**Second draft**

After Eddie Huang, a character from a sitcom I liked to watch, exclaimed that he could make his own cereal by studying food engineering, a light bulb switched on in my mind. Questions that led to more questions formed in my head. How is cereal made? How are commercial foods manufactured? How can food be packaged to maintain its temperature? The science behind products I often consumed, such as ice cream, intrigued me, and before I knew it, I was talking to professionals who dealt with food technology and sustainability, and working in product creation.

Browsing the Institute of Food Technologists’ website introduced me to topics previously unheard of. An article about coffee flavors caught my eye, and through reading that article, I came to know of the 800 or so organic compounds that affect the flavor of coffee, and how they could be broken down to form new compounds during roasting. This led me to conduct an investigation on coffee roasting for my IB Extended Essay, as I wanted to explore how changes in roasting variables affected flavor compounds in coffee beans, and its effects on the espressos brewed from them. A writing assignment I took on in a STEM organization I was in led me to do hours of research on biofortification, focusing on golden rice. After reading the article I was required to write on, I became interested in genetic modification; based on this interest, and to better develop my writing, I did further research on the mechanisms of genetically modifying rice crops in order to increase their beta-carotene content. Through these projects, not only was I able to develop my investigation skills, but also my interest in various areas of food science.

To further my experience in research and development, I interned at Potion Bar, a plant-based foods startup, where I had to create a simple, candle-shaped popsicle. This internship took months, as many trials had to be performed to formulate the perfect recipe. The biggest challenge I faced was the blandness of my first samples. However, by replacing and adding ingredients, and experimenting with ratios, my samples significantly improved. Upon further research, I found that cornstarch could be used to smoothen the texture of the popsicles. Using that information, I added a mixture of cornstarch and water for the next trials. These reiterations, along with my research, expanded my knowledge on the properties of different ingredients and enhanced my creative thinking process in order to develop a marketable product. Through another work experience at Oma Elly, an Italian food service, I learned much about food production processes. There, I learned much about manufacturing and how to develop a strong work ethic.

Collaboration and quick and creative thinking are essential to become a good food scientist. Joining multiple national and international debate competitions has allowed me to hone my communication, teamwork, and quick thinking skills, skills I find crucial as I plan to work in the food industry. While debating, my team has to communicate constantly to come up with arguments and rebuttals in order to win; through this, my abilities to communicate and work under pressure greatly improved. As an event organizer in the Student Council, I learned the value of leadership through planning various student activities, delegating tasks to leaders, and communicating with those leaders to ensure deadlines were met.

Despite these experiences, I have only begun to scratch the surface of food science. As sustainability becomes more prevalent in food production, I hope to contribute to the improvement of global food production by creating products, such as plant-based ones, in such a way that waste is minimized. By studying in the UK, a country where the demand for plant-based foods is booming, I believe I will be able to innovate food production processes and create products that are beneficial to society through methods that are sustainable.