

A combined high-sugar and high-saturated fat dietary pattern is associated with more depressive symptoms in a multi-ethnic population

There are a limited number of studies that have investigated the association between sugar or saturated fat intake and depression. The results of these studies indicated that higher intakes of sugar as well as saturated fat are associated with more depressive symptoms. But is it attainable to disentangle the effects of sugar and fat? We can't live on only sugar-sweetened beverages, fruit juices, table sugar or butter; the majority of unhealthy foods contain both sugar and saturated fat. Since we do not consume separate food elements but whole meals, which consist of a large number of different food elements, the focus of many studies is on overall dietary patterns. There is a growing body of evidence that unhealthy Western dietary patterns (with high intakes of fast foods, sugary and fatty snacks, sodas and red and processed meat) increases depressive symptoms, however this evidence is not consistent yet.

In our study we observed three different dietary patterns; the first pattern was a 'combined high-sugar and high-saturated fat diet' with high intakes of chocolates, sweets and pastries, red meat, added sugars, high-fat dairy products, fried foods, creamy sauces. The second pattern was a 'high-sugar diet' with high intakes of sugar-sweetened beverages, added sugars, fruit and fruit juices. The third pattern was a 'high-saturated fat diet' with high intakes of butter and high-fat dairy products. Our study found that higher consumption of the 'combined high-sugar and high-saturated fat diet' was associated with more depressive symptoms and this was similar among different ethnic groups. We did not find an association between the remaining diets and depressive symptoms. From these results we can conclude that future studies should focus on diets which are high in sugar as well as saturated fat. Even though these recommendations are similar among ethnic groups, differences between intakes of ethnic-specific foods should be taken into account as well in dietary guidelines.