

# [Gene control variation within a species using a simple coded message essay exampl...](https://assignbuster.com/gene-control-variation-within-a-species-using-a-simple-coded-message-essay-example/)

[](https://assignbuster.com/)[Science](https://assignbuster.com/essay-subjects/science/), [Genetics](https://assignbuster.com/essay-subjects/science/genetics/)

Gene control variation in species through the simple process of meiosis. This is the asexual process that results into 4 cells after a single cell splits. Therefore, Gene control variations by forming varied DNA, which have similar molecules with the parent species but varies in each individual or animal. Control of variation by genes is usually carried out through coding for various traits using four nucleic acids which are: Adenine (a purine), Cytosine (a pyrimidine), Guanine (a purine) and Thymine (a pyrimidine) (Gaultier, 2007, p. 156). Different combinations of these four nucleic acids accounts for variations within a species; this is what is referred to as the “ simple coded message” that is responsible for coding everything such as all the physical development, height and eye colour of a particular species.   
Since genes are responsible for the many traits that a species possess, they are therefore very important in the evolution. If a gene codes for traits that helps in creating an advantage over others in an environment, that particular species is likely to reproduce more than their counterparts with weaker traits (Gaultier, 2007, p. 152).. For instance, if a type of a giraffe species possesses genes that are able to code for a 20ft long neck, therefore this giraffe is able to reach easily for the leaves on top of trees and hence has more survival ability than a different type of a giraffe species whose genes codes for a 5ft long neck.   
In conclusion, it is evident that gene control variation of a species is a vital process in the adaptation and evolution of a species. The importance of the simple coded message in the control of gene variation is largely manifested in the Darwin’s theory of the survival for the fittest where the species with varied but well fit genes are able to better adapt and survive to their environment.

## References

Gaultier, C. (2007). Genetic basis for respiratory control disorders. New York ; Berlin:   
Springer.