IMP4.DOC

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IMP4.PDF

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

	Variable	
Description		Positions
GENERAL INFORMATION		
Sequence number	SEQN	1-5
HOUSEHOLD FAMILY QUESTIONNAIRE ITEMS		
Poverty income ratio Anyone living here smoke cigs in home	DMPPIRMI HFF1MI	6-11 12
HOUSEHOLD ADULT QUESTIONNAIRE ITEMS		
Self-rating of health status How tall are you without shoes-inchs How much do you weigh in pounds Beer/wine/liquor (recode) Condition of SPS natural teeth Smoke cigarettes now (recode) Compare own activity level to others K1 for first BP measurement (home) K5 for first BP measurement (home) K1 for second BP measurement (home) K1 for third BP measurement (home) K1 for third BP measurement (home) K5 for third BP measurement (home)	HAB1MI HAM5MI HAM6MI HAN6SRMI HAQ1MI HAR3RMI HAT28MI HAZ2K1MI HAZAK5MI HAZBK1MI HAZBK5MI HAZCK1MI HAZCK5MI	13-14 $15-16$ $17-19$ $20-21$ $22-23$ $24-25$ $26-27$ $28-30$ $31-33$ $34-36$ $37-39$ $40-42$ $43-45$
Condition of natural teeth	HYF2MI	48-49
BONE DENSITOMETRY		
Bone minrl density femur neck-gm/cm sq BMD of intertrochanter region-gm/cm sq K value for scan Bone area of total region - cm sq Bone minrl density total region-gm/cm sq BMD of trochanter region - gm/cm sq BMD of Ward's triangle region-gm/cm sq	BDPFNDMI BDPINDMI BDPKMI BDPTOAMI BDPTODMI BDPTRDMI BDPWTDMI	50-54 55-59 60-64 65-69 70-74 75-79 80-84

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

	Variable	
Description	Name	Positions
BODY MEASUREMENTS		
Buttocks circumference (cm)	BMPBUTMI	85-89
Head circumference (cm)	BMPHEAMI	90-93
Standing height (cm)	BMPHTMI	94-98
Knee height (cm)	BMPKNEMI	99-102
Recumbent length (cm)	BMPRECMI	103-107
Sitting height (cm)	BMPSTHMI	108-112
First subscapular skinfold (mm)	BMPSB1MI	113-116
Second subscapular skinfold (mm)	BMPSB2MI	117-120
First suprailiac skinfold (mm)	BMPSP1MI	121-124
Second suprailiac skinfold (mm)	BMPSP2MI	125-128
First triceps skinfold (mm)	BMPTR1MI	129-132
Second triceps skinfold (mm)	BMPTR2MI	133-136
Waist circumference (cm)	BMPWSTMI	137-141
Weight (kg)	BMPWTMI	142-147
BLOOD AND URINE ASSAY ITEMS		
Serum iron (ug/dl)	FEPMI	148-150
Ferritin (ng/ml)	FRPMI	151-154
Serum HDL cholesterol (mg/dL)	HDPMI	155-157
Hemoglobin (g/dl)	HGPMI	158-162
Hematocrit (%)	HTPMI	163-167
Mean cell hemoglobin: SI	MCPSIMI	168-172
Mean cell hemoglobin conc (g/dl)	MHPMI	173-177
Mean cell volume: SI (fl)	MVPSIMI	178-183
Lead (ug/dl)	PBPMI	184-189
Length of calculated fast (in hours)	PHPFSTMI	190-194
Serum transferrin saturation (%)	PXPMI	195-199
Red blood cell count (x 10**6)	RCPMI	200-203
Red cell distribution width (%)	RWPMI	204-208
Selenium (ng/ml)	SEPMI	209-211
Serum cholesterol (mg/dL)	TCPMI	212-214
Serum triglycerides (mg/dL)	TGPMI	215-218
Serum TIBC (ug/dl)	TIPMI	219-221

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Summary drusen score	FPPSUDMI	222-223
Summary age-related maculopathy score	FPPSUMMI	224-225
Summary diabetic retinopathy score	FPPSURMI	226-227

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

	Variable	
Description	Name	Positions

REPLICATE BLOOD PRESSURE (3x) FROM MEC EXAMINATION

K1, systolic, for 1st BP (mmHg)	PEP6G1MI	228-230
K4, diastolic, for 1st BP(mmHg)	PEP6G2MI	231-233
K5, diastolic, for 1st BP (mmHg)	PEP6G3MI	234-236
K1, systolic, for 2nd BP (mmHg)	PEP6H1MI	237-239
K4, diastolic, for 2nd BP(mmHg)	PEP6H2MI	240-242
K5, diastolic, for 2nd BP (mmHg)	PEP6H3MI	243-245
K1, systolic, for 3rd BP (mmHg)	PEP6I1MI	246-248
K4, diastolic, for 3rd BP(mmHg)	PEP6I2MI	249-251
K5, diastolic, for 3rd BP (mmHg)	PEP6I3MI	252-254

FILENAME=IMP4 VERSION 1.0		ION 1.0	N=33994	
		GENERAL	INFORMATION	
Positions SAS name	Counts	Item descript: and code	ion	Notes

 1-5
 Sample person identification number

 SEQN
 33994

 00003-53623

FILENAME=IMP4 VERSION 1.0			N=33994
	НО	USEHOLD FAMILY QUESTIONNAIRE ITEMS	
Positions SAS name	Counts	Item description and code	Notes
6-11 DMPPIRMI	33994	Poverty Income Ratio 00.000-11.889	See note
12-12 HFF1MI	12495 21499	Does anyone who lives here smoke cigarettes in the home? 1 Yes 2 No	See note

 FILENAME=IM	 P4		VERSION 1.0	N=33994
	HOI	USEHOLD A	DULT QUESTIONNAIRE ITEMS	
Positions		Item des		
SAS name	Counts	and (code 	Notes
13-14		Would	you gour health in	See note
HAB1MI			you say your health in l is excellent, very good,	see note
1111111111		-	fair or poor?	
	13944		Not applicable	
	3071		Excellent	
	4745		Very good	
	7193		Good	
	3998	04	Fair	
	1043	05	Poor	
15-16 HAM5MI		How ta	ll are you without shoes? (inches)	See note
	13944	-9	Not applicable	
	20050	41-91		
17-19		How muc	ch do you weigh without	See note
НАМБМІ			s or shoes? (pounds)	
	13944		Not applicable	
	20050	057-450	0	
20-21 HAN6SRMI		Beer, w	wine, and liquor per month (recode	e)See note
	13944	-9	Not applicable	
	11228		0 times in past month	
	5531		1-10 times in past month	
	3291	03	11 or more times in past month	
22-23		How wor	uld you describe the	See note
HAQ1MI		condit	ion of your natural teeth:	
		poor?		
	13944	-9	Not applicable	
	1448	01	Excellent	
	2435	02	Very good	
	5669	03	Good	
	4893	04	Fair	
	2867	05	Poor	
	2738	06	Has no natural teeth	
24-25 HAR3RMI		Do you	<pre>smoke cigarettes now? (recode)</pre>	See note
	13944	-9	Not applicable	
	4992	01	No	
	15058	02	Yes	

FILENAME=IM		VERSION 1.0	N=33994	
HOUSEHOLD ADULT QUESTIONNAIRE ITEMS				
Positions SAS name		Item description and code	Notes	
26-27 HAT28MI	13944 6275 4524 9251	01 More active 02 Less active	See note	
28-30 HAZAK1MI	13944 20050	First Korotkoff sound (K1) for 1st home measurement (systolic, mm Hg) -09 Not applicable 072-260	See note	
31-33 HAZAK5MI	13944 20050	Fifth Korotkoff sound (K5) for 1st home measurement (systolic, mm Hg) -09 Not applicable 000-148	See note	
34-36 HAZBK1MI	13944 20050	First Korotkoff sound (K1) for 2nd home measurement (systolic, mm Hg) -09 Not applicable 074-264	See note	
37-39 HAZBK5MI	13944 20050	Fifth Korotkoff sound (K5) for 2nd home measurement (systolic, mm Hg) -09 Not applicable 000-154	See note	
40-42 HAZCK1MI	13944 20050	First Korotkoff sound (K1) for 3rd home measurement (systolic, mm Hg) -09 Not applicable 074-258	See note	
43-45 HAZCK5MI	13944 20050	Fifth Korotkoff sound (K5) for 3rd home measurement (systolic, mm Hg) -09 Not applicable 000-156	See note	

FILENAME=IMP4		VERSION 1.0	N=33994
		USEHOLD YOUTH QUESTIONNAIRE ITEMS	
Positions SAS name	Counts	Item description and code	Notes
46-47 HYDIMI	20050 5430 3674 3750	01 Excellent 02 Very good 03 Good 04 Fair	
48-49 HYF2MI	23496 2772 2215 3291 1598 620 2	01 Excellent 02 Very good 03 Good 04 Fair	

FILENAME=IM	 P4	VERSION 1.0	N=33994
		BONE DENSITOMETRY	
Positions SAS name	Counts	Item description and code	Notes
50-54 BDPFNDMI			See note
55-59 BDPINDMI	15169 18825		See note
60-64 BDPKMI	15169 18825		See note
65-69 BDPTOAMI	15169 18825		See note
70-74 BDPTODMI	15169 18825	± ±	See note
75-79 BDPTRDMI	15169 18825		See note
80-84 BDPWTDMI	15169 18825		See note

FILENAME=IM		VERSION 1.0	N=33994
		BODY MEASUREMENTS	
Positions SAS name	Counts	Item description and code	Notes
85-89 BMPBUTMI	3446 30548		See note
90-93 BMPHEAMI		Head circumference (cm) (2 months-7 years) -009 Not applicable 34.4-58.1	See note
94-98 BMPHTMI	3446 30548		See note
99-102 BMPKNEMI	27398 6596		See note
103-107 BMPRECMI	28012 5982		See note
108-112 BMPSTHMI	3446 30548		See note
113-116 BMPSB1MI	33994	First subscapular skinfold (mm) (2 months and over) 02.8-47.4	See note
117-120 BMPSB2MI	33994	Second subscapular skinfold (mm) (2 months and over) 02.8-50.4	See note
121-124 BMPSP1MI	3446 30548		See note
125-128 BMPSP2MI		Second suprailiac skinfold (mm) (2 years and over)	See note

3446	-009	Not	applicable
30548	02.0-50	.0	

FILENAME=IM	₽4	VERSION 1.0	N=33994
		BODY MEASUREMENTS	
		Item description and code	Notes
129-132 BMPTR1MI		First triceps skinfold (mm) (2 months and over) 01.2-49.8	See note
133-136 BMPTR2MI		Second triceps skinfold (mm) (2 months and over) 02.8-49.0	See note
137-141 BMPWSTMI		Waist circumference (cm) (2 years and over) -0009 Not applicable 034.5-179.7	See note
142-147 BMPWTMI		Weight (kg)	See note
	33994	002.80-241.80	

FILENAME=IM		VERSION 1.0	N=33994
		BLOOD AND URINE ASSAY ITEMS	
Positions SAS name		Item description and code	Notes
148-150 FEPMI	21.07	Serum iron (ug/dL) -09 Not applicable	See note
		000-338	
151-154 FRPMI			See note
		-009 Not applicable 0002-3059	
155-157 HDPMI		Serum HDL cholesterol (mg/dL)	See note
	5982 28012	-09 Not applicable 007-196	
158-162 HGPMI		Hemoglobin (g/dL)	See note
		-0009 Not applicable 04.95-19.60	
163-167 HTPMI		Hematocrit (%)	See note
	2107 31887	-0009 Not applicable 16.60-57.60	
168-172 MCPSIMI			See note
	2107 31887	-0009 Not applicable 13.60-53.60	
173-177 MHPMI		Mean cell hemoglobin concentration (g/dL)	See note
	2107 31887		
178-183 MVPSIMI		Mean cell volume: SI (fL)	See note
	2107 31887		
184-189 PBPMI		Lead (ug/dL)	See note
	2107 31887		

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

FILENAME=IM		VERSION 1.0	N=33994
		BLOOD AND URINE ASSAY ITEMS	
Positions SAS name	Counts	Item description and code	Notes
195-199 PXPMI		Serum transferrin saturation (%)	See note
		-0009 Not applicable 000.0-098.5	
200-203 RCPMI		Red blood cell count	See note
	2107 31887	-009 Not applicable 1.69-6.84	
204-208 RWPMI		Red blood cell count	See note
		-0009 Not applicable 07.80-31.95	
209-211 SEPMI		Serum selenium (ng/mL)	See note
	11728 22266	-09 Not applicable 039-622	
212-214 TCPMI		Serum cholesterol (mg/dL)	See note
	5982 28012	-09 Not applicable 059-702	
215-218 TGPMI		Serum triglycerides (mg/dL)	See note
		-009 Not applicable 0013-3616	
219-221 TIPMI		Serum TIBC (ug/dL)	See note
	2107 31887	-09 Not applicable 069-866	

FILENAME=IM	₽4	7	VERSION 1.0	N=33994
		FUNI	DUS PHOTOGRAPHY	
Positions		Item desci	-	
SAS name	Counts	and co	ode 	Notes
222-223 FPPSUDMI		Summary	drusen score	See note
	22546	-9	Not applicable	
	2456	00	None	
	2025	01	Questionable	
	6967	02	Present	
224-225 FPPSUMMI		Summary	age-related maculopathy score	See note
	22546	-9	Not applicable	
	9761	00	None	
	1625	01	Early	
	62	02	Late	
226-227 FPPSURMI		Summary	diabetic retinopathy score	See note
	22546 10549 778 95 26	00 01	Not applicable None Mild Moderate Proliferative	

FILENAME=IM	 P4	VERSION 1.0	N=33994
	REPLICATE	BLOOD PRESSURE (3x) FROM MEC EXAMINATION	
Positions SAS name	Counts	Item description and code	Notes
228-230 PEP6G1MI			orSee note
	7151 26843	-09 Not applicable 052-258	
231-233 PEP6G2MI		Fourth Korotkoff sound (K4), diastolic, for first BP measurement (mm Hg)	See note
		-09 Not applicable 002-104	
234-236 PEP6G3MI		Fifth Korotkoff sound (K5), diastolic, for first BP measurement (mm Hg)	See note
		-09 Not applicable 000-136	
237-239 PEP6H1MI		First Korotkoff sound (K1), systolic, fo second blood pressure (BP) measurement	orSee note
	7151 26843	-09 Not applicable 054-266	
240-242 PEP6H2MI		Fourth Korotkoff sound (K4), diastolic, for second BP measurement (mm Hg)	See note
		-09 Not applicable 002-102	
243-245 PEP6H3MI		Fifth Korotkoff sound (K5), diastolic, for second BP measurement (mm Hg)	See note
	7151 26843	-09 Not applicable 000-138	
246-248 PEP6I1MI		First Korotkoff sound (K1), systolic, fo third blood pressure (BP) measurement	orSee note
	7151 26843		
249-251 PEP6I2MI		Fourth Korotkoff sound (K4), diastolic, for third BP measurement (mm Hg)	See note

25976	-09	Not	applicable
8018	002-106		

FILENAME=IMP4		VERSION 1.0	N=33994
	REPLICATE	BLOOD PRESSURE (3x) FROM MEC EXAMINATION	
Positions SAS name	Counts	Item description and code	Notes
252-254 PEP6I3MI	4	Fifth Korotkoff sound (K5), diastolic, for third BP measurement (mm Hg)	See note
	7151 26843	-09 Not applicable 000-140	

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 calender 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 BDPTOAIF 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.

BMPRECMI: 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:

MCH = Hb/RBC MCHC = Hb/PCV MCV = PCV/RBC

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 RCPIF 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.

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

New value = 16.795 + 0.902 * 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 PEP6IIIF 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.