



Jean Mayer Human Nutrition Research Center on Aging at Tufts University



QUESTIONNAIRE FOR STUDY:
BONE MINERAL DENSITY

Instructions: The following questions refer to your place of residence and your migration history over the past years..

10 Years

1a. Based on the **past ten years**, how many years or months have you lived in the Northeastern United States (Massachusetts, New York, etc.)?

BD1a_y years **BD1a_m** months

1b. Based on the **past ten years**, how many years or months have you lived in Puerto Rico, the Southern United States, or another area with a similar climate?

BD1b_y years **BD1b_m** months

Past Year (12 Months)

2a. In the **past (1) year**, how many months have you lived in the Northeast United States (Massachusetts, New York, etc.)?

BD2a months

2b. In the **past (1) year**, how many months have you lived in Puerto Rico, the Southern United States, or another area with a similar climate?

BD2b months

3. On average, how many hours per week do you spend outdoors during the summer?
(**DO NOT include time spent inside vehicles / cars / buses**)

BD3a hours per day (If "Don't Know", write "98")

OR

BD3b hours per week

4a. When you spend time outdoors during the summer, what parts of your skin are **usually** exposed to the sun? (**Choose only one answer**)

- a. Face only **BD4a**
- b. Face and hands
- c. Face, hands and arms
- d. Face, hands, arms and legs
- e. Not applicable

4b. When you go out, do you normally use sunscreen/SPF?

0 = No **BD4b**

1 = Yes

98 = Don't Know

99 = Not Applicable

Instructions: The following questions refer to falls and fractures that you may have suffered during the past year.

5. During the **past year**, did you accidentally fall to the ground?
(Choose “0 = No” if the accident occurred during a sports activity)

0 = No (If “No,” go to question #8) **BD5**
1 = Yes (If “Yes,” continue with question #6)
98 = Don’t Know (If “Don’t Know,” continue with question #6)

6. If “Yes” or “Don’t Know”: How many times did you suffer (or think you suffered) a fall during the last year?

BD6 times

7. Did any of your falls during the **last year** result in the following?

	Outcome	Yes	No	Don’t Know
a.	Fracture	BD7a 1	0	98
b.	Skin cut	BD7b 1	0	98
c.	Blow to the head requiring medical attention	BD7c 1	0	98
d.	Dislocation	BD7d 1	0	98
e.	Bruise, sprain (twisting of ligaments), or skin cut not requiring medical intervention	BD7e 1	0	98

8. From **age 20 until now**, has your physician ever told you if you have suffered a fracture or broken bone?

0 = No (If “No,” go to question #10) **BD8**
1 = Yes (If “Yes,” continue with question #9)
98 = Don’t Know (If “No,” continue with question #9)

9. In how many of the following bones did you ever suffer (or think your doctor told you that you suffered) a fracture, and at what age?

(If any bones were broken more than once, indicate the age at the time of the first fracture)
(Specify left or right side inside the appropriate box)
(If you don’t know what side, write “98” in the “Left” and “Right” boxes)
(If you don’t know the age, write “98” in the “Age” box)

	Bone	Yes	No	Left	Right	Age (of first fracture)
a.	Hip	BD9a 1	0	BD9a_L	BD9a_R	BD9a_age
b.	Humerus (arm bone above the elbow)	BD9b 1	0	BD9b_L	BD9b_R	BD9b_age
c.	Cubitus or radius (forearm bones below the elbow), or wrist	BD9c 1	0	BD9c_L	BD9c_R	BD9c_age
d.	Hand	BD9d 1	0	BD9d_L	BD9d_R	BD9d_age
e.	Collarbone	BD9e 1	0	BD9e_L	BD9e_R	BD9e_age
f.	Spinal column	BD9f 1	0	BD9f_L	BD9f_R	BD9f_age
g.	Pelvis	BD9g 1	0	BD9g_L	BD9g_R	BD9g_age
h.	Leg	BD9h 1	0	BD9h_L	BD9h_R	BD9h_age
i.	Foot	BD9i 1	0	BD9i_L	BD9i_R	BD9i_age
j.	Toe(s)	BD9j 1	0	BD9j_L	BD9j_R	BD9j_age
k.	Other; specify: BD9k_specify	BD9k 1	0	BD9k_L	BD9k_R	BD9k_age

Instructions: The following questions refer to falls and fractures that any members of your family may have suffered after the age of 20.

10. Did your mother ever suffer a bone fracture after age 20?

(Refer to your biological mother)

0 = No (If "No" go to question #11)

BD10

1 = Yes

98 = Don't Know (If "Don't Know" go to question #11)

10a. If "Yes": Please indicate each bone where your mother suffered a fracture and her age at the time.

(If any bones were broken more than once, indicate the age at the time of the first fracture)

(Specify left or right side inside the appropriate box)

(If you don't know what side, write "98" inside the "Left" and "Right" boxes)

(If you don't know the age, write "98" inside the "Age" box)

	Bone	Yes	No	Left	Right	Age (of first fracture)
a.	Hip	BD10a 1	0	BD10a_L	BD10a_R	BD10a_age
b.	Humerus (arm bone above the elbow)	BD10b 1	0	BD10b_L	BD10b_R	BD10b_age
c.	Cubitus or radius (forearm bones below the elbow), or wrist	BD10c 1	0	BD10c_L	BD10c_R	BD10c_age
d.	Hand	BD10d 1	0	BD10d_L	BD10d_R	BD10d_age
e.	Collarbone	BD10e 1	0	BD10e_L	BD10e_R	BD10e_age
f.	Spinal column	BD10f 1	0	BD10f_L	BD10f_R	BD10f_age

g.	Pelvis	BD10g	1	0	BD10g_L	BD10g_R	BD10g_age
h.	Leg	BD10h	1	0	BD10h_L	BD10h_R	BD10h_age
i.	Foot	BD10i	1	0	BD10i_L	BD10i_R	BD10i_age
j.	Toe(s)	BD10j	1	0	BD10j_L	BD10j_R	BD10j_age
k.	Other; specify: BD10k_specify	BD10k	1	0	BD10k_L	BD10k_R	BD10k_age

11. Did your father ever suffer a bone fracture after age 20?

(Refer to your biological father)

0 = No (If "No" go to question #12)

BD11

1 = Yes

98 = Don't know (If "Don't know" go to question #12)

11a. If "Yes": Please indicate each bone where your father suffered a fracture and his age at the time.

(If any bones were broken more than once, indicate the age at the time of the first fracture)

(Specify left or right side inside the appropriate box)

(If you don't know what side, write "98" in the "Left" and "Right" boxes)

(If you don't know the age, write "98" in the "Age" box)

	Bone	Yes	No	Left	Right	Age (of first fracture)	
a.	Hip	BD11a	1	0	BD11a_L	BD11a_R	BD11a_age
b.	Humerus (arm bone above the elbow)	BD11b	1	0	BD11b_L	BD11b_R	BD11b_age
c.	Cubitus or radius (forearm bones below the elbow), or wrist	BD11c	1	0	BD11c_L	BD11c_R	BD11c_age
d.	Hand	BD11d	1	0	BD11d_L	BD11d_R	BD11d_age
e.	Collarbone	BD11e	1	0	BD11e_L	BD11e_R	BD11e_age
f.	Spinal column	BD11f	1	0	BD11f_L	BD11f_R	BD11f_age
g.	Pelvis	BD11g	1	0	BD11g_L	BD11g_R	BD11g_age
h.	Leg	BD11h	1	0	BD11h_L	BD11h_R	BD11h_age
i.	Foot	BD11i	1	0	BD11i_L	BD11i_R	BD11i_age
j.	Toe(s)	BD11j	1	0	BD11j_L	BD11j_R	BD11j_age
k.	Other; specify: BD11k_specify	BD11k	1	0	BD11k_L	BD11k_R	BD11k_age

12. How many biological sisters do you have?

(Make sure to include any deceased sisters. DO NOT include step-sisters, adopted sisters, or any sisters who are not biologically related to you)

BD12 sisters (If zero, write "0" and go to question #13)

12a. Did any of your biological sisters ever break or fracture her hip after age 20?

0 = No

BD12a

1 = Yes

98 = Don't Know

12b. Did any of your biological sisters ever break or fracture her wrist or forearm after age 20?

0 = No

BD12b

1 = Yes

98 = Don't Know

13. How many biological brothers do you have?

(Make sure to include any deceased brothers. DO NOT include step-brothers, adopted brothers, or any brothers who are not biologically related to you)

BD13 brothers *(If zero, write "0" and go to question #14)*

13a. Did any of your biological brothers ever break or fracture his hip after age 20?

0 = No

BD13a

1 = Yes

98 = Don't Know

13b. Did any of your biological brothers ever break or fracture his wrist or forearm after age 20?

0 = No

BD13b

1 = Yes

98 = Don't Know

Instructions: The following questions refer to your weight and size / height, and any prescription medications that you may have taken to treat certain medical conditions.

14. What was your average weight at age 25?

(Women: DO NOT include your weight during pregnancy.

If you do not remember, give your best estimate)

BD14 lbs.

15. What was your size / height, without shoes, at age 25?

(If you do not remember, give your best estimate)

BD15_f feet **BD15_i** inches

16. What was your average weight at age 50?

(Women: DO NOT include your weight during pregnancy.

If you do not remember, give your best estimate)

BD16 lbs. *(If the subject's current age is less than 50, write "999")*

17. Are you currently taking any of the following prescription medications to treat osteoporosis?

	Medication Name	No	Yes	Length of Use
a.	Calcitonin <i>by injection</i> (Calcinar, Miacalcin)	BD17a 0	1	BD17a_yr 1. <1yr 2. 1-5yrs 3. 5yrs
b.	<i>Nasal</i> Calcitonin (Miacalcin)	BD17b 0	1	BD17b_yr 1. <1yr 2. 1-5yrs 3. 5yrs
c.	Fosamax (Alendronate)	BD17c 0	1	BD17c_yr 1. <1yr 2. 1-5yrs 3. 5yrs
d.	Didronal (Etidronate)	BD17d 0	1	BD17d_yr 1. <1yr 2. 1-5yrs 3. 5yrs
e.	Calcium + Vitamin D	BD17e 0	1	BD17e_yr 1. <1yr 2. 1-5yrs 3. 5yrs
f.	Calcium	BD17f 0	1	BD17f_yr 1. <1yr 2. 1-5yrs 3. 5yrs
g.	Vitamin D	BD17g 0	1	BD17g_yr 1. <1yr 2. 1-5yrs 3. 5yrs
h.	Cod liver oil	BD17h 0	1	BD17h_yr 1. <1yr 2. 1-5yrs 3. 5yrs
i.	Other: BD17i_specify	BD17i 0	1	BD17i_yr 1. <1yr 2. 1-5yrs 3. 5yrs

WOMEN only

18. Are you currently taking any of the following estrogen preparations, either orally or via a patch?
(Do not include vaginal creams)

	Medication Name	No	Yes	Length of Use
a.	Premarin	BD18a 0	1	BD18a_yr 1. <1yr 2. 1-5yrs 3. 5yrs
b.	Prempro	BD18b 0	1	BD18b_yr 1. <1yr 2. 1-5yrs 3. 5yrs
c.	Premphase	BD18c 0	1	BD18c_yr 1. <1yr 2. 1-5yrs 3. 5yrs
d.	Estratab	BD18d 0	1	BD18d_yr 1. <1yr 2. 1-5yrs 3. 5yrs
e.	Menest	BD18e 0	1	BD18e_yr 1. <1yr 2. 1-5yrs 3. 5yrs
f.	Estrace	BD18f 0	1	BD18f_yr 1. <1yr 2. 1-5yrs 3. 5yrs
g.	Ogen, Ortho-Est	BD18g 0	1	BD18g_yr 1. <1yr 2. 1-5yrs 3. 5yrs
h.	Estraderm, Vivelle	BD18h 0	1	BD18h_yr 1. <1yr 2. 1-5yrs 3. 5yrs
i.	Evista	BD18i 0	1	BD18i_yr 1. <1yr 2. 1-5yrs 3. 5yrs
j.	Other; specify: BD18j_specify	BD18j 0	1	BD18j_yr 1. <1yr 2. 1-5yrs 3. 5yrs

Instructions: The following questions are in regards to restless leg syndrome and sleep patterns.

19a. Do you have unpleasant sensations in your legs, such as leg tingling, electric current or burning in your legs, combined with a feeling of urgency or the need to move your legs?

0 = No (*if "No," go to question #20*) **BD19a**

1 = Yes

- 19b.** Do these sensations/symptoms occur only when you are resting?
 0 = No (*if "No," go to question #20*) **BD19b**
 1 = Yes
- 19c.** Do these sensations/symptoms ameliorate if you move?
 0 = No (*if "No," go to question #20*) **BD19c**
 1 = Si
- 19d.** Are these sensations/symptoms worse at night when compared to during the morning?
 0 = No (*if "No," go to question #20*) **BD19d**
 1 = Si
- 19e.** How frequently do these sensations/symptoms take place? **(BD19e)**
 1 = Less than once per month / Once per month
 2 = 2-4 times per month
 3 = 2-3 times per week
 4 = 4-5 times per week
 5 = 6-7 times per week
- 20a.** Please indicate the total number of hours that you really sleep, typically, during a 24 hour period: **BD20a**
 1 = 5 hours or less
 2 = 6 hours
 3 = 7 hours
 4 = 8 hours
 5 = 9 hours
 6 = 10 hours or more
- 20b.** What time do you usually go to bed?
BD20b a.m. / p.m. BD20b_amORpm (1=am, 0=pm)
- 20c.** The following questions explore your sleeping patterns:

	Most of the Time	Sometimes	Almost Never or Never
How frequently do you have difficulty falling asleep?	BD20c_1 2	1	0
How frequently do you have trouble with waking up at night?	BD20c_2 2	1	0
How frequently do you have trouble with waking up too early in the morning and not being able to fall asleep again?	BD20c_3 2	1	0

How frequently do you feel so sleepy during the day or night that you need to take a nap?	BD20c_4 2	1	0
How frequently do you feel truly rested when you wake up in the morning?	BD20c_5 0	1	2

* Please note that five subjects: 94048, 94236, 94963, 95217, 95345 were originally asked the question Q20c_5 as “How frequently do you **feel truly tired** when you wake up in the morning?” due to printing error in the questionnaire. Data for question Q20c_5 for these five participants have been reverse coded. Researchers concerned with content validity may choose to exclude these five subjects from their analysis.

20d. Do you snore? (if you have a partner or share your bedroom with another person, please ask him/her) **BD20d**

- 1 = Every night
- 2 = Most nights
- 3 = A few nights a week
- 4 = Occasionally
- 5 = Almost never

20e. Did you respond to the previous question about snoring after asking your partner or bedroom-mate?

- 1 = Si **BD20e**
- 0 = No

GREYED VARIABLES IN THE CODEBOOK ARE NOT PRESENT IN THE RELEASED DATASET

Studyid: Unique Subject Identifier

V00002: The date when the survey interview was conducted.

SCAN_DT_BD: Date of Bone DXA Scan

FEMALE: Gender of the subject

1: female

0: male

Exam_Ht : Height measured using Stadiometer (in cm)

HTM_BD: Height measured using Stadiometer (in mts)
Exam_Ht/100

WTKG_BD: Weight measured in kg

Derived Variables

**** Three Indicator variables were created to flag all those subjects who have a large duration between their dates of survey interview, blood collection, urine collection, Bone DXA Scan.*

Blood_Survey_Indicator: If the duration between `specdate_b_bd` (Date the blood specimen was drawn) and `V00002` (The Date when the survey interview was conducted) is greater than or equal to a year then this indicator's value will be 1, else it will be 0.

Scan_Survey_Indicator : If the difference between the `SCAN_DT_BD` (Date of Bone DXA Scan) & `V00002` is greater than or equal to a year than this value will be 1, else it will be 0.

Urine_Survey_Indicator: If the difference between the `specdate_u_bd` (Date when the Urine specimen was drawn) and `V00002` is greater than or equal to a year than this value will be 1, else it will be 0.

AGE_BD: Calculated from Bone DXA Scan and birth date (From Scan Database)

BMI_BD: Body Mass Index

$BMI_BD = WTKG_BD / (HTM_BD * HTM_BD)$
Where `WTKG_BD` is the weight in kg
`HTM_BD` is the height in meter

BMIZZ_BD (NIH 2000)

0: $0 \leq BMI < 25$

1: $25 \leq BMI < 30$

2: $30 \leq \text{BMI}$

BMIZZ2_BD

0: $0 \leq \text{BMI} < 18.5$

1: $18.5 \leq \text{BMI} < 25$

2: $25 \leq \text{BMI} < 30$

3: $30 \leq \text{BMI} < 35$

4: $35 \leq \text{BMI} < 40$

5: $40 \leq \text{BMI}$

CRPZZ_BD *CRP (Pearson et al 2003);

0: $0 \leq \text{CRP} < 1$

1: $1 \leq \text{CRP} \leq 3$

2: $3 < \text{CRP} < 10$

3: $10 \leq \text{CRP}$

CRPZZ2_BD *CRP (NHANES 1999-2000)

0: Male: ($\text{AGE} > 59$ and $\text{CRP} < 4.9$) or ($\text{AGE} \leq 59$ and $\text{CRP} < 4.6$)

Female: ($\text{AGE} > 59$ and $\text{CRP} < 7.3$) or ($\text{AGE} \leq 59$ and $\text{CRP} < 8.4$)

1: Male: ($\text{AGE} > 59$ and $\text{CRP} \geq 4.9$) or ($\text{AGE} \leq 59$ and $\text{CRP} \geq 4.6$)

Female: ($\text{AGE} > 59$ and $\text{CRP} \geq 7.3$) or ($\text{AGE} \leq 59$ and $\text{CRP} \geq 8.4$)

ALBZZ_BD: (Visser et al. 2005)

1: $\text{ALB} < 3.8$

0: Male: $3.8 \leq \text{ALB} \leq 5.4$

Female: $3.8 \leq \text{ALB} \leq 5.3$

CREATZZ_BD (Shlipak et al. 2002)

0: Male: $0 \leq \text{CREAT} < 1.5$

Female: $0 \leq \text{CREAT} < 1.3$

1: Male: $\text{CREAT} \geq 1.5$

Female: $\text{CREAT} \geq 1.3$

CREAT_IDMS_BD

$-0.03339 + (1.01127 * \text{creat})$

CREATZZ_IDMS_BD

0: Male: $0 \leq \text{CREAT_IDMS} < 1.5$

Female: $0 \leq \text{CREAT_IDMS} < 1.3$

1: Male: $\text{CREAT_IDMS} \geq 1.5$

Female: $\text{CREAT_IDMS} \geq 1.3$

SEASON_SCN_BD: Season in which the Bone Scan was performed

1 = winter (December – January - February)

2 = spring (March- April- May)

3 = summer (June- July – August)

4 = fall (September – October- November)

MONTHS_BD: Month of Bone Scan

DERIVED MEDICATIONS:

The following variables take into consideration all the coded medications, either specified as one of the checked options or mentioned in the specify field.

- **mVitD_Total_BD :** Taking Total Vitamin-D: obtained from any supplementation source
 - 1=Yes
 - 0=No
- **mVitD_total_D_BD:** Length of Use of Total Vitamin-D: obtained from any supplementation source
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **mVitD_BD:** Taking prescribed Vitamin-D: obtained from Vitamin-D (only) prescribed medication list
 - 1=Yes
 - 0=No
- **mVitD_D_BD:** Length of Use of prescribed Vitamin-D: obtained from Vitamin-D (only) prescribed medication list.
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **mCa_total_BD:** Taking Calcium - obtained from any supplementation source.
 - 1=Yes
 - 0=No
- **mCa_total_D_BD:** Length of Use of Calcium - obtained from any supplementation source
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **mCa_BD:** Taking Prescribed Calcium- obtained from Calcium (only) prescribed medication list
 - 1=Yes
 - 0=No
- **mCa_D_BD:** Length of Use of Prescribed Calcium - obtained from (only) prescribed medication list
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **mCaD_BD :** Taking prescribed(Calcium+Vitamin D)
 - 1=Yes
 - 0=No
- **mCaD_D_BD:** Length of Use of prescribed(Calcium+Vitamin D)
 - 1 = <1 yr
 - 2 = 1-5 yrs

- 3 = 5 yrs
- **mvit_BD:** Taking any Supplements including Vitamins & Minerals
 - 1=Yes
 - 0=No
- **mvit_D_BD:** Length of Use of any supplement including vitamins and minerals (Vitamins & Minerals)
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **Mmultv_BD:** Taking a Multivitamin
 - 1=Yes
 - 0=No
- **mmultv_d_BD:** Length of Use of a Multivitamin supplement
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **miron_BD:** Taking Iron
 - 1=Yes
 - 0=No
- **miron_d_BD:** Length of Use of Iron
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **mvitEsupp_BD:** Taking Vitamin-E: obtained from any supplementation source
 - 1=Yes
 - 0=No
- **mvitesupp_D_BD:** Duration of Vitamin-E: obtained from any supplementation source
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **mvitAsupp_BD:** Taking Vitamin-A: obtained from any supplementation source
 - 1=Yes
 - 0=No
- **mvitAsupp_D_BD:** Duration of Vitamin-A: obtained from any supplementation source
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **Mzincsupp_BD:** Taking Zinc : Obtained from any supplementation source
 - 1=Yes
 - 0=No
- **mzincsupp_d_BD:** Length of Zinc Use: obtained from any supplementation source
 - 1 = <1 yr

- 2 = 1-5 yrs
- 3 = 5 yrs
- **momega3_BD** : Taking Omega-3: Obtained from any supplementation source
 - 1=Yes
 - 0=No
- **momega3_D_BD**: Length of Omega-3: Obtained from any supplementation source
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **momega6_BD** : Taking Omega-6: Obtained from any supplementation source
 - 1=Yes
 - 0=No
- **momega6_D_BD** : Length of Omega-6: Obtained from any supplementation source
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **mvitB12supp_BD**: Taking Vitamin-B12: Obtained from any supplementation source
 - 1=Yes
 - 0=No
- **mvitB12supp_d_BD**: Length of Vitamin-B12: Obtained from any supplementation source
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **Mnsaid_BD**: Taking NSAID
 - 1=Yes
 - 0=No
- **mnsaid_d_BD**: Length of NSAID Use
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **mmisc_BD** : Taking miscellaneous drugs
 - 1=Yes
 - 0=No
- **mmisc_d_BD**: Length of miscellaneous drugs use
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs

Bone Medications: Inhibitor of Bone Resorption:

- **Alendronate_BD** : Taking Alendronate
 - 1=Yes
 - 0=No
- **Alendronate_D_BD** : Length of Use of Alendronate

- 1 = <1 yr
- 2 = 1-5 yrs
- 3 = 5 yrs
- **Calcitonin_BD:** Taking Calcitonin
 - 1=Yes
 - 0=No
- **Calcitonin_D_BD:** Length of Use of Calcitonin
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **Mbone_BD:** Derived: bone resorption medications including: Alendronate, Risedronate (Actonel), Calcitonin Injection, Nasal Calcitonin, Fosamax, Didronal (Etidronate) and Tamoxifen.
 - 1=Yes
 - 0=No
- **mbone_d_BD:** Length of Use of Bone Resorption medications (Calcitonin & Alendronate)
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs

Hormonal use (Women only):

- **Estradiolmed_BD:** Taking Estradiol (Women only)
 - 1=Yes
 - 0=No
- **Estradiolmed_d_BD:** Length of Estradiol use (Women only)
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **Progesterone_BD:** Taking Progesterone (Women only)
 - 1=Yes
 - 0=No
- **Progesterone_d_BD:** Length of Progesterone use(Women only)
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **Estrogen_Agonist_BD:** Taking Estrogen Agonist (Women only)
 - 1=Yes
 - 0=No
- **Estrogen_Agonist_d_BD:** Length of Estrogen Agonist Use (Women only)
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs
- **MHORM_BD:** Derived: Taking hormones including: Premarin, Prempro, Premphase, Estratab, Menest, Estrace, Estraderm Vivelle, Ogen, Ortho-Est, Evista, Tamoxifen, Provera, and Progesterone (all medications listed on question BD18a-j)
 - 1=Yes

- 0=No
- **MHORM_D_BD:** Duration of the hormones use. If a subject takes more than one hormone then the maximum duration out of those hormones' durations will be considered.
 - 1 = <1 yr
 - 2 = 1-5 yrs
 - 3 = 5 yrs

OSTEOPOROSIS/OSTEOPOROSIS DEFINITIONS:

- **FEMUR NECK: Osteocat_femurNECK**
 - 1=Osteoporosis
 - 2=Osteopenia
 - 3=Normal
- **SPINE L2-L4: Osteocat_spinel2_L4**
 - 1=Osteoporosis
 - 2=Osteopenia
 - 3=Normal

LAB DATA - BLOOD

specdate_b_bd: Date the blood specimen was drawn

spectime_b_bd: Time when the blood specimen was drawn

specperiod_b_bd: Indicates if the subject was fasting/non-fasting before the blood draw

specnotes_b_bd: Blood Specimen Notes

pdate_b_bd: Date when the blood specimen was processed/entered in the HNRC Database

vitd_bd: VIT D, 25(OH) RIA (ng/ml)

albumin_bd: albumin (g/dL)

ntxserum_bd: NTX, serum NM BCE

osteocal_bd: osteocalcin (ng/ml)

crp_bd: hs_CRP (mg/L)

pth_bd:PTH (pg/ml)

testo_bd: testosterone

estradiol_bd: Estradiol (pg/ml)

igf1_bd: insulin-like growth factor

calmgdl_bd: CALCIUM (mg/dl)

TNF_BD: TNF (pg/ml)

IL6_bd: Interleukin 6

il1beta_bd: Serum IL-1B (pg/mL)

LAB DATA – URINE

specdate_u_bd: Date range (24 hr period) when the Urine specimen was collected

spectime_u_bd: Time range between which the Urine Specimen was collected

specperiod_u_bd: Indicates the period of urine collection (Should be 24 hr as per the protocol)

specnotes_u_bd: Urine Specimen Notes

pdate_u_bd: Date when the urine sample was processed/entered in the HNRC Database

urinevol_bd: URINE VOLUME (ml/24HRS)
creatconc_bd: CREATININE CONCENTRATION (mg/dl)
creatconc_c_bd: Creatinine Concentration Comments
createxc_bd: CREATININE EXCRETION (G/24HRS)
createxc_c_bd: Creatinine Excretion Comments
calconc_bd: CALCIUM CONCENTRATION (mg/dl)
calconc_c_bd: Calcium Concentration Comments
calexc_bd: CALCIUM EXCRETION (mg/24HOUR)
calexc_c_bd: Calcium Excretion Comments
cacreatexc_bd: CALCIUM 24-HR EXCRETION ADJ. FOR CREATININE EXCRETION (mg/G CREATININE)
cacreatexc_c_bd: Calcium Excretion Adj. Comments
sodconc_bd SODIUM CONCENTRATION (mg/dl)
sodconc_c_bd Sodium Concentration Comments
sodexc_bd SODIUM EXCRETION (MG/24 HRS)
sodexc_c_bd Sodium Excretion Comments
nacreatexc_bd: SODIUM 24-HR EXCRETION ADJ. FOR CREATININE EXCRETION (MG/G CREATININE)
nacreatexc_c_bd: Sodium 24-hr Excretion Adj. Comments
potassium_bd: POTASSIUM (mg/dl)
potassium_c_bd: Potassium Comments
potexc_bd: POTASSIUM EXCRETION (MG/24 HR)
potexc_c_bd: Potassium Excretion Comments
kcreatexc_bd: POTASSIUM 24-HR EXCRETION ADJ. FOR CREATININE EXCRETION (MG/G CREATININE)
kcreatexc_c_bd: Potassium 24-hr excretion adj. Comments
urinenitrgmgml_bd: NITROGEN URINE UNIT ((mg/ml)
urinenitrgmgml_c_bd Nitrogen Urine Comments
urinenitrghr_bd: Urine NITROGEN (G/24HR)
urinenitrghr_c_bd: Urine Nitrogen Comments

SCAN DATA

Variable	Label
pat_handle	pat_handle
scan_height	Height (m)
scan_weight	Weight (kg)
Ethnic	Ethnicity
Avgfat	avg_percent_fat
Avgtis	avg_tissue_thickness
Scandob	Date of Birth at Scan Visit
Comments	Comments
BONE MASS MEASUREMENTS BY SITE	
bonemass_android	Bone mass android (bmc, g)
bonemass_arms	Bone mass arms (bmc, g)
bonemass_leftarm	Bone mass left arm (bmc, g)
bonemass_rightarm	Bone mass right arm (bmc, g)
bonemass_armdiff	Bone mass difference Left arm vs Right arm (bmc, g)
bonemass_gynoid	Bone mass gynoid (bmc, g)
bonemass_head	Bone mass head (bmc, g)
bonemass_legs	Bone mass legs (bmc, g)

bonemass_leftleg	Bone mass left leg (bmc, g)
bonemass_rightleg	Bone mass right leg (bmc, g)
bonemass_legsdiff	Bone mass difference Left leg vs Right leg (bmc, g)
bonemass_pelvis	Bone mass pelvis (bmc, g)
bonemass_ribs	Bone mass ribs (bmc, g)
bonemass_spine	Bone mass spine (bmc, g)
bonemass_lefttrunk	Bone mass left trunk (bmc, g)
bonemass_righttrunk	Bone mass right trunk (bmc, g)
bonemass_trunkdiff	Bone mass difference Left trunk vs Right trunk (bmc, g)
bonemass_lefttotal	Total bone mass left side (bmc, g)
bonemass_righttotal	Total bone mass right side (bmc, g)
bonemass_bodydiff	Bone mass difference Left body vs Right body (bmc, g)
bonemass_total	Total bone mass (bmc, g)
LEAN MASS MEASUREMENTS BY SITE	
leanmass_android	Lean mass android (g)
leanmass_arms	Lean mass arms (g)
leanmass_leftarm	Lean mass left arm (g)
leanmass_rightarm	Lean mass right arm (g)
leanmass_armdiff	Lean mass difference Left arm vs Right arm (g)
leanmass_gynoid	Lean mass gynoid (g)
leanmass_head	Lean mass head (g)
leanmass_legs	Lean mass legs (g)
leanmass_leftleg	Lean mass left leg (g)
leanmass_rightleg	Lean mass right leg (g)
leanmass_legsdiff	Lean mass difference Left leg vs Right leg (g)
leanmass_pelvis	Lean mass pelvis (g)
leanmass_ribs	Lean mass ribs (g)
leanmass_spine	Lean mass spine (g)
leanmass_trunk	Lean mass trunk (g)
leanmass_lefttrunk	Lean mass left trunk (g)
leanmass_righttrunk	Lean mass right trunk (g)
leanmass_trunkdiff	Lean mass difference Left trunk vs Right trunk (g)
leanmass_lefttotal	Total lean mass left side (g)
leanmass_righttotal	Total lean mass right side (g)
leanmass_bodydiff	Lean mass difference Left body vs Right body (g)
leanmass_total	Total lean mass (g)
FAT MASS MEASUREMENTS BY SITE	
fatmass_android	Fat mass android (g)
fatmass_arms	Fat mass arms (g)
fatmass_leftarm	Fat mass left arm (g)
fatmass_rightarm	Fat mass right arm (g)
fatmass_armdiff	Fat mass difference Left arm vs Right arm (g)
fatmass_gynoid	Fat mass gynoid (g)
fatmass_head	Fat mass head (g)
fatmass_legs	Fat mass legs (g)
fatmass_leftleg	Fat mass left leg (g)
fatmass_rightleg	Fat mass right leg (g)

fatmass_legsdiff	Fat mass difference Left leg vs Right leg (g)
fatmass_pelvis	Fat mass pelvis (g)
fatmass_ribs	Fat mass ribs (g)
fatmass_spine	Fat mass spine (g)
fatmass_trunk	Fat mass trunk (g)
fatmass_lefttrunk	Fat mass left trunk (g)
fatmass_righttrunk	Fat mass right trunk (g)
fatmass_trunkdiff	Fat mass difference Left trunk vs Right trunk (g)
fatmass_bodydiff	Fat mass difference Left body vs Right body (g)
fatmass_lefttotal	Total fat mass left side (g)
fatmass_righttotal	Total fat mass right side (g)
fatmass_total	Total fat mass (g)
BONE MINERAL COMPOSITION BY SITE	
bmc_bodyANDROID	BMC android (g)
bmc_bodyGYNOID	BMC gynoid (g)
bmc_bodyHEAD	BMC head (g)
bmc_bodyTRUNK	BMC trunk (g)
bmc_bodyLEFTTRUNK	BMC left trunk (g)
bmc_bodyRIGHTTRUNK	BMC right trunk (g)
bmc_bodySPINE	BMC spine (g)
bmc_spineL1	BMC spine L1 (g)
bmc_spineL2	BMC spine L2 (g)
bmc_spineL3	BMC Spine L3 (g)
bmc_spineL4	BMC spine L4 (g)
bmc_spineL1_L2	BMC spine L1 to L2 (g)
bmc_spineL1_L3	BMC spine L1 to L3 (g)
bmc_spineL2_L4	BMC Spine L2 to L4 (g)
bmc_spineL3_L4	BMC spine L3 to L4 (g)
bmc_bodyRIBS	BMC ribs (g)
bmc_bodyPELVIS	BMC pelvis (g)
bmc_bodyARMS	BMC arms (g)
bmc_bodyLEFTARM	BMC left arm (g)
bmc_bodyRIGHTARM	BMC right arm (g)
bmc_bodyLEGS	BMC legs (g)
bmc_bodyLEFTLEG	BMC left leg (g)
bmc_bodyRIGHTLEG	BMC right leg (g)
bmc_femurTOTAL	BMC femur total (g)
bmc_femurUPNECK	BMC femur upper neck (g)
bmc_femurLOWNECK	BMC femur lower neck (g)
bmc_femurNECK	BMC femur neck (g)
bmc_femurWARDS	BMC femur wards (g)
bmc_femurTROCH	BMC femur troch (g)
bmc_femurSHAFT	BMC femur shaft (g)
bmc_bodyHEADLESSTOTAL	BMC total body minus head (g)
bmc_bodyLEFTTOTAL	BMC left body total (g)
bmc_bodyRIGHTTOTAL	BMC right body total (g)
bmc_bodyTOTAL	BMC total body (g)

BONE MINERAL DENSITY BY SITE	
bmd_bodyANDROID	BMD android (g/cm ²)
bmd_bodyGYNOID	BMD gynoid (g/cm ²)
bmd_bodyHEAD	BMD Head (g/cm ²)
bmd_bodyTRUNK	BMD trunk (g/cm ²)
bmd_bodyLEFTTRUNK	BMD left trunk (g/cm ²)
bmd_bodyRIGHTTRUNK	BMD right trunk (g/cm ²)
bmd_bodySPINE	BMD spine (g/cm ²)
bmd_spineL1	BMD spine L1 (g/cm ²)
bmd_spineL2	BMD spine L2 (g/cm ²)
bmd_spineL3	BMD Spine L3 (g/cm ²)
bmd_spineL4	BMD spine L4 (g/cm ²)
bmd_spineL1_L2	BMD spine L1 to L2 (g/cm ²)
bmd_spineL1_L3	BMD spine L1 to L3 (g/cm ²)
bmd_spineL2_L4	BMD Spine L2 to L4 (g/cm ²)
bmd_spineL3_L4	BMD spine L3 to L4 (g/cm ²)
bmd_bodyRIBS	BMD ribs (g/cm ²)
bmd_bodyPELVIS	BMD pelvis (g/cm ²)
bmd_femurNECK	BMD femur neck (g/cm ²)
bmd_femurUPNECK	BMD femur upper neck (g/cm ²)
bmd_femurLOWNECK	BMD femur lower neck (g/cm ²)
bmd_femurWARDS	BMD femur wards (g/cm ²)
bmd_femurTROCH	BMD femur troch (g/cm ²)
bmd_femurSHAFT	BMD femur shaft (g/cm ²)
bmd_femurTOTAL	BMD femur total (g/cm ²)
bmd_bodyARMS	BMD arms (g/cm ²)
bmd_bodyLEFTARM	BMD left arm (g/cm ²)
bmd_bodyRIGHTARM	BMD right arm (g/cm ²)
bmd_bodyLEGS	BMD legs (g/cm ²)
bmd_bodyLEFTLEG	BMD left leg (g/cm ²)
bmd_bodyRIGHTLEG	BMD right leg (g/cm ²)
bmd_bodyLEFTTOTAL	BMD Left body total (g/cm ²)
bmd_bodyRIGHTTOTAL	BMD right body total (g/cm ²)
bmd_bodyHEADLESSTOTAL	BMD total body minus head (g/cm ²)
bmd_bodyTOTAL	BMD total body (g/cm ²)
Z-SCORE BY SITE	
zscore_bodyANDROID	Android, Z score
zscore_bodyGYNOID	Gynoid, Z score
zscore_bodyHEAD	Head, Z score
zscore_bodyTRUNK	Trunk, Z score
zscore_bodyLEFTTRUNK	Left trunk, Z score
zscore_bodyRIGHTTRUNK	Right trunk, Z score
zscore_bodySPINE	Spine, Z score
zscore_spineL1	Spine L1 Z score
zscore_spineL2	Spine L2 Z score
zscore_spineL3	Spine L3 Z score
zscore_spineL4	Spine L4 Z score

zscore_spinel1_L2	Spine L1 to L2 Z score
zscore_spinel1_L3	Spine L1 to L3 Z score
zscore_spinel2_L4	Spine L2 to L4 Z score
zscore_spinel3_L4	Spine L3 to L4 Z score
zscore_bodyRIBS	Ribs, Z score
zscore_bodyPELVIS	Pelvis, Z score
zscore_bodyARMS	Arms, z score
zscore_bodyLEFTARM	Left arm, Z score
zscore_bodyRIGHTARM	Right arm, Z score
zscore_bodyLEGS	Legs, Z score
zscore_bodyLEFTLEG	Left leg, Z score
zscore_bodyRIGHTLEG	Right leg, Z score
zscore_femurTOTAL	Femur total, Z score
zscore_femurNECK	Femur neck, Z score
zscore_femurUPNECK	Femur upper neck, Z score
zscore_femurLOWNECK	Femur lower neck, Z score
zscore_femurWARDS	Femur wards, Z score
zscore_femurTROCH	Femur troch, Z score
zscore_femurSHAFT	Femur shaft, Z score
zscore_bodyHEADLESSTOTAL	Total body minus head, Z score
zscore_bodyLEFTTOTAL	Left body total, Z score
zscore_bodyRIGHTTOTAL	Right body total, Z score
zscore_bodyTOTAL	Total body, Z score
T-SCORE BY SITE	
tscore_bodyANDROID	Android, T score
tscore_bodyGYNOID	Gynoid, T score
tscore_bodyHEAD	Head, T score
tscore_bodyTRUNK	Trunk, T score
tscore_bodyLEFTTRUNK	Left trunk, T score
tscore_bodyRIGHTTRUNK	Right trunk, T score
tscore_bodySPINE	Spine, T score
tscore_spinel1	Spine L1 T score
tscore_spinel2	Spine L2 T score
tscore_spinel3	Spine L3 T score
tscore_spinel4	Spine L4 T score
tscore_spinel1_L2	Spine L1 to L2 T score
tscore_spinel1_L3	Spine L1 to L3 T score
tscore_spinel2_L4	Spine L2 to L4 T score
tscore_spinel3_L4	Spine L3 to L4 T score
tscore_bodyRIBS	Ribs, T score
tscore_bodyPELVIS	Pelvis, T score
tscore_bodyARMS	Arms, T score
tscore_bodyLEFTARM	Left arm, T score
tscore_bodyRIGHTARM	Right arm, T score
tscore_bodyLEGS	Legs, T score
tscore_bodyLEFTLEG	Left leg, T score
tscore_bodyRIGHTLEG	Right leg, T score

tscore_femurTOTAL	Femur total, T score
tscore_femurUPNECK	Femur upper neck, T score
tscore_femurLOWNECK	Femur lower neck, T score
tscore_femurNECK	Femur neck, T score
tscore_femurWARDS	Femur wards, T score
tscore_femurTROCH	Femur troch, T score
tscore_femurSHAFT	Femur shaft, T score
tscore_bodyLEFTTOTAL	Left body total, T score
tscore_bodyRIGHTTOTAL	Right body total, T score
tscore_bodyHEADLESSTOTAL	Total body minus head, T score
tscore_bodyTOTAL	Total body, T score
AREA BY SITE	
area_bodyANDROID	Area android (cm2)
area_bodyGYNOID	Area gynoid (cm2)
area_bodyHEAD	Area head (cm2)
area_bodyTRUNK	Area trunk (cm2)
area_bodyLEFTTRUNK	Area left trunk (cm2)
area_bodyRIGHTTRUNK	Area right trunk (cm2)
area_bodyRIBS	Area ribs (cm2)
area_bodySPINE	Area spine (cm2)
area_spineL1	Area spine L1 (cm2)
area_spineL2	Area spine L2 (cm2)
area_spineL3	Area Spine L3 (cm2)
area_spineL4	Area spine L4 (cm2)
area_spineL1_L2	Area spine L1 to L2 (cm2)
area_spineL1_L3	Area spine L1 to L3 (cm2)
area_spineL2_L4	Area spine L2 to L4 (cm2)
area_spineL3_L4	Area spine L3 to L4 (cm2)
area_bodyPELVIS	Area pelvis (cm2)
area_bodyARMS	Area arms (cm2)
area_bodyLEFTARM	Area left arm (cm2)
area_bodyRIGHTARM	Area right arm (cm2)
area_bodyLEGS	Area legs (cm2)
area_bodyLEFTLEG	Area left leg (cm2)
area_bodyRIGHTLEG	Area right leg (cm2)
area_femurTOTAL	Area femur total (cm2)
area_femurNECK	Area femur neck (cm2)
area_femurUPNECK	Area femur upper neck (cm2)
area_femurLOWNECK	Area femur lower neck (cm2)
area_femurWARDS	Area femur wards (cm2)
area_femurTROCH	Area femur troch (cm2)
area_femurSHAFT	Area femur shaft (cm2)
area_bodyLEFTTOTAL	Area left body total (cm2)
area_bodyRIGHTTOTAL	Area right body total (cm2)
area_bodyHEADLESSTOTAL	Area total body minus head (cm2)
area_bodyTOTAL	Area total body (cm2)
DESCRIPTION OF NORMAL BY SITE	

norm_bodyANDROID	Android, describes the normal
norm_bodyGYNOID	Gynoid, describes the normal
norm_bodyHEAD	Head, describes the normal
norm_bodyTRUNK	Trunk, describes the normal
norm_bodyLEFTTRUNK	Left trunk, describes the normal
norm_bodyRIGHTTRUNK	Right trunk, describes the normal
norm_bodyRIBS	Ribs, describes the normal
norm_bodySPINE	Spine, describes the normal
norm_spineL1	Spine L1, describes the normal
norm_spineL2	Spine L2, describes the normal
norm_spineL3	Spine L3, describes the normal
norm_spineL4	Spine L4, describes the normal
norm_spineL1_L2	Spine L1 to L2, describes the normal
norm_spineL1_L3	Spine L1 to L3, describes the normal
norm_spineL2_L4	Spine L2 to L4, describes the normal
norm_spineL3_L4	Spine L3 to L4, describes the normal
norm_bodyPELVIS	Pelvis, describes the normal
norm_bodyARMS	Arms, describes the normal
norm_bodyLEFTARM	Left arm, describes the normal
norm_bodyRIGHTARM	Right arm, describes the normal
norm_bodyLEGS	Legs, describes the normal
norm_bodyLEFTLEG	Left leg, describes the normal
norm_bodyRIGHTLEG	Right leg, describes the normal
norm_femurTOTAL	Femur total, describes the normal
norm_femurNECK	Femur neck, describes the normal
norm_femurUPNECK	Femur upper neck, describes the normal
norm_femurLOWNECK	Femur lower neck, describes the normal
norm_femurWARDS	Femur wards, describes the normal
norm_femurTROCH	Femur trochanter, describes the normal
norm_femurSHAFT	Femur shaft, describes the normal
norm_bodyLEFTTOTAL	Left body total, describes the normal
norm_bodyRIGHTTOTAL	Right body total, describes the normal
norm_bodyHEADLESSTOTAL	Total body minus head, describes the normal
norm_bodyTOTAL	Total body, describes the normal
REFERENCE POPULATION USED BY SITE	
pop_bodyANDROID	Android, reference population used
pop_bodyGYNOID	Gynoid, reference population used
pop_bodyHEAD	Head, reference population used
pop_bodyTRUNK	Trunk, reference population used
pop_bodyLEFTTRUNK	Left trunk, reference population used
pop_bodyRIGHTTRUNK	Right trunk, reference population used
pop_bodySPINE	Spine, reference population used
pop_spineL1	Spine L1 Reference population used
pop_spineL2	Spine L2 Reference population used
pop_spineL3	Spine L3 Reference population used
pop_spineL4	Spine L4 Reference population used
pop_spineL1_L2	Spine L1 to L2 reference population used

pop_spineL1_L3	Spine L1 to L3 reference population used
pop_spineL2_L4	Spine L2 to L4 reference population used
pop_spineL3_L4	Spine L3 to L4 reference population used
pop_bodyRIBS	Ribs, reference population used
pop_bodyPELVIS	Pelvis, reference population used
pop_bodyARMS	Arms, reference population used
pop_bodyLEFTARM	Left arm, reference population used
pop_bodyRIGHTARM	Right arm, reference population used
pop_bodyLEGS	Legs, reference population used
pop_bodyLEFTLEG	Left leg, reference population used
pop_bodyRIGHTLEG	Right leg, reference population used
pop_femurTOTAL	Femur total, reference population used
pop_femurNECK	Femur neck, reference population used
pop_femurUPNECK	Femur upper neck, reference population used
pop_femurLOWNECK	Femur lower neck, reference population used
pop_femurWARDS	Femur wards, reference population used
pop_femurTROCH	Femur troch, reference population used
pop_femurSHAFT	Femur shaft, reference population used
pop_bodyLEFTTOTAL	Left body total, reference population used
pop_bodyRIGHTTOTAL	Right body total, reference population used
pop_bodyHEADLESSTOTAL	Total body minus head, reference population used
pop_bodyTOTAL	Total body, reference population used
VERSION OF REFERENCE DATA USED BY SITE	
normver_bodyANDROID	Android, version of reference data used
normver_bodyGYNOID	Gynoid, version of reference data used
normver_bodyHEAD	Head, version of reference data used
normver_bodyTRUNK	Trunk, version of reference data used
normver_bodyLEFTTRUNK	Left trunk, version of reference data used
normver_bodyRIGHTTRUNK	Right trunk, version of reference data used
normver_bodySPINE	Spine, version of reference data used
normver_spineL1	Spine L1 version of reference data used
normver_spineL2	Spine L2 version of reference data used
normver_spineL3	Spine L3 version of reference data used
normver_spineL4	Spine L4 version of reference data used
normver_spineL1_L2	Spine L1 to L2 version of reference data used
normver_spineL1_L3	Spine L1 to L3 version of reference data used
normver_spineL2_L4	Spine L2 to L4 version of reference data used
normver_spineL3_L4	Spine L3 to L4 version of reference data used
normver_bodyRIBS	Ribs, version of reference data used
normver_bodyPELVIS	Pelvis, version of reference data used
normver_bodyARMS	Arms, version of reference data used
normver_bodyLEFTARM	Left arm, version of reference data used
normver_bodyRIGHTARM	Right arm, version of reference data used
normver_bodyLEGS	Legs, version of reference data used
normver_bodyLEFTLEG	Left leg, version of reference data used
normver_bodyRIGHTLEG	Right leg, version of reference data used
normver_femurTOTAL	Femur total, version of reference data used

normver_femurNECK	Femur neck, version of reference data used
normver_femurUPNECK	Femur upper neck, version of reference data used
normver_femurLOWNECK	Femur lower neck, version of reference data used
normver_femurWARDS	Femur wards, version of reference data used
normver_femurTROCH	Femur troch, version of reference data used
normver_femurSHAFT	Femur shaft, version of reference data used
normver_bodyLEFTTOTAL	Left body total, version of reference data used
normver_bodyRIGHTTOTAL	Right body total, version of reference data used
normver_bodyHEADLESSTOTAL	Total body minus head, version of reference data used
normver_bodyTOTAL	Total body, version of reference data used
AGE MATCHED ADJUSTED TO YOUNG NORMAL BY SITE	
adjust_bodyANDROID	Android, age matched adjusted to young normal
adjust_bodyGYNOID	Gynoid, age matched adjusted to young normal
adjust_bodyHEAD	Head, age matched adjusted to young normal
adjust_bodyTRUNK	Trunk, age matched adjusted to young normal
adjust_bodyLEFTTRUNK	Left trunk, age matched adjusted to young normal
adjust_bodyRIGHTTRUNK	Right trunk, age matched adjusted to young normal
adjust_bodySPINE	Spine, age matched adjusted to young normal
adjust_spinel1	Spine L1 age matched adjusted to young normal
adjust_spinel2	Spine L2 age matched adjusted to young normal
adjust_spinel3	Spine L3 age matched adjusted to young normal
adjust_spinel4	Spine L4 age matched adjusted to young normal
adjust_spinel1_L2	Spine L1 to L2 age matched adjusted to young normal
adjust_spinel1_L3	Spine L1 to L3 age matched adjusted to young normal
adjust_spinel2_L4	Spine L2 to L4 age matched adjusted to young normal
adjust_spinel3_L4	Spine L3 to L4 age matched adjusted to young normal
adjust_bodyRIBS	Ribs, age matched adjusted to young normal
adjust_bodyPELVIS	Pelvis, age matched adjusted to young normal
adjust_bodyARMS	Arms, age matched adjusted to young normal
adjust_bodyLEFTARM	Left arm, age matched adjusted to young normal
adjust_bodyRIGHTARM	Right arm, age matched adjusted to young normal
adjust_bodyLEGS	Legs, age matched adjusted to young normal
adjust_bodyLEFTLEG	Left leg, age matched adjusted to young normal
adjust_bodyRIGHTLEG	Right leg, age matched adjusted to young normal
adjust_femurTOTAL	Femur total, age matched adjusted to young normal
adjust_femurNECK	Femur neck, age matched adjusted to young normal
adjust_femurUPNECK	Femur upper neck, age matched adjusted to young normal
adjust_femurLOWNECK	Femur lower neck, age matched adjusted to young normal
adjust_femurWARDS	Femur wards, age matched adjusted to young normal
adjust_femurTROCH	Femur troch, age matched adjusted to young normal
adjust_femurSHAFT	Femur shaft, age matched adjusted to young normal
adjust_bodyLEFTTOTAL	Left body total, age matched adjusted to young normal
adjust_bodyRIGHTTOTAL	Right body total, age matched adjusted to young normal
adjust_bodyHEADLESSTOTAL	Total body minus head, age matched adjusted to young normal
adjust_bodyTOTAL	Total body, age matched adjusted to young normal
PERCENT YOUNG ADULT BY SITE	
perya_bodyANDROID	Android, percent young adult

perya_bodyGYNOID	Gynoid, percent young adult
perya_bodyHEAD	Head, percent young adult
perya_bodyTRUNK	Trunk, percent young adult
perya_bodyLEFTTRUNK	Left trunk, percent young adult
perya_bodyRIGHTTRUNK	Right trunk, percent young adult
perya_bodySPINE	Spine, percent young adult
perya_spineL1	Spine L1 percent young adult
perya_spineL2	Spine L2 percent young adult
perya_spineL3	Spine L3 percent young adult
perya_spineL4	Spine L4 percent young adult
perya_spineL1_L2	Spine L1 to L2 percent young adult
perya_spineL1_L3	Spine L1 to L3 percent young adult
perya_spineL2_L4	Spine L2 to L4 percent young adult
perya_spineL3_L4	Spine L3 to L4 percent young adult
perya_bodyRIBS	Ribs, percent young adult
perya_bodyPELVIS	Pelvis, percent young adult
perya_bodyARMS	Arms, percent young adult
perya_bodyLEFTARM	Left arm, percent young adult
perya_bodyRIGHTARM	Right arm, percent young adult
perya_bodyLEGS	Legs, percent young adult
perya_bodyLEFTLEG	Left leg, percent young adult
perya_bodyRIGHTLEG	Right leg, percent young adult
perya_femurNECK	Femur neck, percent young adult
perya_femurUPNECK	Femur upper neck, percent young adult
perya_femurLOWNECK	Femur lower neck, percent young adult
perya_femurWARDS	Femur wards, percent young adult
perya_femurTROCH	Femur troch, percent young adult
perya_femurSHAFT	Femur shaft, percent young adult
perya_femurTOTAL	Femur total, percent young adult
perya_bodyLEFTTOTAL	Left body total, percent young adult
perya_bodyRIGHTTOTAL	Right body total, percent young adult
perya_bodyHEADLESSTOTAL	Total body minus head, percent young adult
perya_bodyTOTAL	Total body, percent young adult
PERCENT AGE MATCHED BY SITE	
peram_bodyANDROID	Android, percent age matched
peram_bodyGYNOID	Gynoid, percent age matched
peram_bodyHEAD	Head, percent age matched
peram_bodyTRUNK	Trunk, percent age matched
peram_bodyLEFTTRUNK	Left trunk, percent age matched
peram_bodyRIGHTTRUNK	Right trunk, percent age matched
peram_bodySPINE	Spine, percent age matched
peram_spineL1	Spine L1 percent age matched
peram_spineL2	Spine L2 percent age matched
peram_spineL3	Spine L3 percent age matched
peram_spineL4	Spine L4 percent age matched
peram_spineL1_L2	Spine L1 to L2 percent age matched
peram_spineL1_L3	Spine L1 to L3 percent age matched

peram_spineL2_L4	Spine L2 to L4 percent age matched
peram_spineL3_L4	Spine L3 to L4 percent age matched
peram_bodyRIBS	Ribs, percent age matched
peram_bodyPELVIS	Pelvis, percent age matched
peram_bodyARMS	Arms, percent age matched
peram_bodyLEFTARM	Left arm, percent age matched
peram_bodyRIGHTARM	Right arm, percent age matched
peram_bodyLEGS	Legs, percent age matched
peram_bodyLEFTLEG	Left leg, percent age matched
peram_bodyRIGHTLEG	Right leg, percent age matched
peram_femurTOTAL	Femur total, percent age matched
peram_femurNECK	Femur neck, percent age matched
peram_femurUPNECK	Femur upper neck, percent age matched
peram_femurLOWNECK	Femur lower neck, percent age matched
peram_femurWARDS	Femur wards, percent age matched
peram_femurTROCH	Femur troch, percent age matched
peram_femurSHAFT	Femur shaft, percent age matched
peram_bodyLEFTTOTAL	Left body total, percent age matched
peram_bodyRIGHTTOTAL	Right body total, percent age matched
peram_bodyHEADLESSTOTAL	Total body minus head, percent age matched
peram_bodyTOTAL	Total body, percent age matched