

How Much Do You REALLY Know About Bones?

QUIZ ANSWER KEY – TAKE THIS HOME AND SHARE YOUR KNOWLEDGE!!

1. The largest bone in the human body is:

- a. Skull b. Spine c. **Femur (thigh bone)** d. Tibia (shin bone)

Answer: c. Your femur (thigh bone) is not only the largest bone, but also the strongest one, bearing much of the weight of your body. The lower end of the femur joins to the tibia in a joint that forms your knee. The upper end is rounded into a ball that fits into a "socket" located in your pelvis to form your hip joint. The smallest bone in the body is in the ear and is only 1/8 inch long.

2. The term "long bones" is used to describe:

- a. Very tall people b. Women with very long legs c. **Bones that offer structure and mobility** d. Any fully grown bone

Answer: c. "Long bones" describes any hard, dense bone that also provides strength, structure and mobility, such as the femur.

3. The difference between a "broken" bone and a "fractured" bone is:

- a. Severity b. Location c. Complications d. **No difference**

Answer: d. "Break" and "fracture" are interchangeable terms that mean the same thing: The bone is broken. There are, however, different types of bone breaks. A complete break is said to occur when a bone breaks into two or more pieces; an incomplete break means the bone does not break all the way through; a compound fracture(also called an "open" fracture) occurs when a bone breaks through the skin; a simple fracture (or "closed" fracture) occurs when the bone breaks but there is no break in the skin. In children, the most common type of bone break is a greenstick fracture, a type of incomplete break that causes the bone to be bent.

4. Adults have 206 bones in their body. Babies are born with:

- a. 206 bones b. 150 bones c. **300 bones** d. 185 bones

Answer: c. Babies are born with about 300 bones, almost a third of which eventually fuse together to form the 206-bone skeleton of an adult. Further, some of the "bones" in a baby's body are not really bone at all, but instead cartilage, a soft and flexible material that eventually grows into a bone. Calcium and other nutrients are what help baby's bones fuse and grow into a strong skeletal structure.

5. Which type of bone break most often leads to death in people over 65?

- a. Skull fracture b. Spine fracture c. **Hip fracture** d. Collarbone fracture

Answer: c. When it comes to deaths from injuries in senior citizens, data from the CDC tell us that falls are one of the leading causes, with hip fractures the No. 1 cause of fall-related deaths. Moreover, hip fractures are the cause of the most severe health problems in this age group, and they're also responsible for a dramatic reduction in quality of life. About 80% of hip fractures occur in women, with the rate increasing dramatically between ages 65 and 85. According to the CDC, by age 90, one in three women will sustain a hip fracture.

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6. The most common site of bone break seen in hospital emergency rooms is in the:

- a. Wrist/hand/fingers b. Skull c. Ankle/Foot/Toes d. Hip

Answer: a. According to data provided by the American Academy of Orthopaedic Surgeons, in 2004 the leading bone break seen in hospital emergency rooms was a fracture of the wrist, hand, or fingers, with some 1,093,000 cases in the U.S. Next in line were ankle, foot, and toe fractures (783,000), followed by lower arm fractures (763,000) and upper arm fractures (342,000).

7. Nutrients necessary for healthy bones include:

- a. Calcium and vitamin D b. Zinc and magnesium c. Protein d. All of the above

Answer: d. Though calcium is a key nutrient for strong bones, vitamin D is also necessary in order for bones to absorb calcium -- one reason why milk is often fortified with this nutrient. That said, zinc, magnesium, and protein are also found in milk and are important for strong bone health. Among the best sources of calcium are low-fat or nonfat milk or cheese, yogurt, broccoli, almonds, and calcium-fortified foods such as orange juice, cereals, soy beverages, and tofu products.

8. Which of the following lifestyle habits affects bone health:

- a. Smoking b. Exercise c. Excessive alcohol consumption d. All of the above

Answer: d. While smoking and alcohol affect bones in a negative way, exercise can have a positive effect on bone health. Studies have shown a direct link between smoking and a decrease in bone density that in turn increases the risk of a bone-thinning disorder known as osteoporosis. Excessive drinking can interfere with the production of vitamin D, which in turn interferes with calcium absorption. Alcoholism has also been linked to an increase in levels of cortisol, a hormone that can decrease bone formation and increase bone breakdown. Meanwhile, exercise -- particularly weight-bearing workouts that force you to push against gravity, such as walking, weight lifting, and climbing stairs -- increases bone health to help slow loss of bone density as we age.

9. Osteopenia is:

- a. The study of bone health b. A type of bone fracture c. A female bone disease d. Low bone mass

Answer: d. Osteopenia is a term used for low bone mass that isn't low enough to be osteoporosis. It is sometimes the forerunner to osteoporosis, a more serious bone-thinning disease. Both are diagnosed via a painless bone mineral density test known as DXA

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Hope you enjoyed this Bone Quiz!

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