

The main error that occurred in this experiment was the perforation of the DNA gel. By perforating the DNA gel, my undigested sample and my digested sample leaked through and did not run on the gel; thus, I was unable to accurately identify my genotype. This perforation occurred when I was loading my sample into lanes 3 and 4. The pipette was inserted too far into the lane and the tip went through the bottom of the lane. In order to obtain conclusive results, I would have to rerun the entire experiment. The results I assume I would have seen would be a thick band lower on the DNA gel than the lane with the undigested sample because the restriction enzyme would have cleaved the DNA strand into two smaller fragments.

Because of the experimental error, I was unable to substantiate my hypothesis. I can assume, using the experimental data from the tasting stick, I am either a homozygous or heterozygous taster, but I lack the evidence of bands on the DNA to further prove this claim. Though I was unable to confirm my genotype through PCR and gel electrophoresis, I was able to speculate about what it would be based upon the experimental data gained from the taster stick. I was also able to analyze the sequence, its SNPs, the PCR products, and the evolution of this gene through use of bioinformatics.

#### References:

*More outside refs next time*

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- "Polymerase Chain Reaction" 2010. Genetics Laboratory Manual. BIO 201. Department of Biology. University of Richmond, Richmond, VA.
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