

# Uncertain Genetic Test Results

## “Variants of Uncertain Significance”

What happens when we don't know if a change in a recipe (or gene) might change the final product?

### Recipe 1

**DNA Alphabet**  
Letters to write out the recipes

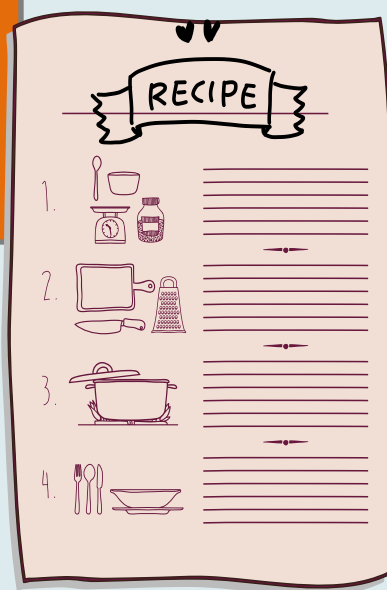
ATG  
GCA  
GGC



**Chocolate**

**Gene = Recipe**

Following the recipe, we will use chocolate.



### Recipe 2

ATG  
GGA  
GGC

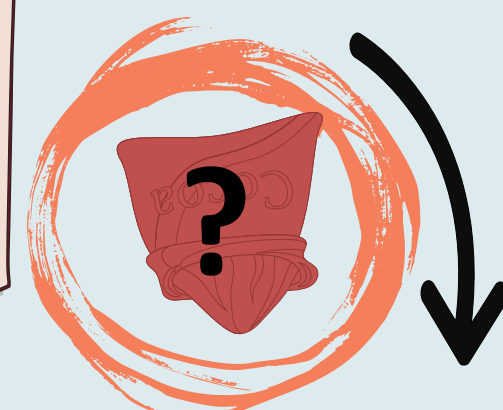
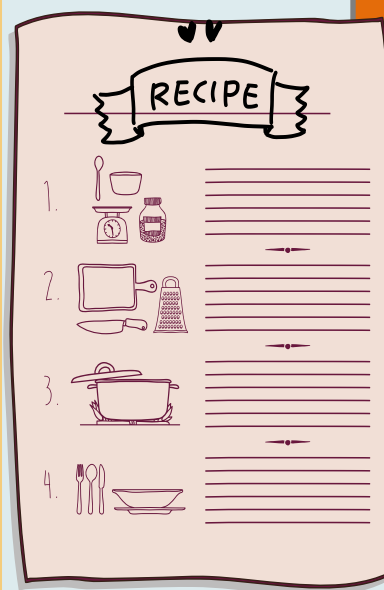
**DNA Alphabet**  
Letters to write out the recipes



**Chokalate**

**Gene = Recipe**

The "chocolate" in the recipe has been changed to "chokalate." We don't know what this word means.



**Chocolate Cake**

Following this recipe that used chocolate, we baked a chocolate cake.



**Final Product???**

Following this recipe that used "chokalate," we don't know yet what the final product would be.



The change in the recipe from chocolate to "chokalate" may have changed the cake that was baked, but we do not know for certain. A variant of uncertain significance (VUS) acts the same way. When we see a change in our genes that has not been well studied, we cannot predict how this change might affect a person. Over time, a VUS may eventually be better understood so doctors know more about how the change affects people.