Examining the Association Between Dietary Patterns in Obese Women and Risk of Depression

By: Makayla Brown, MS & FEM student, and Samantha Hutson, PHD, RD, LDN
Tennessee Tech University

Introduction
One of the most common mental disorders in the U.S. is depression. Depression is defined as a mood disorder that is present for at least two weeks and affects the way an individual feels, thinks, and manages daily activities. The awareness for mental health is desperately needed due to the prevalence of depression in our society. According to the National Institute of Mental Health (NIMH), in 2019 an estimated 19.4 million U.S. adults aged 18 or older experienced at least one major depressive episode. Maintaining a healthy diet can lead to the prevention of many health issues, including depression. The dietary patterns that individuals conform to can either negatively or positively affect their health. Poor nutrition can lead to overweight and obesity, heart disease and stroke, type 2 diabetes, and cancer. In the U.S., 19% of young people and 40% of adults have obesity. Those who face obesity may also struggle with mental and emotional health. Research has linked individuals who are overweight with an increase in depression. The purpose of this literature review was to examine the association between dietary patterns in obese women and risk of depression.

Methodology
This review of literature focused on the association between diet patterns in women with obesity and the risk of depression. Databases included the Journal of the Academy of Nutrition and Dietetics, Tennessee Tech University Library, and American Journal of Psychiatry.

The Association Between Dietary Intake and Depression

- A healthy and balanced diet has been found to have positive outcomes on many diseases, including depression. This diet would include would include a dietary intake of fruits, vegetables, lean proteins, whole grains, healthy fats or oils, and water.
- A dietary pattern that includes a high intake of highly processed and fatty foods has been found to increase the risk of major depression.
- A western dietary pattern consists of high intakes of red meat, processed foods, desserts, refined grains, and fried foods. This diet has been linked to high risk of inflammation in the body. Higher levels of inflammation have been linked to the higher risk of the development of depression.

Nutrition Recommendations for Depression

- One of the diets that has been found to have a positive effect on the health of those with depression is the Mediterranean Diet. The Mediterranean Diet is a diet that consists of a diet that is high in vegetables, fruits, legumes, whole grains, fish, olive oil, and low-fat dairy products.
- Consuming a diet that is plant-based can lead to reduction in inflammation in the body, which can lower the risk of depression
- A diet that is low in saturated fats, processed foods, and sugar can reduce risks of depression

Conclusion
There are two major issues that the U.S. is facing today that could be benefit by a balanced and healthy diet. One of the most common mental disorders in the United States (U.S.) today is major depressive disorder. In the U.S. 40% of adults have been found to have obesity. Those who face obesity may also struggle with mental and emotional health. Research was found that has suggest that inflammatory markers can be increased by poor eating habits and excess body fat. Higher levels of inflammation have been found to increase the risk of the development of depression. There has been a correlation found between nutrition, depression, and obesity in this review; however, obesity itself has been linked to higher risk of depression in women, so it cannot be concluded that poor diet quality alone is the cause of mental illness. Research is continually being done between nutrition and mental health, so it is important to continue to stay up to date as new information is produced. Through the evidence that has been reviewed and stated in this literature review, it is likely that a balanced nutritional dietary intake can be beneficial in reducing the risk of depression and obesity in women.