**Written Summary:**

My original thought for the research project was to explore organic food, but I changed to focus on nutrition’s effect on learning as there was more information in this area while still showing the importance of nutritious food. The research question was: To what extent does food insecurity affect childhood development via both nutrition and non-nutrition pathways? In short, it was found that food insecurity negatively impacts children in a diverse variety of ways. Nutrition of both mother and child are compromised, academic performance and ability is decreased, and permanent impacts on psychological functions are evident. Not only does this affect the child’s current situation, but their lifelong prospects fuelling the cycle of poverty. Both secondary and primary research sources were used to come to this conclusion with a majority of evidence drawn from scientific articles. The outcome was written in an essay format presenting all key findings.

**Word Count:** 148

**E1**

Scientific studies were my largest and most reliable source of information. I found the use of Google Scholar very profitable, and this is how I accessed most of my sources. Specifically, keywords from my research question and topics I wanted to explore further were used to search for articles increasing the validity of sources. I also found it advantageous to read the abstract of each article before reading it in its entirety, so I knew whether it was valid to my research question or not. This meant time was not wasted reading unnecessary information and could instead be used to find more information ensuring the research question was answered to the best possible extent. Many of the articles had multiple authors**,** such as *Maternal Depression: Relationship to Food Insecurity and Preschooler Fruit/Vegetable Consumption*[[1]](#footnote-2) written by six authors, this increased the reliability of the source. Most authors also were doctorates making them useful to quote in my outcome providing credibility to my research outcome. They were often long and time-consuming to read, but this is because they went deep into particular topics providing valuable information for both topics of nutrition and non-nutrition pathways ensuring all aspects of my question were met. While these sources were laborious to read, they provided invaluable information increasing the reliability of my outcome.

Books were also used as a source of information. While I used peer-reviewed books with reliable authors, I did not find them to provide the most reliable information. I went to a variety of libraries, but most books were published quite a few years ago, which detracted from the reliability of the information. One book by Doctor Noakes and Doctor Clifton, published by the CSIRO in 2006,[[2]](#footnote-3) contained reliable information but a majority of information was not valid. It had a nutrition focus but made no links to food insecurity. I could use this information to a degree in my outcome, but it was necessary to look to other source types for more valid information. I could have tried the State Library as they have an extensive collection of books, but I found scientific articles to be more easily accessible, and they contained the information needed. While books can be a reliable source of information, they were unsuitable for my topic as it was imperative to have current information as new research surrounding my topic is continuously being explored.

Cross-referencing was a beneficial process throughout the research period allowing me to determine the reliability of my sources. Sometimes there were one or two facts within a reliable article that are not so reliable, so cross-referencing allowed me to check the reliability of each point. An instance is that of a scientific journal published in 2000 but the facts came from a 1997 report. The true extent of food insecurity on health had not been discovered as they stated “the results indicate that food insecurity does not affect child health”,[[3]](#footnote-4) but now new information has been found counteracting this statement which is what I used in my outcome to ensure current reliability. While this provided a few unreliable paragraphs that had to be discounted, the rest was consistent with other information and could be used as evidence to strengthen the outcome. For sources such as interviews that are susceptible to bias, it allowed me to confirm their information against other, more reliable sources such as scientific articles. Cross-referencing was especially relevant towards the end of my research as I was consolidating information and working out the most reliable facts to include in my outcome to ensure overall reliability.

**E2**

I was initially researching organic food; however, most of the current research lies in consumer beliefs rather than facts about organic/sustainable food which would not create a reliable outcome. Instead, I decided to focus on nutrition’s effect on learning as it was still food-related and showed the importance of nutritious food, similar to my original question. Rather than changing to an entirely new topic, this was in the same area, so I was in the right headspace, and some initial learning was still relevant as a foundation for this topic. This proved to be a sagacious decision, while I was now short on time as I had spent some weeks trying to research organic food, I could now find an abundance of resources on food insecurity as it is a current pressing issue and much research has been conducted surrounding this topic. I no longer had the same people to survey and interview as before, but the large number of scientific journals enabled me to get highly reliable information. Instead of being theoretical which my original topic would have lead to I was able to get a credible scope of information on my topic which was reflected in my outcome.

For a variety of reasons, I struggled to get interviews from reliable, valid sources which meant I didn’t have much primary research. To compensate for this, I started to search for and use TED talks as they are a form of primary evidence. While I was not able to get direct answers to my questions, I had access to a much broader source of information as there are thousands of TED talks. The TED website, provides information about their speakers which allowed me to understand who they were and from what perspective they were talking from so I could tell how reliable their presentation was. TED also provides full transcripts of the presentations which were really useful to get quotes and draw key findings from which proved to be an advantage over face to face or phone interviews where I would have to write notes potentially missing key details. Although an interview would have been useful to get specific answers, TED talks were an adequate substitute providing substantial primary information.

One opportunity that emerged while researching was the impact of the mother on the child. Many articles I read kept mentioning the effects food insecurity of the mother and therefore the repercussions for the child. Researching into this was an excellent decision as I discovered significant amounts of information in this area. The impacts of maternal influences are especially strong when children are young so looking into this was beneficial as my research question specifically focused on young children. This also provided a more holistic approach to the impacts of food insecurity providing another section of information in my outcome and showed I had looked at my question from multiple angles which increased the validity of my outcome.

**E3**

My outcome was written in an essay format synthesising all information. I organised my outcome into two sections, nutrition and non-nutrition pathways with further subheadings under each of these sections. This made it both easy to read and ensured I covered every aspect of my question. This strengthened my research outcome, as all key findings were discussed appropriately. I referenced a total of 14 scientific journals which substantiated my outcome and included three primary sources to add extra depth and clarity, as well as many other sources, providing a reliable, balanced view of the topic.

While my outcome contained reliable information, I have only been researching this topic for a few months in comparison to the years of work and research authors of scientific journals have done. As they have a more comprehensive understanding of the topic, this improves the reliability of their information. In contrast, I, while stating the same information, may have misinterpreted it or taken it out of context, decreasing the validity of my outcome. Also, many articles I read contained accounts of longitudinal studies they had conducted, I, on the other hand, had minimal primary information and could not conduct large scale studies primarily due to time constraints. Therefore, I was unable to present any new information, only synthesise current information. My outcome is useful for those wanting to gain an initial understanding of the topic as it covers a wide variety of angles, but the lack of new information limits its usefulness. The word constraint also meant I could not get as specific and in-depth as other published articles making them a preferred choice for other researchers in this area.

Personally, I gained many benefits from conducting this research project. My awareness of food insecurity has dramatically increased, and I now view it as a pressing issue in society that has to be overcome in order to end the cycle of poverty. I now have a higher recognition of the importance of nutritious food, especially in the face of stress. I will continue to try and maintain a healthy diet to optimise my personal growth and development and potentially in the future implement this knowledge as a caregiver especially considering most of my research focused on young children. Besides explicitly learning about the topic of food insecurity, I gained many valuable skills, including ways to research, record and coherently synthesise information. Time management skills were also acquired as the research had to be conducted efficiently in a set time frame.

**Word Count:** 1500

**Reference List:**

1. Noakes, M. and Clifton, P., 2006. *The CSIRO Total Wellbeing Diet Book 2*. 1st ed. Camberwell, Vic.: Penguin and CSIRO, pp.1-62.
2. Reid, L. (2000). *The Consequences of Food Insecurity for Child Well-Being: An Analysis of Children’s School Achievement, Psychological Well-Being, and Health*. [online] Florida State University, pp.15. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.194.7912&rep=rep1&type=pdf> [Accessed 6 Mar. 2020].
3. Ward, W., Swindle, T., Kyzer, A., Edge, N., Sumrall, J. and Whiteside-Mansell, L., 2019. Maternal Depression: Relationship to Food Insecurity and Preschooler Fruit/Vegetable Consumption. *International Journal of Environmental Research and Public Health*, [online] 17(1), pp.1-10. Available at: <https://pdfs.semanticscholar.org/1261/95f09380bf2a0414712fd5a6618b6849e357.pdf?_ga=2.23914874.1942300742.1586504101-1181150232.1582688222> [Accessed 10 April 2020].

1. Ward, W., Swindle, T., Kyzer, A., Edge, N., Sumrall, J. and Whiteside-Mansell, L., 2019. Maternal Depression: Relationship to Food Insecurity and Preschooler Fruit/Vegetable Consumption. *International Journal of Environmental Research and Public Health*, [online] 17(1), pp.1-10. Available at: <https://pdfs.semanticscholar.org/1261/95f09380bf2a0414712fd5a6618b6849e357.pdf?_ga=2.23914874.1942300742.1586504101-1181150232.1582688222> [Accessed 10 April 2020]. [↑](#footnote-ref-2)
2. Noakes, M. and Clifton, P., 2006. *The CSIRO Total Wellbeing Diet Book 2*. 1st ed. Camberwell, Vic.: Penguin and CSIRO, pp.1-62. [↑](#footnote-ref-3)
3. Reid, L. (2000). *The Consequences of Food Insecurity for Child Well-Being: An Analysis of Children’s School Achievement, Psychological Well-Being, and Health*. [online] Florida State University, pp.15. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.194.7912&rep=rep1&type=pdf> [Accessed 6 Mar. 2020]. [↑](#footnote-ref-4)