMPKNEMI: Knee height (cm)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPKNEIF in the data file CORE.DAT.

BMPRECM1: Recumbent length (cm)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPRECIF in the data file CORE.DAT.

BMPSTHMI: Sitting height (cm)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPSTHIF in the data file CORE.DAT.

BMPSB1MI: First subscapular skinfold (mm)  
Multiply Imputed Version

For NHANES III, the body measurements protocol specified that skinfolds would be measured at four different anatomic body sites. Independent measures were taken at each body site by two technicians, resulting in a minimum of two skinfold observations for each site.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply

Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPSB1IF in the data file CORE.DAT.

BMPSB2MI: Second subscapular skinfold (mm)  
Multiply Imputed Version

For NHANES III, the body measurements protocol specified that skinfolds would be measured at four different anatomic body sites. Independent measures were taken at each body site by two technicians, resulting in a minimum of two skinfold observations for each site.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPSB2IF in the data file CORE.DAT.

BMPSP1MI: First suprailiac skinfold (mm)  
Multiply Imputed Version

For NHANES III, the body measurements protocol specified that skinfolds would be measured at four different anatomic body sites. Independent measures were taken at each body site by two technicians, resulting in a minimum of two skinfold observations for each site.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPSP1IF in the data file CORE.DAT.

BMPSP2MI: Second suprailiac skinfold (mm)  
Multiply Imputed Version

For NHANES III, the body measurements protocol specified that skinfolds would be measured at four different anatomic body sites. Independent measures were taken at each body site by two technicians, resulting in a minimum of two skinfold observations for each site.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPSP2IF in the data file CORE.DAT.

BMPTR1MI: First triceps skinfold (mm)  
Multiply Imputed Version

For NHANES III, the body measurements protocol specified that skinfolds would be measured at four different anatomic body sites. Independent measures were taken at each body site by two technicians, resulting in a minimum of two

skinfold observations for each site.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPTR1IF in the data file CORE.DAT.

BMPTR2MI: Second triceps skinfold (mm)  
Multiply Imputed Version

For NHANES III, the body measurements protocol specified that skinfolds would be measured at four different anatomic body sites. Independent measures were taken at each body site by two technicians, resulting in a minimum of two skinfold observations for each site.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPTR2IF in the data file CORE.DAT.

BMPWSTMI: Waist circumference (cm)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPWSTIF in the data file CORE.DAT.

BMPWTMI: Weight (kg)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable BMPWTIF in the data file CORE.DAT.

FEPMI: Serum iron (ug/dL)  
Multiply Imputed Version

Laboratory methods differed between NHANES III and previous surveys. Therefore, results may not be comparable between surveys. Consult the Laboratory Procedures Used for NHANES III (U.S. DHHS, 1996).

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable FEPIF in the data file CORE.DAT.

FRPMI: Ferritin (ng/mL)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable FRPIF in the data file CORE.DAT.

HDPMI: Serum HDL cholesterol (mg/dL)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HDPIF in the data file CORE.DAT.

HGPMI: Hemoglobin (g/dL)  
Multiply Imputed Version

In NHANES I, NHANES II, and HHANES, determinations of red and white blood cell counts were made using a semiautomated cell counter (Coulter model FN). Determinations of hemoglobin concentration (Hb) were made using a Coulter hemoglobinometer, and determinations of packed cell volume (PCV) were made using the microhematocrit centrifuge method. The hematologic indices MCH, MCHC, and MCV were calculated as follows:

$$\begin{aligned} \text{MCH} &= \text{Hb/RBC} \\ \text{MCHC} &= \text{Hb/PCV} \\ \text{MCV} &= \text{PCV/RBC} \end{aligned}$$

In NHANES III, these hematologic parameters were determined by using a fully automated Coulter S+JR hematology analyzer. These analyzers measured the mean (red) cell volume (MCV) directly, utilizing a process of continuous integration of pulse heights divided by the pulse number; PCV values were calculated through the multiplication of MCV and RBC.

Although it has been shown that identified errors in the microhematocrit method caused by plasma trapping and red cell dehydration approximately compensate each other (Bull, 1990), packing errors can occur in macrocytic anemia and can be considerable in sickle cell anemia, spherocytosis, and thalassemias (NCCLS, 1993). Therefore, individual values for MCV, PCV ('hematocrit'), and MCHC from NHANES III cannot be compared directly to values from the previous NHANES.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HGPIF in the data file CORE.DAT.

HTPMI: Hematocrit (%)  
Multiply Imputed Version

See notes for HGPMI.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable HTPIF in the data file CORE.DAT.

MCPSIMI: Mean cell hemoglobin: SI (pg)  
Multiply Imputed Version

See notes for HGPMI.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable MCPSIIF in the data file CORE.DAT.

MHPMI: Mean cell hemoglobin concentration (g/dL)  
Multiply Imputed Version

See notes for HGPMI.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable MHPIF in the data file CORE.DAT.

MVPSIMI: Mean cell volume: SI (fL)  
Multiply Imputed Version

See notes for HGPMI.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable MVPSIIF in the data file CORE.DAT.

PBPMI: Lead (ug/dL)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PBPIF in the data file CORE.DAT.

PHPFSTMI: Length of calculated fast (in hours)  
Multiply Imputed Version

The fasting time was calculated using the time of venipuncture and the time the examinee last ate or drank (other than water). This was determined using the snack/drink time and the corresponding day variables. Fasting time is the elapsed interval between the time the examinee last ate or drank and the time of venipuncture.

The following variables were used to calculate this variable: PHPSNTI, PHPSNDA, PHPDRIN, PHPDRTI, PHPDRDA, and PHPBEST. If the examinee drank only water since he/she last ate (PHPDRIN = 2), then the time and day the examinee last ate (PHPSNTI and PHPSNDA) were subtracted from the time and day of the venipuncture (PHPBEST). The difference was the number of hours between the time the examinee last ate and the time of the venipuncture.

If the examinee drank anything other than water (PHPDRIN = 1), then the time and day the examinee last drank (PHPDRTI and PHPDRDA) were subtracted from the time and day of the venipuncture (PHPBEST). The difference was the number of hours between the time the examinee last drank and the time of the venipuncture.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PHPFSTIF in the data file CORE.DAT.

PXPMI: Serum transferrin saturation (%)  
Multiply Imputed Version

This value was calculated as  $(FEP / TIP) * 100$ .

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PXPIF in the data file CORE.DAT.

RCPMI: Red blood cell count  
Multiply Imputed Version

Consult the Manual for Medical Technicians for the Coulter granulocyte number, lymphocyte number, mononuclear number, white blood cell count, red blood cell count, and platelet count units (U.S. DHHS, 1996).

See notes for HGPMI.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable RCPFI in the data file CORE.DAT.

RWPMI: Red cell distribution width (%)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable RWPIF in the data file CORE.DAT.

SEPMI: Serum selenium (ng/mL)  
Multiply Imputed Version

Selenium values were measured on two Perkin-Elmer graphite furnace atomic absorption spectrophotometers (model 3030 and model 5100) during the six-year study. Based on a comparability study using linear models, the results generated using the Model 5100 instrument (from 12/07/90 to 1/13/95) were on average 4.3 percent higher than those from the Model 3030 instrument (used from 10/1/88 to 12/06/90). Since the Model 5100 represented more precise measurements, the model 3030 data were adjusted to make them comparable to the Model 5100. Perkin-Elmer Model 5100 Zeeman-corrected graphite furnace atomic absorption spectrophotometer testing began on 12/07/90. All selenium values measured prior to 12/07/90 were adjusted to the AA5100 values. The formula used was:

$$\text{New value} = 16.795 + 0.902 * \text{original value.}$$

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable SEPIF in the data file CORE.DAT.

TCPMI: Serum cholesterol (mg/dL)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable TCPIF in the data file CORE.DAT.

TGPMI: Serum triglycerides (mg/dL)  
Multiply Imputed Version

Serum triglyceride levels were measured regardless of the examinee's fasting status. Mean serum triglycerides and the distribution of serum triglycerides should be estimated only on examinees who did fast at least nine hours, were examined in the morning, and were randomly assigned to the morning fasting sample (WTPFHSD6 > 0). For the purpose of this calculation, the number of hours fasted was rounded to the nearest whole integer. Consult the Laboratory Procedures Used for NHANES III (U.S. DHHS, 1996) for details.



Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable TGPIF in the data file CORE.DAT.

TIPMI: Serum TIBC (ug/dL)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable TIPIF in the data file CORE.DAT.

FPPSUDMI: Summary drusen score  
Multiply Imputed Version

The summary drusen score was derived from a combination of values from several variables.

Definite drusen present: FPP1230, hard drusen, and/or FPP1240, soft drusen, were coded '02 Yes.'

Questionable drusen present: Definite drusen were not present, and FPP1230, hard drusen, and/or FPP1240, soft drusen, were/was coded '01 Questionable.'

No drusen present: Neither definite nor questionable drusen was present, and FPP1230, hard drusen, and/or FPP1240, soft drusen, were/was coded '00 None.'

Cannot grade drusen: FPP1230, hard drusen, and FPP1240, soft drusen, were both treated as missing values.

Blank but applicable: FPP1060, gradability, was coded as missing, or FPP1020, fundus, was coded as '00' or missing.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable FPPSUDIF in the data file CORE.DAT.

FPPSUMMI: Summary age-related maculopathy score  
Multiply Imputed Version

The summary age-related maculopathy score was derived from a combination of values from several variables. A detailed description of lesions as defined by the Wisconsin Age-Related Maculopathy Grading System is available (Klein, 1991; NTIS, 1991).

Late age-related maculopathy: At least one of the following variables was coded '02 Yes.'

FPP1174, geographic atrophy  
FPP1176, sub-retinal hemorrhage  
FPP1178, sub-retinal fibrous scar  
FPP1180, sensory serous (sub-retinal) detachment

Early age-related maculopathy: At least one of the following three sets of conditions was met.

FPP1172, degeneration of retinal pigment epithelium (RPE), was coded '02 Yes,' and (FPP1230, hard drusen, and/or FPP1240, soft drusen, were/was coded '02 Yes').

FPP1182, hyperpigmentation, was coded '02 Yes,' and (FPP1230, hard drusen, and/or FPP1240, soft drusen, were/was coded '02 Yes').

FPP1240, soft drusen, was coded '02 Yes,' and FPP1250, grid area, was coded 02-04 (equal to or greater than a circle 95 microns in diameter).

No age-related maculopathy: Early and late age-related maculopathy definitions were not met, and FPP1240, soft drusen, was coded 00-02 (gradable).

'Cannot grade' age-related maculopathy: Early and late age-related maculopathy definitions were not met, and FPP1240, soft drusen, was coded 'Can't grade' and treated as missing.

Blank but applicable: FPP1060, gradability, was coded '06 Entire field ungradable,' or FPP1020, fundus, was coded '00 Absent' or '88 Blank but applicable' and treated as missing.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable FPPSUMIF in the data file CORE.DAT.

FPPSURMI: Summary diabetic retinopathy score  
Multiply Imputed Version

The summary diabetic retinopathy score was derived from a combination of values from several variables. That is, it combines the diabetic retinopathy level variable (FPP1070) and history of treatment for proliferative diabetic retinopathy (using the photocoagulation treatment outside the arcades variable (FPP1214) as a marker). A detailed description of lesions as defined by The Early Treatment Diabetic Retinopathy Study (ETDRS) is available in the ETDRS report #10 (The Early Treatment Diabetic Retinopathy Study, 1991). The NHANES III fundus photo grading protocol (NTIS, 1995) describes methods of assigning diabetic levels.

Proliferative diabetic retinopathy: At least one of the following two sets of conditions was met.

FPP1070, diabetic retinopathy level, was coded 060-070.

FPP1070, diabetic retinopathy level, has a code of anything other than '012 Non-diabetic retinopathy,' and FPP1214, photocoagulation treatment outside arcades, was coded '02 Yes.'

Moderate/severe non-proliferative retinopathy: FPP1070, diabetic retinopathy level, was coded '041 Moderate non-proliferative' or '051 Severe non-proliferative.'

Mild non-proliferative retinopathy: FPP1070, diabetic retinopathy level, was coded '020 Microaneurysms only' or '031 Early non-proliferative.'

No diabetic retinopathy: FPP1070, diabetic retinopathy level, was coded 010-015.

'Cannot grade' diabetic retinopathy: FPP1070, diabetic retinopathy level, was coded 'Can't grade' and treated as missing.

Blank but applicable: FPP1060, gradability, was coded '06 Entire field ungradable,' or FPP1020, fundus, was coded '00 Absent' or '88 Blank but applicable' and treated as missing.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable FPPSURIF in the data file CORE.DAT.

PEP6G1MI: K1, systolic, for 1st BP (mmHg)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply

Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PEP6G1IF in the data file CORE.DAT.

PEP6G2MI: K4, diastolic, for 1st BP(mmHg)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PEP6G2IF in the data file CORE.DAT.

PEP6G3MI: K5, diastolic, for 1st BP(mmHg)  
Multiply Imputed Version

Zero is considered a valid observation for diastolic (K5) measurements when pulse sounds continue to be heard down to 0 mm Hg.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PEP6G3IF in the data file CORE.DAT.

PEP6H1MI: K1, systolic, for 2nd BP (mmHg)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PEP6H1IF in the data file CORE.DAT.

PEP6H2MI: K4, diastolic, for 2nd BP(mmHg)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PEP6H2IF in the data file CORE.DAT.

PEP6H3MI: K5, diastolic, for 2nd BP(mmHg)  
Multiply Imputed Version

Zero is considered a valid observation for diastolic (K5) measurements when pulse sounds continue to be heard down to 0 mm Hg.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PEP6H3IF in the data file CORE.DAT.

PEP6I1MI: K1, systolic, for 3rd BP (mmHg)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PEP6I1IF in the data file CORE.DAT.

PEP6I2MI: K4, diastolic, for 3rd BP(mmHg)  
Multiply Imputed Version

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PEP6I2IF in the data file CORE.DAT.

PEP6I3MI: K5, diastolic, for 3rd BP(mmHg)  
Multiply Imputed Version

Zero is considered a valid observation for diastolic (K5) measurements when pulse sounds continue to be heard down to 0 mm Hg.

Missing values in this variable have been imputed using model-based methods described in the documentation on the NHANES III Multiply Imputed Data Set CD-ROM. Imputed values may be identified by the imputation flag variable PEP6I3IF in the data file CORE.DAT.