



Calcium: The Essential Mineral

The body is unable to manufacture calcium and therefore dietary calcium is indispensable in maintaining healthy bones.

The body loses calcium every the day through skin, nails, hair, sweat and waste products.

When calcium is lost and not replaced the body must break down bone to obtain the mineral and maintain homeostasis of the calcium level in the blood stream.

Throughout our life bones are undergoing a process called remodeling in which small amounts of older bone are absorbed into the body and new bone is formed to replace it. Remodeling is easiest seen in the case of a fracture in which the healing bone gradually reshapes itself as it builds bone in one place and gradually removes it in another to heal the fracture.

In children this remodeling is so complete that after a year or so one can not even tell that a fracture has occurred in that particular bone. In adults remodeling after fractures also occurs, but often the remodeling is not complete and the residual evidence of the fracture can be seen on x-ray.

The vast majority of bone growth occurs during the adolescent and teen years with slow growth extending out to about age 35.

The American Academy of Orthopaedic Surgeons points out that as we age the balance between bone absorption and bone formation changes resulting in a net loss of bone tissue. The mineral content of bones decreases so they become less dense and more fragile.

A calcium rich diet is essential to help build and maintain strong bones throughout life.

The American Academy of Orthopaedic Surgeons, the American Academy of Pediatrics and the American Dietetic Association encourage calcium intake during all stages of life.

Ages 4 - 8: 800mg of calcium per day with three servings of milk to meet that goal.

Ages 9 - 19: Children in this age group should put calcium deposits in their "bone bank" with a 1300mg intake of calcium per day.



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Ages 20 - 35: Bone formation is not occurring as readily as before although peak bone strength is reached during these years. Adults in this age group need at least 1000mg of calcium per day.

Ages 35 - 50: Adults may gradually begin to lose bone so 1000mg of calcium each day is essential to keep bone loss to a minimum.

Over 50 years: Calcium intake should increase to 1200mg per day to encourage optimal bone health.



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Please consult Dr. Haverbush or a physician for specific treatment recommendations.

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