Comparison of Bone Mineral Density in Elite Skiers and Athletes

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ABSTRACT Physical activity, as a case for increase in bone mass is a factor. Based on this, a comparison between elite level sport athletes and skiers was conducted to compare their bone mineral density. Standard DEXA at the lumbar spine and proximal femur study describes the measurement. The athletes’ blood parameters (sodium, calcium, potassium) were determined in routine biochemistry. The results of analysis of bone mineral density levels of skiers compared to athletes p<0.05 was determined to be significant. In addition, the potassium level in skiers was found to be significantly lower in athletes. Among groups, a significant difference in the levels of calcium and phosphorus was determined. Elite athletes and intense experience for exercising, training frequency and the different results depending on the type of sports activity is reported. As a result, for the skiers in the study their bone mineral density was higher as compared to athletes and therefore with increasing physical activity that may cause bone and muscle stress of intense exercise program can be said to differ from each other should be considered.