**Mutation Story**

I am the gene that altered my hosts’ 2 X chromosomes. I diagnosed her with haemophilia. Her life is a lot more complicated now. Her gene mutation, haemophilia, impairs the body’s ability to control blood clotting. It got noticed 7 years ago, my host fell off her bike while riding for the first time and scraped her knee. It wasn’t a very deep cut but she bled for hours and it didn’t completely heal for days. She was 5 at the time and her parents took her for a blood test after the accident. The blood test results showed that my host was diagnosed with haemophilia, a rare mutation and even more uncommon for girls. The doctor told her that haemophiliacs don’t bleed more intensely than a person without it but they can bleed for a much longer time. In severe cases, minor injuries can cause blood loss lasting for days or weeks or even never completely healing which seemed to be what my host had as her cut was minor yet it bled for hours. Haemophilia was extremely rare for my host to be diagnosed with. To be diagnosed with this disorder, females would have to have 2 altered X chromosomes which is why it is more rare for females as males only have to have one altered X chromosome. Women can only have it if their father has haemophilia and their mother is a carrier of the gene, which is very uncommon but my hosts’ parents met the criteria. Although there is no cure for my host, it can be handled with regular infusions of the deficient clotting factor. My host is now 12 and handles the mutation quite well. By doing specific exercises, she will strengthen her joints, especially the elbows, knees and ankles to prevent internal joint bleeding. She is very cautious and aware of her surroundings at all times.

**The Making of Mutation Story**

For the making of my mutation story, I had to search “how is haemophilia inherited”, “symptoms of haemophilia”, and just “haemophilia”. My searches got me all the information I needed to create the story. First I searched haemophilia to get general information from Wikipedia, then I searched certain questions about the mutation and got more specific answers. I could have spent more time on my story to get more information and detail about the mutation.

The sites I used are:

<https://en.wikipedia.org/wiki/Haemophilia>

<https://ghr.nlm.nih.gov/condition/hemophilia>

<https://www.hemophilia.org/Bleeding-Disorders/Inhibitors-Other-Complications/Inhibitors-for-Consumers/How-do-You-Know-if-You-Have-an-Inhibitor>

<https://www.wfh.org/en/page.aspx?pid=644>