


## Depression and its relationship with food consumption and body image

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### ABSTRACT

Depression is a mental disorder that compromises the physical and psychological health of the individual, and can affect people of any age, about 300 million people and when this disorder remains for a long time, it can lead to suicide. The increase in the prevalence of depression is related to the adoption of a modern lifestyle, represented by a sedentary lifestyle, dietary changes and sleep deprivation, a stressful environment, fast pace and low quality of the diet consumed. Body image can be defined as a wide range of psychological experiences. It encompasses not only the concept of physical appearance, but attitudes towards the body, encompassing thoughts, behaviors, convictions, emotions and actions and over the years, society has promoted an aesthetic standard that privileges thin or muscular and defined bodies associated with beauty and success, and this is promoted mainly through the media. In some mood changes, food consumption may increase, with greater interest in consuming high-calorie foods, such as ultra-processed foods. These foods increase the production of serotonin in the body, providing a feeling of immediate pleasure and, consequently, it becomes a vicious cycle. Therefore, the promotion of healthy eating, with foods that are a source of antioxidant nutrients, is important in the prevention and treatment of depression, in addition to humanized care, with a multidisciplinary team.

**Keywords:** Depression, Eating disorders, Food consumption, Body image.

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## INTRODUCTION

Depression is a mental disorder that compromises the physical and psychological health of the individual, and can affect people of any age, whose symptoms are sadness for a long period, low self-esteem, chronic fatigue, discouragement, insomnia, irritability and appetite alteration (MS, 2005). Worldwide, more than 300 million people, of all ages, suffer from depression and when this disorder remains for a long time, it can lead to suicide, about 800 thousand deaths per year (PAHO, 2018).

A healthy diet is of paramount importance for the balance of the body, as it needs all the nutrients and vitamins for proper functioning. Deficiency of some nutrients such as zinc, magnesium, vitamins A, C, D, E and B complex is associated with depression. The benefits of these micronutrients are intrinsic in the development and regulation of appetite, transmission of nerve impulses, improvement in the immune system, and production of neurotransmitters such as serotonin, whose function is to regulate mood, sleep, and appetite (Rocha et al., 2020).

The increase in the prevalence of depression is related to the adoption of a modern lifestyle, represented by a sedentary lifestyle, dietary changes and sleep deprivation, a stressful environment, fast pace, and low quality of the diet consumed (Sousa et al., 2024).

In today's society, there is an intense appreciation of the body and an incessant search for thin beauty and the media has been an important vehicle for the dissemination and formation of idealized body image, influencing how the individual should mold himself to the standards of beauty considered acceptable in the social environment. In this way, there is dissatisfaction with the body, a constant desire to be and be thin, with negative repercussions on the subject's mental health, acquiring psychological disorders such as depression and eating disorders (Barros, 2019).

According to Lacerda and Assumpção, (2018), body image is formed from childhood, with children's self-perception of recognizing their own body, maturing their behaviors and appearance according to the social parameters that are presented to them, over time. When this occurs in a distorted way, the child develops dissatisfaction with their own body, low self-esteem and propensity to some psychic disorders due to the established beauty standards.

## LITERATURE REVIEW

### DEPRESSION

Depression is classified as a mood disorder, and is often confused with sadness, but it is characterized by a loss of interest and pleasure; energy and reduced activity; marked tiredness after light exertion, especially when of long duration and with moderate or severe intensity. Depression can become a critical health condition. Other associated symptoms are: decreased appetite, disturbed sleep, ideas of guilt, and reduced: self-esteem, concentration and attention (WHO, 1993; WHO, 2015).



According to the Pan American Health Organization (PAHO), it is estimated that more than 300 million people suffer from depressive disorders, which can result in problems in family relationships, friendships, as well as performance at work and in studies. In extreme cases, this disorder can lead to suicide. Statistics indicate that more than 800 thousand people take their lives each year (ALBUQUERQUE, 2021).

There are several fields in neuroscience that seek to explain this disease. From a neurochemical point of view, research focuses on monoamine neurotransmitters (dopamine, serotonin, epinephrine). From a neuroanatomical point of view of the brain, structural abnormalities are observed in areas such as the hippocampus and different cortical regions of the brain. When depression is looked at from a neurocognitive point of view, it is observed that it is associated with changes in information processing, attention, and memory (ALBUQUERQUE, 2021).

Depressive disorder is a growing phenomenon, affecting various social groups without distinction between gender, economic class or age group. In addition, it is associated as a comorbidity with other diseases, and is often referred to as "the disease of the twenty-first century" (WHO, 2001). It is a disorder resulting from multiple factors, and is related to maladaptive thoughts, which can manifest themselves in situations of complex understanding. Maladaptive thoughts influence the interpretation of thoughts in relation to oneself, others, and the future, often triggering situations that are difficult to cope with (SILVA, GONÇALVES, SILVA, 2017).

With regard to depressive thoughts about oneself, many of them are related to the inability to solve problems, thoughts of rejection and loss; based on the use of instruments, it becomes possible to plan interventions that are based on the prevention not only of depression, but also of suicide, before the symptoms worsen (SILVA, GONÇALVES, SILVA, 2017).

It is known that thoughts are considered by cognitive therapy as a fundamental part of the treatment of depression, and it presupposes that the negative perception that the subject has of himself, others and the future directly interferes in his cognitive vulnerability, and the more dysfunctional the thoughts, the greater the severity of the episode (CARNEIRO E BAPTISTA, 2012).

## BODY IMAGE-ASSOCIATED DEPRESSION

Body Image (CI) can be defined as a wide range of psychological experiences. It encompasses not only the concept of physical appearance, but also attitudes towards the body, encompassing thoughts, behaviors, convictions, emotions, and actions (SANTOS, 2021).

According to Yazdani *et al* (2018), Body image can involve three dimensions: the perceptual dimension, which refers to the subject's perception of their physical appearance; the subjective dimension, which involves emotional and affective aspects of the individual, including their level of satisfaction with their physical appearance; and the behavioral dimension, which relates to the



behaviors adopted by the person as a result of their body perception, how to avoid situations that require exposure of the body due to the discomfort felt in relation to it (SANTOS, 2021; CASH, 2003).

Over the years, society has promoted an aesthetic standard that privileges lean or muscular and defined bodies associated with beauty and success, and this is mainly promoted through the media. As a result, there has been an excessive preoccupation with appearance, as well as feelings of inferiority in individuals who do not fit this pattern. This aesthetic pressure considerably increases the risk of depression, anxiety, and food-related problems (CARDOSO et al., 2020).

The study by Fernandes (2019), conducted with 647 undergraduate students at the Federal University of Ouro Preto (UFOP), with the aim of evaluating the impacts of social media on body dissatisfaction and the risks of eating disorders and symptoms of depression, found a positive correlation between body dissatisfaction and levels of stress, anxiety, depression, and risks of eating disorders. with the female public being the most affected.

This fact is more evident in courses where Body Image is an essential sight for the professional future. The study by Lima et al. (2018), carried out at the Federal University of Piau /Brazil with university students of Physical Education, found that 70% of the students had body dissatisfaction. It is assumed that this high dissatisfaction is attributed to the demands of the course profession itself, to the physical and aesthetic demands and appearance, seen as essential for success. It is worth noting that no statistically significant relationship was found between body dissatisfaction and depression. However, feeling dissatisfied with one's own body can start a negative cycle of thoughts and emotions, significantly harming emotional and mental well-being. And when not treated properly, it can trigger a host of emotional issues, depression being one of them.

## DEPRESSION AND FOOD CONSUMPTION

Food is considered an environmental determinant that plays an important role in an individual's health. A healthy diet can play a protective role in the development, progression, and treatment of some mental disorders, and its adherence is inversely related to depressive symptoms and their severity, because when a nutritional deficiency occurs, it can cause serum changes in inflammatory markers (Costa et al., 2020).

In some mood changes, food consumption may increase, with greater interest in consuming high-calorie foods, such as ultra-processed foods. These foods increase the production of serotonin in the body, providing a feeling of immediate pleasure and, consequently, it becomes a vicious cycle, these cravings are directly associated with a decrease in the response of neurotransmitters (Ara jo, 2017; Franco et al., 2023).



Some nutrients, such as polyunsaturated fatty acids, exert a modulating function, such as omega 3, which has an anti-inflammatory action to improve depression. Among the minerals, magnesium should be highlighted, as it is involved in the reactions of neurotransmitters, hormones and neuronal membrane. In addition, its intake is associated with lower levels of inflammation markers that impact the development of the disease (Rocha et al, 2020).

Vitamin D is related to the synthesis of some neurotransmitters and plays a crucial role in sleep and circadian rhythms, which, when unbalanced, can be associated with depression. B vitamins play an important role in the synthesis of neurotransmitters of the Central Nervous System (CNS), helping to rebuild brain and nervous system tissues (Angels; Martin; Costa, 2020).

Excessive consumption of carbohydrates, saturated fats, sodium, and alcohol increases the prevalence of depressive symptoms and, in addition, can trigger inflammatory processes, free radical formation, neurotransmitter imbalance, and can cause changes in the intestinal microbiota and, consequently, induce the worsening of the clinical condition of depressed patients (Neres et al., 2022).

The quality of the diet positively affects the individual's health and contributes in an impactful way to the improvement of the depressive condition. Therefore, the promotion of healthy eating, with foods that are a source of antioxidant nutrients, is important in the prevention and treatment of depression, in addition to humanized care, with a multidisciplinary team to improve the individual's quality of life.



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