


Anxiety And Eating Behavior In Adults: A Literature Review

 <https://doi.org/10.56238/colleinternhealthscienv1-105>

Isadora Helena Bento Capelini

Nutritionist from the Universidade do Extremo Sul Catarinense - UNESC.

E-mail: i.sacapelini@hotmail.com

ORCID: 0000-0002-3132-3940

Alessandra Zanette Ghisi Frassetto

Nutritionist, Master, Professor of the Nutrition Course, Universidade do Extremo Sul Catarinense – UNESC

Maria Cristina Gonçalves de Souza

Nutritionist, Master, Professor of the Nutrition Course, Universidade do Extremo Sul Catarinense - UNESC

ORCID: 0000-0001-9365-1272

Paula Rosane Vieira Guimarães

Nutritionist, Master, Professor of the Nutrition Course, Universidade do Extremo Sul Catarinense - UNESC.

Nutritionist at the Health Secretariat of Criciúma, SC.

E-mail: paulag@unesc.net

ORCID: 0000-0003-2063-2331

ABSTRACT

Anxiety is described as a mental and psychic response of the human body to situations of fear or threat, being manifested through various symptoms such as tremors, shortness of breath, increased heartbeat, sweating, gastrointestinal changes, among others. The Anxiety Disorder directly affects the psychological state of the individual, and may intensify his emotions and, consequently, interfere with his eating behavior. Psychological changes such as anxiety and stress can

induce the individual to behave in a restrictive, compulsive, compensatory, and/or purgative way. This behavior can cause excessive consumption of food, and this consequently influences the individual's nutritional status. The aim of this study was to investigate the relationship between anxiety and eating behavior in adults through a literature review. This is a narrative literature review based on articles and theses selected from sites such as Scielo, Google Scholar, CAPES and databases of the Federal Government of Brazil, as the Health Surveillance Agency (ANVISA) and the Ministry of Health. A total of 24 articles were selected, 7 about eating behavior, 7 about nutritional status, 7 about the prevalence of anxiety and binge eating, and 3 about foods that reduce anxiety symptoms. It was possible to observe that anxiety influences the individual's eating behavior. High levels of anxiety were observed in patients with binge eating disorder, which affects the individual's nutritional status. Among genders, females have higher levels of anxiety and binge eating. The population needs interventions that reduce anxiety levels. Food plays a role in the prevention and treatment of some diseases; the effects of a healthy eating pattern bring physical and mental benefits to the individual. The Nutritionist, through food can influence the reduction of anxiety symptoms, with foods that have a beneficial influence on the body and the performance of a multidisciplinary team is essential, in order to bring more effective results.

Keywords: Anxiety, eating behavior, nutritional status, binge eating disorder.

1 INTRODUCTION

According to the Ministry of Health (2011), the term anxiety is classified as a state in which the individual may present sensations of distress, anguish, disturbance of spirit caused by uncertainty, worries, tension or exaggerated fears, lack of control over thoughts, images or attitudes, among others. Anxiety is a phenomenon that can benefit or harm human beings, depending on the circumstance or intensity in which it is caused, and it may or may not become pathological. It is defined as a pathological disorder when the individual starts to have symptoms considered harmful

to the body, which interfere with quality of life, emotional comfort and performance of daily activities (MULLER *et al.*, 2015).

The Brazilian Health Surveillance Agency (ANVISA) describes the word anxiety as a mental and psychological response to situations of fear or threat. This response can be manifested through symptoms such as tremors, shortness of breath, increased heartbeat, sweating, gastrointestinal changes, among others (ANVISA, 2013).

Anxiety Disorder directly affects the psychological state of the individual, and can intensify their emotions and consequently interfere with their eating behavior (FERREIRA *et al.*, 2018).

Eating behavior is defined by eating habits and the reactions of humans to food and eating. The individual behavior of humans towards food depends on many factors, such as the availability of food, the way it is prepared, utensils, times and division of meals and digestion itself. However, the individual's eating habits are related to his culture, nationality and ethnicity, and can be changed according to interpersonal, regional and cultural influences (VAZ & BENNEMANN, 2014).

Psychological changes such as anxiety and stress can induce the individual to behave in a restrictive, compulsive, compensatory, and/or purgative way. This behavior can cause excessive consumption of food, and this consequently influences the nutritional status of the individual (FERREIRA *et al.*, 2018).

This study aimed to investigate the influence of anxiety on eating behavior, find out whether episodes of anxiety can cause changes in nutritional status, find out whether anxiety can trigger the binge eating disorder (BAC), investigate the prevalence of anxiety among females and males, and describe which foods can help anxiety disorder. Given the above, the problem presented aims to know about the influence of anxiety in the eating behavior of adults through literature review.

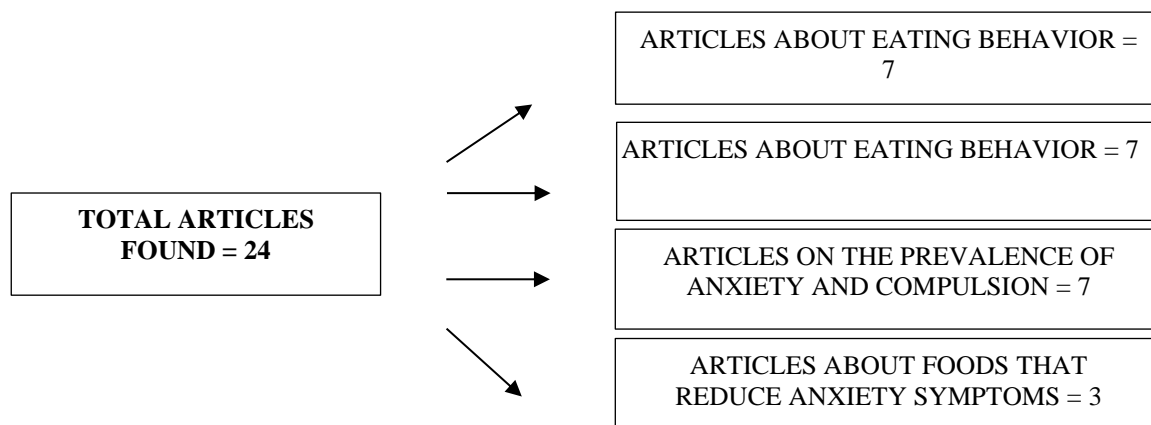
2 METHODOLOGY

This work was written based on articles selected from sites such as Scielo, Google Academic, CAPES and databases of the Federal Government of Brazil, such as the Health Surveillance Agency (ANVISA) and the Ministry of Health using the following descriptors "anxiety", "eating behavior", "eating habits", "food", "nutritional status", "eating disorders", "binge eating disorder", "prevalence of anxiety", "anxiety in males and females" and "foods that influence anxiety".

The research was carried out using a computer with internet access. We evaluated scientific articles published in sites such as Scielo, Google Scholar, CAPES, and sites of federal agencies in Brazil, such as the Health Surveillance Agency (ANVISA) and the Ministry of Health.

The research was conducted using keywords, such as, "anxiety," "eating behavior," "eating habits," "diet," "nutritional status," "eating disorders," "binge eating disorder," "prevalence of anxiety," "anxiety in females and males," and "foods that influence anxiety."

Figure 1: Schematic of themes of the articles located.



This is a narrative literature review that, according to Antônio Santos (2015), is considered the traditional or exploratory review, in which there is no definition of explicit criteria, not following a systematic, in which the authors can include documents according to their bias, so there is no concern in exhausting the sources of information. The selection of studies and interpretation of information may be subject to the subjectivity of the authors. The themes researched involved anxiety and eating behavior in adults.

The inclusion criteria adopted were articles between the years 2010 and 2022, related to the descriptors mentioned above. A full reading of the materials was carried out in order to select the articles that fit the proposed themes and that were available for free and in the Portuguese language. The exclusion criteria included articles that were not compatible with the review proposal, repeated articles, and articles that were not available in full.

Through the key words used in the research, a previous reading of the articles was performed for content analysis according to the steps proposed by Bardin. Thus there was a pre-analysis that comprised the organization of the material that was analyzed, the exploration of the material, which refers to the coding of the material and definition of categories of analysis and the last stage in which the results were found for the conclusion and interpretation performing the highlighting of information relevant to a good analysis (SANTOS, 2012).

Since this is a study that does not contemplate data collection involving human beings, there was no need to submit the study to the ethics committee.

According to the Ministry of Health (2011), the term anxiety is classified as a state in which the individual may present sensations of distress, anguish, disturbance of spirit caused by

uncertainty, worries, tension or exaggerated fears, lack of control over thoughts, images or attitudes, among others. Anxiety is a phenomenon that can benefit or harm human beings, depending on the circumstance or intensity in which it is caused, and it may or may not become pathological. It is defined as a pathological disorder when the individual starts to have symptoms considered harmful to the body, which interfere with quality of life, emotional comfort and performance of daily activities (MULLER *et al.*, 2015).

The Brazilian Health Surveillance Agency (ANVISA) describes the word anxiety as a mental and psychological response to situations of fear or threat. This response can be manifested through symptoms such as tremors, shortness of breath, increased heartbeat, sweating, gastrointestinal changes, among others (ANVISA, 2013).

Anxiety Disorder directly affects the psychological state of the individual, and can intensify their emotions and consequently interfere with their eating behavior (FERREIRA *et al.*, 2018).

Eating behavior is defined by eating habits and the reactions of humans to food and eating. The individual behavior of humans towards food depends on many factors, such as the availability of food, the way it is prepared, utensils, times and division of meals and digestion itself. However, the individual's eating habits are related to his culture, nationality and ethnicity, and can be changed according to interpersonal, regional and cultural influences (VAZ & BENNEMANN, 2014).

Psychological changes such as anxiety and stress can induce the individual to behave in a restrictive, compulsive, compensatory, and/or purgative way. This behavior can cause excessive consumption of food, and this consequently influences the nutritional status of the individual (FERREIRA *et al.*, 2018).

This study aimed to investigate the influence of anxiety on eating behavior, find out whether episodes of anxiety can cause changes in nutritional status, find out whether anxiety can trigger the binge eating disorder (BAC), investigate the prevalence of anxiety among females and males, and describe which foods can help anxiety disorder. Given the above, the problem presented aims to know about the influence of anxiety in the eating behavior of adults through literature review.

3 RESULTS

A search was conducted in sites such as Scielo, Google Academic, CAPES and sites of federal agencies in Brazil, such as the Health Surveillance Agency (ANVISA) and the Ministry of Health using the terms "anxiety", "eating behavior", "eating habits", "food", "nutritional status", "eating disorders", "binge eating disorder", "prevalence of anxiety", "anxiety in females and males" and "foods that influence anxiety". Table 1 shows which results were obtained by the authors of each article, as well as the objective, methods, and region in which it was applied.

Table 1. Articles on anxiety and eating behavior in adults from 2010 - 2022.

| Author/Year | Region | Goal | Method | Result/ Conclusion |
|--------------------------|--------------------------|--|---|--|
| ARAÚJO, 2015 | Brasília, DF | To identify the relationship between anxiety/depression and overweight/obesity in college students and the influence of the university routine in these cases | A qualitative-quantitative study in which 3 questionnaires on nutritional status and university routine, anxiety and depression were applied. | Nine students were identified as overweight and two as obese. The prevalence of anxiety and depression was high, being 36 and 29 in total, respectively, and 25 presented episodes of anxiety and depression at the same time. 93.75% of those with changes in BMI and/or WHR also had some degree of anxiety, while 56.25% had some degree of depression. |
| ALBUQUERQUE et al., 2021 | Brasília, DF | To evaluate the relationship of binge eating with the psychological disorders of anxiety and depression in women | Cross-sectional and descriptive study in which data collection was made with 93 women, aged 20 to 50 years, residents in the regions of Águas Claras and Guará. Validated questionnaires such as the Periodic Compulsion Scale and the Hospital Anxiety and Depression Scale were used for the research. | There was a relationship between BED with anxiety and depression in 30.6%. It was observed that even without BED, there was a high number of women with indicators for psychological disorders (69.4%). |
| BITTENCOURT et al., 2012 | Porto Alegre, RS | To investigate the association between binge eating scores, anxiety and depression symptoms, and body mass index (BMI). To verify whether there is a difference in the intensity of anxiety symptoms, depressive symptoms, and BMI in women with and without binge eating. | The sample was composed of 113 women aged between 22 and 60 years. The following instruments were applied: structured interview, Brazil Economic Classification Criteria, Beck Anxiety Inventory, Beck Depression Inventory, and the Periodic Eating Compulsion Scale. | There was a positive association between binge eating scores and the intensity of anxiety and depression symptoms. No significant association was observed between BMI and binge eating scores. |
| BUTLER & STUART, 2018 | Brighton, United Kingdom | Verify how nutrition can influence the body, with foods that help with anxiety symptoms | The Medical News Today website, through physician Natalie Butler cited what the main symptoms of anxiety are and how food can beneficially influence the reduction of anxiety symptoms. | Among the foods cited were: Brazil nuts, pumpkin seeds, omega-3 rich fish, eggs, chamomile, green tea, chocolate, yogurt, and turmeric. |
| CASSIA & BARBOSA, 2019 | Águas Claras, DF | To identify the presence of anxiety in physically active adult women and its relationship with binge eating. | Cross-sectional analytical study, the sample included 50 women aged between 20 and 59 years. To evaluate social anxiety the Social Phobia Inventory (SPIN) was used, to evaluate binge eating the Periodic Eating Disorder Scale was used, and to evaluate nutritional status the body mass index (BMI) was used. | It was observed that 44% of the patients had anxiety, which showed a weak relationship with the binge eating disorder, and 18% of the patients had binge eating and this was associated with high BMI levels. |
| CONTE et al., 2013 | Ijuí, RS | Address the relationship between binge eating and obesity in the climacteric period. | Literature review of an exploratory nature. | Women are more vulnerable than men to symptoms of anxiety and depression, which are associated with the reproductive period. |
| | | | Cross-sectional study | The sample consisted of 1,953 individuals, and the prevalence |

| | | | | |
|-------------------------|-----------------|---|--|--|
| COSTA et al., 2019 | Santa Maria, RS | To identify the prevalence of anxiety and associated factors in adults | conducted with individuals between 18 and 35 years old. The sociodemographic variables, body mass index (BMI), presence of chronic disease, alcohol abuse, and smoking were analyzed. The Chi-square test was used for evaluation, verified by the <i>Mini International Neuropsychiatric Interview</i> 5.0, with a 95% confidence interval. | of anxiety disorders was 27.4%, agoraphobia 17.9%, and generalized anxiety 14.3%. Women had a higher prevalence of anxiety than men, 32.5% and 21.3% respectively. The variables of gender, years of study, income, chronic disease, smoking, and alcohol were associated with three more anxiety disorders investigated. |
| CREJO & MATHIAS, 2021 | São Paulo, SP | To verify the concepts of Disordered Eating (CT), Periodic Eating Compulsive Disorders, as well as the prevalence and treatment for the disorders with the perspective of Behavioral Nutrition. | This is a literature review study of exploratory nature. | Few studies show the prevalence of disordered eating behavior and BED, but this is a public health problem worth looking at. The goal of BED treatment is to reduce compulsive episodes, making patients realize what the triggering factors are and be able to control them, with autonomy and more appropriate food choices, improving their relationship with food. |
| FERREIRA et al., 2018 | Fortaleza, CE | To characterize the eating behavior and nutritional status of adult faculty members at a University Center | Quantitative and descriptive cross-sectional study, conducted in the city of Fortaleza, in a University Center with 50 faculty members in April 2017. The sample was randomly selected by convenience. | The restrictive eating behavior scored higher in females, while in males it was the external ingestion behavior. Women had lower weight and BMI values, and a lower risk for metabolic complications according to the mean. The nutritional status of females was better than that of males, but it was not possible to state that one type of eating behavior defined the nutritional status. |
| FIGUEIREDO et al., 2014 | Curitiba, PR | To evaluate the eating behavior and psychological characteristics of obese women, with Body Mass Index (BMI) between 30 and 40kg/m ² . | Cross-sectional study, involving 180 women with a mean age of 36.6 who participated in the randomized clinical trial. Semi-structured interviews and psychometric instruments were conducted. | Approximately 39% of the women had depression, 43% anxiety, and 38% binge eating episodes. Most obese women reported irregular eating behavior, dissatisfaction with their body image, accompanied by distress and guilt. The act of eating was directly linked with emotional state and current weight. |
| FRANCE et al., 2012 | Brasília, DF | To evaluate the impact of the nutritional and psychological aspects of a psychoeducational group focusing on dietary change. | The sample consisted of 11 individuals of both sexes, aged between 18 and 70 years. The focus group, epidemiological questionnaire, food frequency questionnaire, and weight and height measurements were used. | The prevalence of depression and anxiety as psychological factors that interfere with eating behavior change was confirmed. |
| FREITAS et al., 2020 | Santa Cruz, RN | Nutritional guidelines for nutrients that assist in alleviating anxiety, as well as foods that have these nutrients. | Illustrative guide containing the benefits of food to reduce anxiety in times of covid-19. | Foods such as probiotics, tryptophan, omega-3, vitamin C, vitamin E, vitamins B6, B9 and B12, magnesium, and cocoa can influence the reduction of anxiety levels. |
| Cross-sectional study, | | | | |

| | | | | |
|------------------------------|---------------------------|--|---|---|
| FUSCO et al., 2020 | São Paulo, SP | To analyze the relationship of anxiety with binge eating and sleep quality in overweight or obese adults. | with intentional sample composed of individuals of both sexes, literate, aged between 20 and 59 years, who had a body mass index (BMI) greater than or equal to 25kg/m ² . The Trait-State Anxiety Inventory, the Periodic Eating Compulsion Scale, and the Pittsburgh Sleep Pattern Questionnaire were used. Pearson or Spearman correlation coefficients were used to analyze the data, according to their distribution. | The sample consisted of 130 individuals. The overall sample and young adults who showed higher anxiety status had higher rates of binge eating and worse sleep quality. In adults aged 45 years and older, they had lower anxiety scores. |
| GARCIA et al., 2018 | São Paulo, SP | To identify the presence of binge eating in patients with cardiovascular disease and verify its relationship with sociodemographic and clinical variables and the presence of anxious and depressive symptoms. | A correlational, cross-sectional study with a sample consisting of 111 patients with cardiovascular disease. The presence of anxious and depressive symptoms was assessed by the hospital <i>anxiety and depression scale</i> instrument and binge eating was assessed by the Periodic Eating Compulsion Scale. | Among the patients, 82% had no binge eating, 13.5% had moderate binge eating, and 4.5% had severe binge eating. Binge eating was present in 18% of the patients, and was associated with body mass index and anxiety. |
| KAVA et al., 2020 | Ponta Grossa, PR | To identify the prevalence and factors associated with anxiety in medical professionals who work in teaching, physicians who work in care, and medical residents. | Cross-sectional observational study, in which the <i>Google forms</i> platform was used for data collection. The content answered was through a sociodemographic questionnaire, conditions of living habits, and the General Anxiety Disorder scale. | The prevalence of anxiety was 25.49%, predominantly female (53.85%), median age 34 years, single (53.85%), and white (69.23%). |
| KLOBUKOSKI & HÖFELMANN, 2017 | Curitiba, PR | To verify the prevalence of binge eating and associated factors in overweight individuals in Primary Health Care. | Cross-sectional study, carried out with 360 overweight adults of both sexes. The methods for data analysis were the Periodic Eating Compulsion Scale, a questionnaire with demographic, socioeconomic, and behavioral information related to health, and anthropometric assessment. | Binge eating was identified in 41.6% of the sample, and the prevalence was higher among women, individuals who reported not being gainfully employed, obese people, and those with an increased waist circumference. |
| MUNHOZ et al., 2021 | Santana do Livramento, RS | Check whether anxiety influences binge eating and obesity in students at the Universidade Federal do Pampa (Dom Pedrito Campus) | A descriptive, quantitative study in which data were collected using a structured questionnaire. The data was collected through a survey of 373 academics using a regression approach. To assess anxiety, the | It was found that anxiety has an influence on binge eating, but anxiety does not cause obesity. It is assumed that binge eating may be a mediating variable in the relationship between anxiety and obesity. |

| | | | | |
|---------------------|--------------------------|--|---|---|
| | | | Anxiety Trait-State Anxiety Inventory (IDATE) was used, to assess binge eating, the Periodic Eating Compulsion Scale (ECAP) was used, and to assess obesity, the Body Mass Index (BMI) was used. | |
| ROCHA et al., 2020 | Brasília, DF | Understand the role of diet and herbal medicine in the treatment of anxiety and depression disorders in the adult and elderly population. | Literature review through the selection of scientific articles from publication and in national and international journals. | Anxiety and depression disorders affect a large part of the population. Nutritional monitoring and phytotherapy are indicated as adjuvant treatments for individuals who have negative reactions to traditional treatments. It is important to supplement zinc, magnesium, vitamins A, C, D, E, and B complex, as well as include food sources that contain tryptophan and omega 3 for a beneficial response in the profile of anxiety and depression. |
| ROCHA & SALEM, 2021 | Manaus, AM | Describe the main consequences of binge eating and what binge eating can cause in people who suffer from anxiety. | Theoretical discussion to investigate and understand the consequences generated from binge eating derived from people suffering from anxiety. | Binge eating is derived from a trauma, and can be a psychological disorder such as anxiety. The disorders present mild signs that evolve to severe disorders. |
| SILVA et al., 2021 | Rio de Janeiro, RJ | Identify the prevalence of anxiety in healthcare workers during the pandemic of COVID - 19. | Systematic review of studies published in any language in the year 2020. | The overall prevalence of anxiety was 35% (95% CI: 29 - 40), with a higher risk of anxiety in women compared to men and in nurses compared to physicians. |
| SILVA et al., 2021 | Maceió, AL | To identify the nutritional profile and anxious and depressive symptoms of oncology patients from public and complementary health care networks, and to verify associations with nutritional status. | Cross-sectional study, carried out in a university hospital and a private hospital. Weight, height, arm circumference and calf circumference were measured, and the Hospital Anxiety and Depression Scale was used. | The mean BMI was higher in the public network group and WC in the supplementary network group. The nutritional status was associated with the presence of anxious and depressive symptoms, the anxious symptoms were associated with BMI and WC, while the depressive symptoms were associated only with BMI. It was possible to observe differences in the nutritional status of patients from the different services, as well as presenting associations with symptoms of depression and anxiety. |
| SILVA et al., 2022 | Vitória da Conquista, BA | Understanding the impact of anxiety disorder on the nutritional health of individuals | Literature review. | The obsessive ingestion of caloric food by anxious individuals can lead to the appearance of metabolic diseases, such as obesity. This occurs due to a hormonal and psychic imbalance, in which the individual, in an attempt to escape from unpleasant sensations, starts to eat a large amount of food. It is necessary to alert society about the association of anxiety and eating disorders, and the main risks that a combination of these diseases can result in the life of an individual. |
| SOUZA, 2010 | Pelotas, RS | To analyze epidemiological aspects of generalized anxiety disorder (GAD) | A systematic review of the scientific literature regarding the prevalence of generalized anxiety | Female gender, age between 30 and 59 years, low socioeconomic status and not living with a partner are |

| | | | | |
|--------------------|--------------------|--|---|---|
| | | | disorder and its associated factors. | associated with Generalized Anxiety Disorder (GAD) |
| SOUZA et al., 2017 | Belo Horizonte, BH | Analyze the interrelationship between food and anxiety by assessing the effect of food, binge eating, and food choices on anxiety. | This is a bibliographic and descriptive study, which was based on scientific texts and on the Scielo and Google Academic databases, as well as on scientific books. | Anxiety directly interferes with emotions by altering mood. These changes, when in excess, can lead to psychological and nutritional health problems. |

4 DISCUSSION

Among the objectives of the study was to verify the assertive influence of anxiety on the eating behavior of adults.

Anxiety is defined in ICD-11 as a state of apprehension or anticipation of unfavorable future dangers or events, accompanied by a feeling of worry, discomfort, or somatic symptoms of tension. It is composed of symptoms conventionally subdivided into subjective, which include as psychological experience, dread, emotional worries, depersonalization, among others, and objective that include abdominal pain, nausea, dizziness, palpitations, and dry mouth (FROTA et al., 2022).

Food goes beyond a biological need, it is added of cultural and symbolic values that will determine its eating behavior, which is originated by demographic, economic, social, cultural, environmental, psychological and nutritional aspects of an individual or society. Based on the influence of anxiety on eating behavior and the prevalence of this disorder in today's society, the Brazilian Congress of Health Sciences analyzed the interrelationship between eating and anxiety, including the effect of eating, binge eating, and food choices on anxiety. It was possible to observe that anxiety directly affects emotions by altering mood, these changes, when in excess, can lead to psychological and nutritional health problems (SOUZA et al., 2017).

Eating disorders, such as binge eating disorder, are considered psychic pathologies, since the individual seeks in food a form of relief for several feelings and sensations, such as anxiety, stress, depression, anger, boredom, frustration, and loneliness (CREJO & MATHIAS, 2021).

Psychological changes such as anxiety and stress can induce the individual to behave in a restrictive, compulsive, compensatory and/or purgative way. This behavior can cause excessive consumption of food, and this consequently influences the nutritional status of the individual (FERREIRA et al., 2018).

In the study by Rocha and Salem (2021), aiming to investigate and understand the consequences of binge eating derived from people suffering from anxiety, it was observed that binge eating comes from a psychological disorder, such as anxiety, which when established can induce the individual to have compensatory behaviors, which are characteristic of binge eating. It is noticeable that obese individuals have a higher prevalence of binge eating disorder (BED), and they have high levels of perfectionism, impulsivity, anxiety, and social isolation.

A study conducted with 180 women, between 18 and 45 years old, aimed to evaluate the eating behavior and psychological characteristics of obese women. Depression and anxiety were evaluated through the Beck Depression Inventory (BDI) and the Beck Anxiety Inventory (BAI). The eating behavior

was evaluated through the Binge Eating Scale (BES) and for the biopsychosocial profile semi-structured interviews were used. Of the 180 women, 39% had depression, 43% anxiety, and 38% binge eating episodes. By analyzing the sample profile, it was evident the relation of the eating behavior with emotional aspects, and more than 80% of the participants reported an appetite change when they felt stressed or anxious. The authors observed a significant association between mood and eating habits. In women with unstable mood, there was a higher frequency of irregular eating habits ($p=0.04$) (FIGUEIREDO et al., 2014).

A cross-sectional, descriptive study with intentional sample was conducted in May 2015, consisting of 130 individuals of both genders, literate, aged between 20 and 59 years and with BMI greater than or equal to 25kg/m². The objective of the study was to evaluate anxiety, sleep quality, and binge eating in overweight or obese individuals. Anxiety was assessed by the Anxiety Trait-State Inventory (IDATE), binge eating was assessed by the Periodic Eating Compulsion Scale (ECAP), and sleep quality was assessed by the Pittsburgh Sleep Quality Index (PSQI). It was possible to observe a direct relationship, expressed in the positivity of the significant correlation coefficient, indicating that individuals who presented a higher state of anxiety had higher rates of binge eating and worse sleep quality, which corroborates the proposed objectives of this study (FUSCO et al., 2020).

Disorders in eating behavior arising from psychological changes such as anxiety and stress, can cause excessive consumption of food causing a change in the nutritional status of the individual (FERREIRA et al., 2018).

In a cross-sectional study conducted in the city of São Paulo, which aimed to identify the presence of binge eating in cardiovascular patients and verify its relationship with sociodemographic and clinical variables and presence of anxious and depressive symptoms. The sample consisted of 111 patients with cardiovascular diseases, the presence of anxious and depressive symptoms was assessed by the hospital *anxiety and depression scale* instrument and binge eating was assessed through the Periodic Eating Compulsion Scale (ECAP). It was possible to observe that there was a predominance of patients without binge eating (82%), followed by the presence of patients with moderate (13.5%) and severe (4.5%) binge eating. The study concluded that binge eating was present in 18% of patients, being associated with high levels of body mass and the presence of anxious symptoms (GARCIA et al., 2018).

Another study aimed to evaluate the relationship of binge eating with anxiety disorders and depression in women. It was a cross-sectional and descriptive study in which data collection was applied to 93 women in the age range of 20 to 50 years. The research showed a high number of women with indicators for binge eating disorder that have a significant relationship with psychiatric disorders such as depression and anxiety. The research also showed a high rate of women with indicators for depression and anxiety, who did not have a binge eating disorder (ALBUQUERQUE et al., 2021).

The study of Bittencourt *et al.* (2012) aimed to investigate the association between binge eating scores, anxiety and depression symptoms, and body mass index (BMI), and to verify whether there was a

difference in the intensity of depressive symptoms and BMI in women with and without binge eating. The sample was composed of 113 women aged between 22 and 60 years old, participants of weight reduction programs. For the data collection the following instruments were used: structured interview, Brazil Economic Classification Criteria, Beck Anxiety Inventory, Beck Depression Inventory, and the Periodic Eating Compulsion Scale. The study showed a positive association between binge eating scores and intensity of anxiety symptoms.

Considering the high rates of obesity and overweight-related diseases in Brazil and worldwide, a study sought to evaluate the immediate impact of nutritional and psychological aspects of a psychoeducational group focused on changing eating behavior. The objectives were: to evaluate changes in weight and food intake of participants after the psychoeducational group; to identify psychological factors that interfere with changing eating behavior; and to analyze the effectiveness of the psychoeducational group in a multidisciplinary action to promote changes in eating behavior. The sample consisted of 11 individuals, aged between 22 and 62 years old, the participants were referred by the multiprofessional team, composed by physicians, psychologists, nurses, social worker and nutritionists. The psychological results included 3 thematic categories: psychological factors, intervention strategies, and the effectiveness of the psychoeducational group. Among the results, it was confirmed the prevalence of depression and anxiety as psychological factors that interfere in changing eating behavior and the relevance of a multidisciplinary action, through psychoeducational groups, as a way to benefit the lifestyle (FRANÇA et al., 2012).

To verify whether anxiety influenced binge eating and obesity, a study was conducted with 373 academics from a university. The instrument used to assess anxiety was the Inventory of Anxiety Trait-State (IDATE) using the anxiety-trait scale (IDATE-T). To measure binge eating the instrument used was the Periodic Eating Compulsion Scale (ECAP) and to assess obesity the Body Mass Index (BMI) was used. Regarding the dependence of the variables, it is verified that anxiety affects binge eating, Thus, hypothesis 1 is accepted, confirming the evidence of Isnard et al. (2003). Because this relationship is positive, it can be seen that people who are more anxious tend to eat more, and this could be harmful to their health. The authors found that anxiety influences binge eating since the significance was 0.000 and that binge eating may be a mediating variable in the relationship between anxiety and obesity thus affecting the individual's nutritional status (MUNHOZ et al., 2021).

A study aimed to identify the relationship between anxiety and depression and overweight and obesity in college students. Data was collected using a questionnaire to assess nutritional status and stressors. The Beck Depression Inventory and the Beck Anxiety Inventory were used to assess depression and anxiety, respectively. Among the research results, it is important to point out that 44 students were interviewed at the beginning of the semester, and 24 of them presented some degree of anxiety, from mild to severe. Regarding the nutritional status, of the 44 participants, 11 had BMI above the eutrophic range and 8 had inappropriate waist hip ratio (WHR). Relating anxiety with nutritional status, it was possible to

observe that 93.75% of participants with changes in BMI and/or WHR had some degree of anxiety (ARAÚJO, 2015).

A literature review aiming to assess the direct relationship between anxiety and binge eating showed that anxiety episodes can influence the onset of eating disorders such as anorexia, bulimia, and binge eating. Binge eating is related to weight gain, which can result in obesity, due to the higher food intake in a short period of time, and the food eaten more quickly and without control of the amount of food ingested (SILVA et al., 2022).

Another cross-sectional study aimed to identify the nutritional profile and anxious and depressive symptoms of cancer patients from public and complementary health care networks, and to verify possible associations with the nutritional status. For the study weight, height, arm circumference and calf circumference were evaluated, and to evaluate the anxious and depressive symptoms the Hospital Anxiety and Depression Ladder was used. It was possible to verify in this study that the nutritional status was associated with the presence of anxious and depressive symptoms, evaluated by BMI ($p < 0.01$) and calf circumference ($p < 0.01$) (SILVA et al., 2021).

According to the World Health Organization (2018), in Brazil about 11.5 million people suffer from anxiety disorder, emphasizing its prevalence in female individuals (ARAÚJO et al., 2020).

According to the Clinical Manual of Eating Disorders (2011), eating disorders are serious problems that occur frequently among women in late adolescence and young adults (HERZOG & EDDY, 2011).

Women are more prone to develop eating disorders because the female gender is more exposed to the media and social pressure, which transmit beauty standards characterized by thinness (CASSIA & BARBOSA, 2019).

Regarding the prevalence of anxiety between female and male sexes, a cross-sectional study aimed to verify the prevalence of binge eating and associated factors in overweight individuals in Primary Health Care. The methods used were the Binge Eating Scale (BPCS), which assesses binge eating, a questionnaire to obtain demographic, socioeconomic and behavioral information related to health and anthropometric measurements (weight, height and waist circumference). A total of 360 overweight adults of both genders participated in the study. Binge eating was identified in 136 individuals, and the prevalence was 127 women (45.5%), while men accounted for 18.8% (9 individuals). This article corroborates with the study that points out that women are more prone to develop eating disorders because they are more exposed to beauty standards (KLOBUKOSKI et al., 2017).

Another study that verified the prevalence of anxiety disorder in adults was conducted with individuals between 18 and 35 years old, in which the sociodemographic variables, body mass index, presence of chronic disease, alcohol abuse and smoking were analyzed. The sociodemographic data were obtained through a questionnaire consisting of the following variables: sex, age, skin color, economic evaluation, work and marital status, the economic evaluation of the participants was performed by the IEN Criterion (National Economic Index), the use of cigarettes and alcohol were analyzed through a

questionnaire, to determine the nutritional status was used the body mass index (BMI) and anxiety was assessed through a structured clinical interview *Mini International Neuropsychiatric Interview 5.0* (MINI). The sample consisted of 1,953 individuals, of these, the prevalence of anxiety disorder was 27.4% and generalized anxiety disorder was 14.3%. Women showed a higher prevalence of anxiety, with 32.5% when compared to men of 21.3% ($p < 0.001$) (COSTA et al., 2019).

A literature review was conducted in which women stand out as the gender that most excels in anxiety disorder, with some studies relating these rates to premenstrual syndrome and hormonal changes (SOUZA, 2010).

A literature review study aimed to evaluate binge eating during the female climacteric period. The climacteric period is classified by the World Health Organization (WHO) as the transition between the reproductive and non-reproductive periods, subdivided into premenopausal, peri-menopausal, and postmenopausal. The study observed that binge eating disorder (BED) mainly affects women between the ages of 30 and 50, and coincidentally this age group corresponds to the climacteric age group. It was possible to ascertain that the causes for overweight and obesity in the climacteric are related to hormonal and psychological changes caused during this period, which causes increased anxiety and nervousness (CONTE et al., 2013).

Another systematic study related to the prevalence of anxiety in healthcare professionals in times of COVID - 19, concluded that the overall prevalence of anxiety was 35% (95%CI: 29-40), with a higher risk of anxiety in women compared to men (95%CI: 1.47 - 1.84) (SILVA et al., 2021).

A cross-sectional observational study, was conducted during the pandemic of COVID - 19, aimed to identify the prevalence and factors associated with anxiety in physicians. For data collection, a structured questionnaire was developed, containing sociodemographic characteristics, living habits conditions and an anxiety assessment questionnaire. The instrument used to assess anxiety was the General Anxiety Disorder ladder (GAD-7). Among 97 selected professionals, 51 agreed to participate in the survey (52.5%). The overall prevalence of anxiety was 25.49%, with a predominance of females (53.85%). It is important to note that most of the sample was composed of men (64.7%), and even so, the gender that prevails anxiety disorder is female (KAVA et al., 2020).

It is clear that we need interventions that reduce anxiety levels in the general population. A balanced diet can beneficially influence the body, including reducing anxiety symptoms in the individual. Diet plays a role in preventing and treating some diseases. Effects of a healthy eating pattern bring physical and mental benefits to the individual (SANTANNA et al., 2018).

According to the manual of dietary benefits for reducing anxiety in times of covid-19, several foods can reduce anxious symptoms. Probiotics favor increased availability of tryptophan (neurotransmitter related to mood and well-being) and the production of serotonin (mood hormone) are found in yogurt and milk. Tryptophan is an essential amino acid, which is obtained through the diet, and participates in the serotonin production process, and is found in eggs, milk, meat, soy, and cereals, among others.

Inflammatory mechanisms have been related to the emergence of anxiety, omega-3 has the ability to attenuate the inflammatory responses of the body through the production of pro-inflammatory cytokines. Omega-3 is found in foods such as sardines, tuna, salmon, mackerel, canola oil, and others. Oxidative stress may be involved in the onset of anxiety, vitamin C has antioxidant properties that combat the damage caused by oxidative stress. It is found in foods such as acerola, cupuaçu, guava, and orange, among others. The vitamin also has these properties, and is found in vegetable oils, egg yolk, butter, meat, and nuts. Vitamins B6, B9, and B12 are essential for the production of serotonin. Vitamin B6 is found in red meat, liver, milk, and eggs, vitamin B9 is found in viscera, beans, green leafy vegetables, and others, and vitamin B12 is found in red and white meat. Magnesium acts in the process of converting tryptophan into serotonin, and is found in dark green vegetables, meats, fish, and crustaceans, among others. Cocoa is a source of tryptophan, participates in the process of serotonin production, combats damage caused by oxidative stress and attenuates the inflammatory responses of the body (FREITAS et al., 2020).

Another article cites some foods that due to their natural properties, can positively influence anxiety levels, such as Brazil nuts, pumpkin seeds, high-fat fish, eggs, chamomile, green tea, chocolate, yogurt, and turmeric. Recent studies point out that chronic inflammation can be responsible for anxiety, stress, and depression. The foods mentioned assist in reducing inflammation, consequently reducing anxiety (BUTLER & STUART, 2018).

A literature review study assures that the nutritionist through promoting healthy eating with better sources of nutrients is indescribable in preventing and aiding recovery from diseases such as anxiety.

Food sources of vitamins A, C, E, and B complex, minerals such as zinc, magnesium, and sources of tryptophan and omega-3 in the diet help control the symptoms of anxiety and depression (ROCHA et al., 2020).

5 CONCLUSION

Eating behavior is formed from cultural, social, economic, production, distribution, and sustainability aspects.

In this study, it was possible to verify how anxiety influences the eating behavior of individuals and what are the long-term consequences of this influence. Individuals with high levels of anxiety may have eating disorders such as binge eating, which in the long term may influence the individual's nutritional status

Among the sexes, the female sex presents higher indices of anxiety and binge eating, which may be due to hormonal causes or to the pressure that the woman suffers in society.

It is notorious that the population needs interventions to reduce anxiety levels and the long-term consequences of this disorder. The Nutritionist, through food, can influence the reduction of anxiety symptoms, with foods that have a beneficial influence on the body and the work of a multidisciplinary team is essential in order to bring more effective results.

Although this study assures of the influence of anxiety on adult eating behavior, it is clear that further studies are needed on the subject confirming this thesis.

REFERENCES

ARAÚJO, Andrey Hudson Interaminense de. **Relação entre ansiedade/depressão e sobrepeso/obesidade em estudantes da Universidade de Brasília**. 08/12/2015. Monografia (Enfermagem) - Universidade de Brasília, [S. l.], 2015. Disponível em: <https://bdm.unb.br/handle/10483/11542>. Acesso em: 21 jun. 2022.

ALBUQUERQUE, Andradina Lima de; BAHIA, Fernanda Candido de Carvalho; MAYNARD, Dayanne da Costa. Compulsão alimentar: uma análise da relação com os transtornos psicológicos da depressão e ansiedade. **Research, Society and Development**, Brasília - DF, v. 10, n. 16, p. 01-08, 14 dez. 2021. Disponível em: <https://rsdjournal.org/index.php/rsd/article/view/23982/21028.%20Acesso%20em:%2024%20mar.%2022>. Acesso em: 24 mar. 2022.

ANVISA. Agência Nacional de Vigilância Sanitária. **Transtornos de Ansiedade**. Rev. Saúde & Economia. Ano V nº 10 | dezembro de 2013, Brasília - DF. Disponível em: <http://antigo.anvisa.gov.br/documents/33884/412285/Boletim+Saúde+e+Economia+nº+10/a45e002d-df42-4345-a3a2-67bf2451870c>. Acesso em: 23 mar. 2022.

BITTENCOURT, Simone Armentano et al. Sintomas de ansiedade e depressão em mulheres com e sem transtorno de compulsão alimentar inscritas em programas de perda de peso. **Tendências Psiquiatria Psicoterapeuta**. , Porto Alegre, v. 34, n. 2, pág. 87-92, 2012. Disponível em <http://old.scielo.br/scielo.php?script=sci_arttext&pid=S2237-60892012000200007&lng=en&nrm=iso>. acesso em 12 de junho de 2022. <https://doi.org/10.1590/S2237-60892012000200007> .

BUTLER, Natalie; STUART, Cathleen Crichton. What are some foods to ease your anxiety?. **Medical News Today**, [S. l.], p. 01-02, 1 ago. 2018. Disponível em: <https://www.medicalnewstoday.com/articles/322652>. Acesso em: 24 mar. 2022.

CASSIA, Lethicia da Silva; BARBOSA, Larissa Beatrice Granciero. Identificação da presença de ansiedade em mulheres adultas e sua relação com a compulsão alimentar. **J Health Sci Inst**, [S. l.], v. 37, n. 2, p. 134-9, 1 jan. 2019. Disponível em: https://repositorio.unip.br/wp-content/uploads/2020/12/05V37_n2_2019_p134a139.pdf. Acesso em: 14 jun. 2022.

CONTE, Franciéli Aline; FRANZ, Lígia Beatriz; WEBER, Isabel Stefenonn; STEINMETZ, Silmara Beatriz; BUSS, Vitor; MANENTI, Marjana. A COMPULSÃO ALIMENTAR NO CLIMATÉRIO: UM ARTIGO DE REVISÃO. **Seminário de Iniciação Científica - Ciências da Saúde**, [S. l.], p. 01-04, 8 ago. 2013. Disponível em: <https://www.publicacoeseventos.unijui.edu.br/index.php/salaaoconhecimento/article/view/1958>. Acesso em: 21 jun. 2022.

COSTA, Camilla Oleiro da; BRANCO, Jerônimo Costa; VIEIRA, Igor Soares; SOUZA, Luciano Dias de Mattos; DA SILVA, Ricardo Azevedo. Prevalência de ansiedade e fatores associados em adultos. **Jornal Brasileiro de Psiquiatria**, Santa Maria, v. 68, n. 2, p. 92-100, 19 jun. 2019. DOI 10.1590/0047-2085000000232. Disponível em: <https://www.scielo.br/j/jbpsiq/a/PSrDy4ZFSGDCzNgJfJwVRxz/?lang=pt&format=html#>. Acesso em: 23 mar. 2022.

CREJO, Bianca da Cunha; MATHIAS, Mariana Giaretta. Comer transtornado e o transtorno de compulsão alimentar e as abordagens da nutrição comportamental. **Revista Interciência**, IMES Catanduva - V.1, Nº6, julho 2021, São Paulo. P. 37-44. Disponível em: <https://www.fafica.br/revista/index.php/interciencia/article/view/302/59>. Acesso em: 23 mar. 2022

FERREIRA, Daianny Alves Araújo; SAMPAIO, Rafaella Maria Monteiro; MONTENEGRO, Ana Carolina Cavalcante; MONTEIRO, Thamyres Fortaleza; PINTO, Francisco José Maia; ARRUDA, Soraia Pinheiro Machado. Caracterização do comportamento alimentar e estado nutricional de adultos. **Motricidade**, [S. l.], v. 14, n. 1, p. 252-258, 1 jan. 2018. Disponível em: <https://www.proquest.com/openview/dccf16be2e1add964283eb28ce16fa8f/1?pq-origsite=gscholar&cbl=616555>. Acesso em: 24 mar. 2022.

FIGUEIREDO, Maria do Desterro de; CUNHA, Darlene Rezende; ARAUJO, Ana Isabel Gomes de; SANTOS, Carlos Maurício C dos; SUPLICY, Henrique Lacerda; BOGUSZEWSKI, Cesar Luiz; RADOMINSKI, Rosana Bento. Comportamento alimentar e perfil psicológico de mulheres obesas. **PsicoFAE**, Curitiba, v. 3, n. 3, p. 43-54, 1 jan. 2014. Disponível em: <https://revistapsicofae.fae.edu/psico/article/view/6>. Acesso em: 28 abr. 2022.

FRANÇA, Cristineide Leandro; BIAGINNI, Marina; MUDESTO, Ana Paula Levindo; ALVES, Elioenai Dornelles. Contribuições da psicologia e da nutrição para a mudança do comportamento alimentar. **Estudos de Psicologia**, [S. l.], v. 17, n. 2, p. 337-345, 17 maio 2012. Disponível em: <https://www.scielo.br/j/epsic/a/rTfZMqP9HwXxBhjdFkwBmBC/?format=pdf&lang=pt>. Acesso em: 28 abr. 2022.

FREITAS, Fernanda da Fonseca; SANTOS, Jéssyca Camila; MEDEIROS, Anna Cecília; LOPES, Fívia de Araújo. **Benefícios da alimentação para reduzir a ansiedade em tempos de COVID-19**. Santa Cruz, RN: [s. n.], 2020. 18 p. Disponível em: https://wp-sites.info.ufrn.br/admin/wp-content/uploads/sites/4/2020/04/Cartilha_Beneficios_Alimentacao_Ansiedade.pdf. Acesso em: 20 maio 2022.

FROTA, Ilger Justa; FÉ, Augusto de Moura; PAULA, Francisco Martins de; MOURA, Victor Santos de; CAMPOS, Eugenio de Moura. Transtornos de ansiedade: histórico, aspectos clínicos e classificações atuais. **J. Health Biol. Sci.**, [S. l.], v. 10, n. 1, p. 01-08, 1 jan. 2022. Disponível em: <https://docs.bvsalud.org/biblioref/2022/03/1361739/3971.pdf>. Acesso em: 28 abr. 2022.

FUSCO, Suzimar de Fátima Benato, AMANCIO, Stéfanie Cristina Pires, PANCIERE Ana Paula, ALVES, Maria Virginia Martins Faria Faddul, SPIRI, Wilza Carla, BRAGA, Eliana Mara. Ansiedade, qualidade do sono e compulsão alimentar em adultos com sobrepeso ou obesidade. **Rev Esc Enferm USP**. 2020; 54:e03656. doi: <https://doi.org/10.1590/S1980-220X2019013903656> Disponível em: <https://www.scielo.br/j/reusp/a/VbCfRCz8XWkBF7bTnXhS44G/?lang=pt#>. Acesso em: 23 mar. 2022.

GARCIA, Géssica Damares; POMPEO, Daniele Alcalá; EID, Letícia Palota; CESARINO, Cláudia Bernardi; PINTO, Maria Helena; GONÇALVES, Laryssa Wilson Paiva. Relação entre sintomatologia ansiosa, depressiva e compulsão alimentar em pacientes com doenças cardiovasculares. **Revista Latino-Americana de Enfermagem**, [S. l.], p. 26:e3040, 3 set. 2018. DOI <https://doi.org/10.1590/1518-8345.2567.3040>. Disponível em: <https://www.scielo.br/j/rlae/a/kZ3pjfp9R6LZXYhvpvzq3rkd/?lang=pt#>. Acesso em: 27 abr. 2022.

HERZOG, David; EDDY, Kamryn. Diagnóstico, epidemiologia e curso clínico dos transtornos da alimentação. In: YAGER, Joel; POWERS, Pauline. **Manual Clínico de Transtornos da Alimentação**. Porto Alegre: ArtMed, 2011. cap. 1, p. 18-50.

MUNHOZ, Paula Gulart; BORGES, Gustavo da Rosa Borges; BEURON, Thiago Antônio Beuron; PETRY, Jonas Fernando. A influência da ansiedade na compulsão alimentar e na obesidade de universitários: Health Systems Management Journal- HSMJ. **Revista de Gestão em Sistemas de Saúde - RGSS**, São Paulo - SP, v. 10, n. 1, p. 21-44, 12 nov. 2021. DOI <https://doi.org/10.5585/rgss.v10i1.14834>. Disponível em: <https://periodicos.uninove.br/revistargss/article/view/14834>. Acesso em: 29 mar. 2022.

MULLER, Juliana de Lima; TRENTINI, Clarissa Marcelli; ZANINI, Adriana Mokwa; LOPES, Fernanda Machado. Transtorno de ansiedade. **Contextos Clínicos**, Porto Alegre - RS, v. 8, ed. 1, p. 159-167, 2015. Disponível em: <https://lume.ufrgs.br/bitstream/handle/10183/159763/001020560.pdf?sequence=1&isAllowed=y>. Acesso em: 23 mar. 2022.

ROCHA, Ana Carolina Borges da; MYVA, Livia Mithye Mendes; ALMEIDA, Simone Gonçalves de. O papel da alimentação no tratamento do transtorno de ansiedade e depressão. **Research, Society and Development**, Brasília - DF, v. 9, n. 9, p. 01-22, 5 set. 2020. DOI <http://dx.doi.org/10.33448/rsd-v9i9.7890>. Disponível em: <https://rsdjournal.org/index.php/rsd/article/view/7890/6935>. Acesso em: 26 mar. 2022.

ROCHA, Irlanda da Silva; SALEM, Elianne Alcântara. As consequências da compulsão alimentar derivada de pessoas que sofrem de ansiedade. **AmazonLiveJournal**, [S. l.], v. 3, n. 4, p. 1-17, 16 nov. 2021. Disponível em: <http://amazonlivejournal.com/wp-content/uploads/2021/11/As-consequencias-da-compulsao-alimentar-derivada-de-pessoas-que-sofrem-de-ansiedade.pdf>. Acesso em: 21 jun. 2022.

SILVA, Dafiny Rodrigues; VASCONCELOS, Laís Gomes Lessa; MELO, Natália Mendes de; NASCIMENTO, Janaína da Silva; MELO, Jayanne Mayara Magalhães de; NASCIMENTO, Carlos Queiroz do; BARROS-NETO, João Araújo. Estado nutricional e sintomas ansiosos e depressivos em pacientes oncológicos: comparação entre um hospital público e outro particular. **Saúde Coletiva**, [S. l.], v. 11, n. 64, p. 5650- 5654, 13 jan. 2021. DOI <https://doi.org/10.36489/saudecoletiva.2021v11i64p5650-5659>. Disponível em: <https://revistas.mpmcomunicacao.com.br/index.php/saudecoletiva/article/view/1511>.

SILVA, David Franciole; COBUCCI, Ricardo Ney; SOARES-RACHETTI, Vanessa de Paula; LIMA, Severina Carla; ANDRADE, Fábila Barbosa de. Prevalência de ansiedade em profissionais da saúde em tempos de COVID-19: revisão sistemática com metanálise. **Ciência & Saúde Coletiva**, [S. l.], v. 36, n. 02, p. 693-710, 12 fev. 2021. Disponível em: <https://www.scielo.org/article/csc/2021.v26n2/693-710/#ModalArticles>. Acesso em: 21 jun. 2022.

SILVA, Joyce Danyelle; GOMES, Alue Marcolino; CARVALHO, Raynara Almeida; BONITO, Yan Gabriel; OASKES, Carlos Augusto; TEIXEIRA, Gabriel Henrique; PEREIRA, Danilo Anderson; FERNANDES, Lidia Jacinta; LEANDRO, Delaide Marinho; CARVALHO, Uliana Pereira. Distúrbio da ansiedade e impacto nutricional: obesidade e compulsividade alimentar. **Revista Eletrônica Acervo Saúde**, [S. l.], v. 15, n. 4, p. 1-7, 1 abr. 2022. DOI <https://doi.org/10.25248/REAS.e10108.2022>. Disponível em: <https://acervomais.com.br/index.php/saude/article/view/10108>. Acesso em: 19 maio 2022. [mpmcomunicacao.com.br/index.php/saudecoletiva/article/download/1511/1709/4675&usg=AOvVaw00wXIj_dnd2Sk1Fth7XNZY](https://www.mpmcomunicacao.com.br/index.php/saudecoletiva/article/download/1511/1709/4675&usg=AOvVaw00wXIj_dnd2Sk1Fth7XNZY). Acesso em: 18 maio 2022.

SANTANNA, Lina C.; MARTINS, Pamela Catiúscia R. **Alimentação e Nutrição para o Cuidado**. [Digite o Local da Editora]: Grupo A, 2018. 9788595027442. Disponível em: <https://integrada.minhabiblioteca.com.br/#/books/9788595027442/>. Acesso em: 20 mai. 2022.

SOUZA, Dalila Teotonio Bernardino de; LÚCIO, Jordânia de Moraes; ARAÚJO, Adiene; BATISTA, Deilton. ANSIEDADE E ALIMENTAÇÃO: UMA ANÁLISE INTER- RELACIONAL. **Anais II CONBRACIS**, Belo Horizonte, 14 jun. 2017. Disponível em: https://www.editorarealize.com.br/editora/anais/conbracis/2017/TRABALHO_EV071_MD1_SA6_ID1109_02052017134105.pdf. Acesso em: 23 mar. 2022.

SOUZA, Luciano Dias de Mattos. **Transtorno de ansiedade generalizada em jovens de 18 a 24 anos: prevalência, fatores associados, comorbidades e impacto na qualidade de vida**. 2010. Programa de Pós-Graduação em Psicologia (Psicologia) - Pontifícia Universidade Católica do Rio Grande do Sul, Rio Grande do Sul - RS, 2010. Disponível em: <https://repositorio.pucrs.br/dspace/handle/10923/4844>. Acesso em: 29 mar. 2022.

KAVA, Gabriel Chiquetto; CORDEIRO, Tatiana Menezes; FLORIANO, Lara Simone; DURAN, Nilmara; ARCARO, Guilherme; MARINHO, Rafaela Olívia. A PREVALÊNCIA DE ANSIEDADE E FATORES ASSOCIADOS EM MÉDICOS DE UMA UNIVERSIDADE PÚBLICA BRASILEIRA NA PANDEMIA COVID-19. **Publicatio UEPG: Ciências Biológicas e da Saúde**, [S. l.], v. 26, n. 02, p. 110-119, 17 maio 2021. Disponível em: <https://revistas2.uepg.br/index.php/biologica/article/view/17038/209209214261>. Acesso em: 21 jun. 2022.

KLOBUKOSKI, Cristina; HÖFELMANN, Doroteia Aparecida. Compulsão alimentar em indivíduos com excesso de peso na Atenção Primária à Saúde: prevalência e fatores associados. **Caderno Saúde Coletiva**, [S. l.], v. 25, n. 4, p. 443-452, 1 out. 2017. DOI 10.1590/1414-462X201700040094. Disponível em: <https://www.scielo.br/j/cadsc/a/nsTx858HVtCv4r64TcJBy8b/?format=pdf&lang=pt>. Acesso em: 19 maio 2022.

VAZ, Diana Santos; BENNEMANN, Rose Mari. **Comportamento alimentar e hábito alimentar: uma revisão**. Paraná, v. 20, n. 01, p. 108-112, 4 set. 2014. Disponível em: https://www.mastereditora.com.br/periodico/20141001_083919.pdf. Acesso em: 23 mar. 2022.