

Bone and Growth how much is too much?

Introduction:

Bones are an essential part of the human skeleton which assists in its daily functions such as prevention of internal organs, movement of the body and overall stability of the structure of the body. Research suggest that bone growth begins in the womb of a mother and comes to an end by the time male/females hit their puberty age, but continue to re-model much after that. During the early development as a baby most of our bones are made out of cartilage and as we grow they undergo breakage in order to fulfill our body's demands. For example as we grow so does our weight, body mass and calcium levels increase, in order to maintain homeostasis with all those changes the bones undergo several breakages and remodeling. Since we know the basic developmental outline of bone growth, let's go deeper into what can cause loss of bone growth or too much bone growth. What factors can lead to either one of the previous scenarios. Is too much or too less bone growth dangerous? What decides how much bone growth is accurate?

Discussion:

Let's begin with what factors can reduce bone growth and what factors can increase them. There are several factors that can limit ones bone growth some that are under our control and some that aren't. Bone growth can be reduced due to body not absorbing enough nutrients needed for the bones to properly grow. For example Calcium is a main nutrient needed for bones to grow healthy and not deformed. When bones are low in calcium they become soft therefore easily deformed during early development. Having less calcium can cause rickets in childhood or osteomalacia in adults. Vitamin A and C are also important for healthy bone growth, Vitamin A is important because it controls osteoblast and osteoclast activity during the stage of bone development. Now with a lack of collagen in the bone can lead to less collagen produced in the osteoblasts and lead to bones becoming fragile and easily breakable. Now factors that lead to healthy and strong bone growth is by changing your diet where it incorporates foods that hold good amounts of vitamins and nutrients. Food such as dairy products (milk), green vegetables and sources of vitamin D; eggs and lives can help bone growth. It is crucial for your bones to be strong from the childhood stage because when we begin to age, our bones begin to also lose nutrients unless we keep with our diet and exercise. This is why young kids should be put into sports at an early age so they can develop stronger bones and also get their daily vitamin D from the sun.

Bone growth is dependant of several things such as daily nutrition, exercise and family heredity. How tall you become after puberty depends on your hormones absorbing all the nutrients and you received a healthy diet while development. There are also certain genetic factors that determine how much bone growth a person has. For example my father is 5'10 ft and my mother is 5'0 ft tall, even though for the most part my early development was fairly normal and healthy. Even after this my height remains at 5'2. So the point is that even when early developmental stages are normal, genetics does play a significant role in ones bone growth.

Conclusion:

In conclusion, bone growth is dependent on several factors but most of which depend on early development. When you bones first begin to grow it is very essential that they received proper nutrients because that is when they form their shape and strength. As we get older and older a healthy diet and a good dose of physical exercise helps the bone remain strong and prevents bone diseases such as

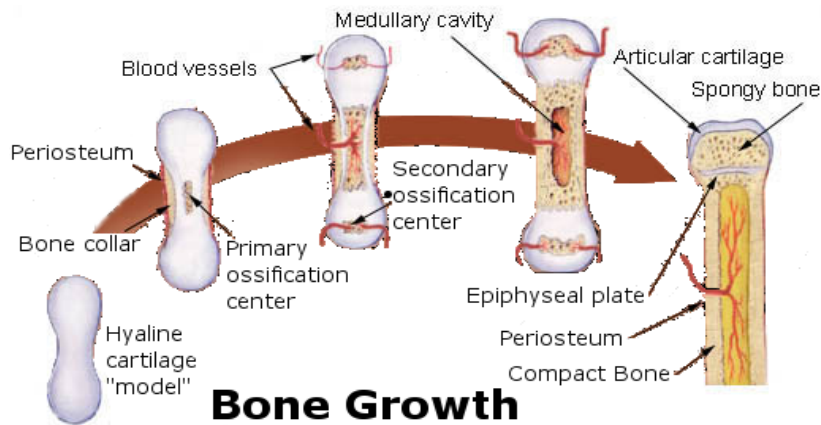
osteoporosis or osteogenesis in which bones become weak and easy to break. How much bone growth in an individual can also be determined from their parents genes or from family heredity. All in all bone growth is highly dependent on a healthy diet and exercise.

References:

<http://www.unu.edu/Unupress/food2/UID06E/uid06e0u.htm>

<http://www.our-sma-angels.com/crystal/Web%20Pages/A%20&%20P/A&P.htm>

Pictures:



After your mid-30s, you begin to slowly lose bone mass. Women lose bone mass faster after menopause, but it happens to men too.



Source: U.S. Office of the Surgeon General