

LET'S TALK ABOUT BONE HEALTH

STATISTICS ABOUT BONE HEALTH ==

When your doctor says your cholesterol is 180 mg/dL or your blood pressure is 120/80, you know you're on target. But what if you had a bone density of -1? Would you know what that means? You should. When it comes to bone health, numbers tell an important story. Here's what they mean for you.

Bone mineral density scores –

You may think a BMD T-score of -1.5 SD of the YAM sounds like gobbledy-gook. But once you know the language, it's easy to see where you stand.

BMD, or bone mineral density, results are scored in two ways. Your T-score compares your bone density to a 30-year-old woman, or the Young Adult Mean (YAM). "Young adults are used because we know that everyone loses some bone with age, so this is a little like stacking the deck. But osteoporosis is lowest in that age group." Says Felicia Cosman, MD, clinical director of the National Osteoporosis Foundation.

Your score is measured in standard deviations from the YAM-outlined by the World Health Organization as follows:

Normal	+1 to -1 of YAM
Low Bone Mass/Osteopenia	-1 to -2.5 below YAM
Osteoporosis	-2.5 or more below YAM; one or more osteoporotic fractures

(source: American Academy of Family Physicians)

While doctors use T-scores to diagnose osteoporosis, your Z-score compares you to people of your own age group. A caution: Z-scores can be misleading. For example, Cosman says it is possible to have a Z-score of -.5 and a T-score of -2.5. This would mean that, while your bone density is in the average range for your age, you still have osteoporosis.

Calcium –

No matter your age or BMD score, getting adequate calcium intake can help strengthen your bones. Check this chart:

AGE/STAGE	AMOUNT (mg per day)
9 – 18 years	1,300
10 – 50 years	1,000
Pregnant and lactating women	1,000 – 1,500
Post-menopausal women on HRT	1,000 – 1,200
51 years and older	1,200
Post-menopausal women not on HRT	1,200 – 1,500

(source: Mayo Clinic)

Calcium, whether from the diet or supplements, is best absorbed when taken several times a day. That's why it's best to take supplements twice a day with meals.

**Vitamin D**–

Called the “key” that unlocks the door for the optimal absorption of calcium, vitamin D is vital for bone health. In fact, Cosman says, vitamin D may also help bone renew itself. According to the National Osteoporosis Foundation, after age 50, adults need twice as much vitamin D.

**RECOMMENDED AMOUNTS OF D  
INTERNATIONAL  
UNITS PER DAY**

<b>AGE/STAGE</b>	<b>INTERNATIONAL UNITS PER DAY</b>
14 – 50 years	200
Pregnant and lactating women	200
51 – 70 years	400
71 years and older	600

Here are a few more numbers to consider –

- 1”** == The height loss considered part of normal aging. Anything greater may be a sign of osteoporosis.
- 20** == The age by which the average woman has acquired 98% of her skeletal mass.
- 25** == The percentage of men over age 50 who will have an osteoporosis-related fracture in their lifetime.
- 44** == The number in millions of Americans who have or are at risk for osteoporosis.
- 48** == If you reach menopause before this age, you're at higher risk for osteoporosis.

15 -- 13 correct answers	5 credits
12 -- 10 correct answers	4 credits
9 -- 7 correct answers	3 credits
6 -- 4 correct answers	2 credits
3 -- 1 correct answers	1 credit

**JULY 2007 JOURNAL ADMINISTRATIVE/CLINICAL ANSWER SHEET**

The following questions will apply for CME credit for the 2008-2009 recertification year. All completed answer sheets should be held until you receive your recertification notice in the mail (April of 2008). At that time, attach all Journal answer sheets to your notice and mail to:

Janet B. Grace, PMAC – 3844 Emerson Drive – Schiller Park, IL 60176

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Read the text on bone health and answer the following questions –

1. B M D stands for \_\_\_\_\_
2. Y A M stands for \_\_\_\_\_
3. T-score compares your bone density to a \_\_\_\_\_ year old woman
4. You are considered to have “low bone mass” if your YAM is \_\_\_\_\_
5. Your Z-score compares you to people of \_\_\_\_\_
6. No matter your age or BMD score, getting adequate calcium intake can help \_\_\_\_\_ your bones.
7. At your age, you need \_\_\_\_\_ mg of calcium per day.
8. Calcium taken once a day is sufficient. \_\_\_\_\_ TRUE \_\_\_\_\_ FALSE
9. What vitamin is needed to have optimal absorption of calcium? \_\_\_\_\_
10. At your age, you need \_\_\_\_\_ units of Vitamin D per day.
11. Taking calcium with the proper vitamin can actually help bones to \_\_\_\_\_
12. Anything more than \_\_\_\_\_ of height loss could be a sign of osteoporosis.
13. At what age have you acquired 98% of your skeletal mass? \_\_\_\_\_
14. Yes \_\_\_\_\_ No \_\_\_\_\_ I take a calcium supplement every day.
15. Yes \_\_\_\_\_ No \_\_\_\_\_ I have had a bone density test within the last 5 years.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

