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Literature Review

## The Effect of Omega-3 Fatty Acids on Asthma

### **Abstract**

Asthma is a lung condition that leaves many children and adults unable to live their life to the fullest potential. Current research is being conducted on whether or not the amount of omega-3 fatty acid in a person's diet can alleviate asthmatic symptoms or potentially even eradicate asthma. The goal of this literature review is to analyze the various experimental set ups that different researchers used to investigate the health effects of omega-3 fatty acid in diets. All the experiments were done on human subjects, and the omega-3 fatty acids were administered to the patients through a fish oil gel or there was an analysis of the patients current dietary habits. It was found that when omega-3 fatty acid was supplemented through pregnancy and in children, there was a positive effect on asthmatic symptoms, but if it was in a young adult, there was little to no effect on asthma.

### **Introduction**

Many people know that eating fish, seeds, or nuts are healthy for you. Some may even know that these healthy foods contain omega-3 fatty acids, which can help with heart disease or brain health. However, not many people know that omega-3 fatty acids can potentially help alleviate asthma. Asthma is a lung condition that results from an allergic reaction to minor substances such as pollen or dust that makes it harder to breath, cause wheezing or coughing, and even be life-threatening. Asthma is very common, as it affects children and adults alike, making it an important issue to concentrate on.

The objective of this literature review is to analyze and compare the methods that different research studies have used in order to examine the effect of omega-3 fatty acids on asthma. The articles were chosen to be used in this literature review because they were all scholarly and in peer-reviewed journals that were reputable and unbiased. The review will be organized by different steps of the methods that were used within the articles chosen. Within each category, the methodology of each of the four studies will be compared and contrasted with each other. The current trend in research is that with the supplementation of omega-3 fatty acids, there will be a positive improvement on the symptoms of asthma.

## **Methods**

### *Subjects*

### *Mode of Supplementation*

### *Post-Supplemental Testing*

### *Statistical Analysis*

## **Experimental Results**

## **Conclusion**

In this literature review, the hypothesis that omega-3 fatty acids could potentially be used to help alleviate asthmatic symptoms was supported. However, it was not supported that omega-3 fatty acids at any stage in life is effective. Based on the findings, it was shown that the most successful use of omega-3 supplementation is when it is administered when the mother is pregnant and had a continued use into the childhood years rather than when used in the adult years. This is significant because the additional use of omega-3 fatty acids can hypothetically lead to a decreased prevalence of childhood asthma, freeing a huge population of the world from being held back by their lung condition.