Effects of Calcium Deficient Diet and Exercise in the Parent Mice on the Bone Growth and its Hardness in their Second Generation Mice

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The purpose of this study is to clarify the cause of increasing bone fractures occurring in children. Mice were used, so as to study the effects of bone growth and its hardness, particularly with regard to environmental differences in the living conditions, such as the calcium intake rate, whether exercise is taken, and other such factors.

1) A significantly normal correlation was seen between parent and offspring with respect to bone length and weight, and hardness of the bone cortex, and the value of the bone components.

2) The lack of calcium during the fetal period and infancy causes insufficient bone growth, and the addition of calcium later dose not help in erasing the effects this lack for a fairly long time.