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In this experiment the prevalence of a 3' untranslated region (UTR) polymorphism in the creatine kinase, muscle (CKM) gene was explored. Previous studies indicated that AA, AG and GG genotypes were found in 51%, 44% and 5% of the population. CKM is found in skeletal and heart muscle tissue, and its presence in the bloodstream is an indicator of muscle damage. The objective of this study was to replicate prior research utilizing CKM and to assess the frequency in the sample. It was hypothesized that the previous research could be replicated and that the genotype frequencies in the sample would match published research on CKM. Fifty-five individuals (16 male, 39 female) were sampled through the use of a cheek swab, and were worked up using Chelex resin techniques. Genotyping was performed using PCR with previously designed primers followed by digestion with the *NcoI*. When running results on the final gel, A allele digestion yielded fragments of 63bp and 52bp, while the G allele was undigested, resulting in a 115bp fragment. Results were obtained for 47 individuals and 12 (26%) were AG genotype while 43 (74%) were AA genotype. These results indicated that the genotyping of the 3' UTR region of CKM was successful, but genotype frequencies were different from those previously documented. Future plans would be to assess the polymorphism frequency on a larger population.