

Consumption of Ultra-Processed Foods and Its Association with the Prevalence of Depression in Adolescents and Adults from a Public Health Perspective: A Literature Review

Consumo de alimentos ultraprocessados e sua associação com a prevalência da depressão em adolescentes e adultos sob a perspectiva de saúde coletiva: uma revisão de literatura

Consumo de Alimentos Ultraprocesados y su Asociación con la Prevalencia de la Depresión en Adolescentes y Adultos desde la Perspectiva de la Salud Colectiva: Una Revisión de la Literatura

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Abstract:

Introduction: High consumption of ultra-processed foods (UPFs) has been associated with an increased risk of depression and other mental health problems across different age groups. These products, characterized by high energy density and low levels of essential nutrients, are associated with inflammatory processes and alterations in the gut microbiota, fundamental mechanisms in the balance of the gut-brain axis. **Objective:** To analyze the association between the consumption of ultra-processed foods and the prevalence of depression in adolescents and adults, to discuss the biological mechanisms involved, and the challenges faced by nutritionists in promoting mental health. **Methodology:** This is a descriptive and exploratory literature review. Primary studies published between 2022 and 2026, in Portuguese and English, that addressed the correlation between the consumption of ultra-processed foods and mental disorders were considered. The search was conducted in the PubMed (U.S. National Library) and SciELO (Scientific Electronic Library Online) databases, using descriptors such as "anxiety," "depression," "mental health," and "ultra-processed foods," combined with Boolean operators. **Results and Discussion:** The studies conducted showed that high intake of ultra-processed foods (UPF) has consistent deleterious effects on mental health. A dose-dependent response was identified, where increased consumption significantly raises the risk of depressive symptoms. The main mechanisms involved include chronic neuroinflammation, oxidative stress, and metabolic dysregulation. In contrast, whole-food-based dietary patterns, such as the Mediterranean and DASH diets, have shown neuroprotective effects. It was also observed that early nutritional interventions are effective in managing symptoms, especially in vulnerable groups such as adolescents and young men. **Conclusion:** The analysis demonstrated that excessive consumption of ultra-processed foods (UPFs) activates inflammatory mediators and affects the synthesis of neurotransmitters essential for mood regulation. Although there are gaps in understanding the exact mechanisms, the findings reinforce the urgency of public policies aimed at reducing the consumption of ultra-processed foods and the importance of the nutritionist's role as an indispensable support in the prevention and management of depression in public health.

Keywords:

Anxiety; Depression; Mental Health; Ultra-processed Foods.

Resumo:

Introdução: O consumo elevado de Alimentos Ultraprocessados (AUPs) tem sido associado ao aumento do risco de depressão e outros prejuízos à saúde mental em diferentes faixas etárias. Esses produtos, caracterizados por alta densidade energética e pobreza de nutrientes essenciais,

estão associados a processos inflamatórios e alterações na microbiota intestinal, mecanismos fundamentais no equilíbrio do eixo intestino-cérebro. Objetivo: Analisar a associação entre o consumo de alimentos ultraprocessados e a prevalência da depressão em adolescentes e adultos, discutindo os mecanismos biológicos envolvidos e os desafios enfrentados pelo nutricionista na promoção da saúde mental. Metodologia: Trata-se de uma revisão de literatura de caráter descritivo e exploratório. Foram considerados estudos primários publicados entre 2022 e 2026, nos idiomas português e inglês, que abordassem a correlação entre o consumo de ultraprocessados e transtornos mentais. A busca foi realizada nas bases de dados PubMed (U.S National Library) e SciELO (Scientific Electronic Library Online), utilizando descritores como “anxiety”, “depression”, “mental health” e “ultra-processed food”, combinados por operadores booleanos. Resultados e Discussão: Os estudos analisados evidenciaram que a alta ingestão de AUP apresenta efeitos deletérios consistentes para a saúde mental. Identificou-se uma resposta dose-dependente, onde o aumento do consumo eleva significativamente o risco de sintomas depressivos. Os principais mecanismos envolvidos incluem a neuroinflamação crônica, o estresse oxidativo e a desregulação metabólica. Em contrapartida, padrões alimentares de base in natura, como as dietas Mediterrânea e DASH, demonstraram efeitos neuroprotetores. Foi observável também que intervenções nutricionais precoces são eficazes no manejo dos sintomas, especialmente em grupos vulneráveis como adolescentes e homens jovens. Conclusão: A análise demonstrou que o consumo exacerbado de AUPs ativa mediadores inflamatórios e afeta a síntese de neurotransmissores essenciais para a regulação do humor. Embora existam lacunas na compreensão dos mecanismos exatos, os achados reforçam a urgência de políticas públicas voltadas à redução do consumo de ultraprocessados e a importância da atuação do nutricionista como suporte indispensável na prevenção e no manejo da depressão na saúde coletiva.

Palavras-chave:

Ansiedade; Depressão; Saúde Mental; Alimentos Ultraprocessados.

Resumen:

Introducción: El elevado consumo de alimentos ultraprocesados (AUP) se ha asociado con un mayor riesgo de depresión y otros perjuicios para la salud mental en diferentes grupos etarios. Estos productos, caracterizados por una alta densidad energética y escasez de nutrientes esenciales, están relacionados con procesos inflamatorios y alteraciones en la microbiota intestinal, mecanismos fundamentales en el equilibrio del eje intestino-cerebro. Objetivo: Analizar la asociación entre el consumo de alimentos ultraprocesados y la prevalencia de la depresión en adolescentes y adultos, discutiendo los mecanismos biológicos implicados y los desafíos enfrentados por el nutricionista en la promoción de la salud mental. Metodología: Se trata de una revisión de la literatura de carácter descriptivo y exploratorio. Se consideraron estudios primarios publicados entre 2022 y 2026, en portugués e inglés, que abordaran la correlación entre el consumo de ultraprocesados y los trastornos mentales. La búsqueda se realizó en las bases de datos PubMed (U.S National Library) y SciELO (Scientific Electronic Library Online), utilizando descriptores como “anxiety”, “depression”, “mental health” y “ultra-processed food”, combinados mediante operadores booleanos. Resultados y Discusión: Los estudios analizados evidenciaron que la alta ingesta de alimentos ultraprocesados presenta efectos perjudiciales consistentes para la salud mental. Se identificó una respuesta dependiente de la dosis, donde el aumento del consumo eleva significativamente el riesgo de síntomas depresivos. Los principales mecanismos implicados incluyen la neuroinflamación crónica, el estrés oxidativo y la desregulación metabólica. Por otro lado, patrones alimentarios basados en alimentos naturales, como las dietas Mediterránea y DASH, demostraron efectos neuroprotectores. También se observó que las intervenciones nutricionales tempranas son

eficaces en el manejo de los síntomas, especialmente en grupos vulnerables como adolescentes y hombres jóvenes. Conclusión: El análisis demostró que el consumo excesivo de alimentos ultraprocesados activa mediadores inflamatorios y afecta la síntesis de neurotransmisores esenciales para la regulación del estado de ánimo. Aunque existen lagunas en la comprensión de los mecanismos exactos, los hallazgos refuerzan la urgencia de políticas públicas dirigidas a reducir el consumo de ultraprocesados y la importancia de la actuación del nutricionista como apoyo indispensable en la prevención y el manejo de la depresión en la salud colectiva.

Palabras clave:

Ansiedad; Depresión; Salud Mental; Alimentos Ultraprocesados.

INTRODUCTION

In recent decades, there has been a considerable increase in the incidence of mental health problems, including common mental disorders such as depressive and anxiety disorders (GBD, 2018). According to data from the World Health Organization (WHO), by 2026, approximately 9.3% to 9.6% of the Brazilian population will suffer from anxiety and approximately 5.8% to 15.5% of the population will suffer from depression throughout their lives, the highest estimate in Latin America; this variation may occur depending on the epidemiological study method (WHO, 2017).

In this context of growing concern about mental health, it is essential to understand the particularities of different life stages, especially adolescence and adulthood, where the prevalence of disorders such as anxiety and depression has proven to be significant (Turecki *et al.* 2019). Adolescence is defined as the phase of life between childhood and adulthood, encompassing the age range of 12 to 18 years (Mesas, A. *et al.* , 2022). It is a period of intense physical, emotional, and social transformations, crucial for the development of skills and knowledge (theoretical and interpersonal) (O'Neil *et al.* 2014). Adulthood, according to the literature, generally encompasses individuals aged between 18 and 59 years, who may present different profiles related to lifestyle, such as sedentary behavior, high levels of routine stress, inadequate dietary patterns, and exposure to risk factors associated with mental health, such as those already mentioned above. (GBD, 2018; Mesas, A. *et al.* , 2022)

Depressive disorders are characterized by a sad, apathetic, or irritable mood that impairs the patient's ability to function professionally and educationally in society (American Psychiatric Association) . Association , 2022). Anxiety, on the other hand, is a state in which the patient experiences excessive fear and anxiety when performing daily activities or interacting with others, associated with a constant fight-or-flight response (American Psychiatric Association, 2022). Association , 2022).

Both disorders can be exacerbated or initiated by problems related to the consumption of ultra-processed foods, due to inflammatory processes that may result from the additives used in the manufacture of these products. Furthermore, this process can also lead to a decrease in the immune system and elevated oxidative stress, which subsequently worsens symptoms of depression and anxiety (Rodriguez, O. *et al.*, 2023).

Within the current food context, there is a significant increase in the consumption of ultra-processed foods, driven by changes in dietary patterns, greater convenience, wide accessibility, and the strong influence of the food environment, which favors quick, palatable choices with low nutritional value (Monteiro, C. *et al.*, 2019; Louzada, M. *et al.*, 2015). In this context, there is a noticeable substitution of *whole foods* for ultra-processed products, generated by convenience and wide availability (Monteiro, C. *et al.*, 2019). These foods, abundant in simple sugars, fats, additives and preservatives, and poor in essential nutrients, can negatively impact mental health through inflammatory problems and alterations in the gut microbiota (Daneshzad, E. *et al.* 2022, Lane, MM *et al.* 2023).

Therefore, it is essential to discuss the relationship between these disorders and the consumption of ultra-processed foods (UPF), since there are studies that analyze the correlation between these two factors, such as a study by USP University, conducted in 2025, which indicated that the consumption of ultra-processed foods increases the risk of persistent depression by 58% (Ferreira, N. *et al.*, 2025).

In this context, the nutritionist plays a fundamental, strategic, and indispensable role in the mental health of individuals affected by this problem, helping not only in treatment but also in the prevention of the emergence of such an impediment that can be acquired throughout life (Firth, J. *et al.*, 2019). The nutritionist works with prescribing appropriate plans for patients already diagnosed, promoting safe food environments, providing nutritional education, offering mental health care (psychonutrition), and conducting food and nutritional surveillance (Boog, M. 2008).

Therefore, this topic is highly relevant to Public Health, highlighting modifiable factors related to mental health, especially those associated with dietary patterns (Firth, J. *et al.*, 2019). In this sense, the strategic role of the nutritionist in promoting healthy eating habits and preventing health problems is reinforced, acting in an integrated way in health care and contributing to improving the quality of life of the population (Firth, J. *et al.*, 2019; O'Neil, A. *et al.*, 2014; Boog, M., 2008).

Therefore, this work aims, through a literature review, to analyze the relationship between the considerable increase in cases of depression and anxiety in recent years and poor



diet, based on ultra-processed foods (UPF), as well as to discuss the reasons for the increase in this type of food consumption. Furthermore, it also aims to discuss the challenges faced by nutritionists in this context of public health.

METHODOLOGY

This study is configured as a literature review, with a descriptive and exploratory character, aiming to answer the following guiding question: "How is the high consumption of ultra-processed foods associated with an increased incidence of depression in adolescents and adults treated in the public health system, and what are the implications for public health?"

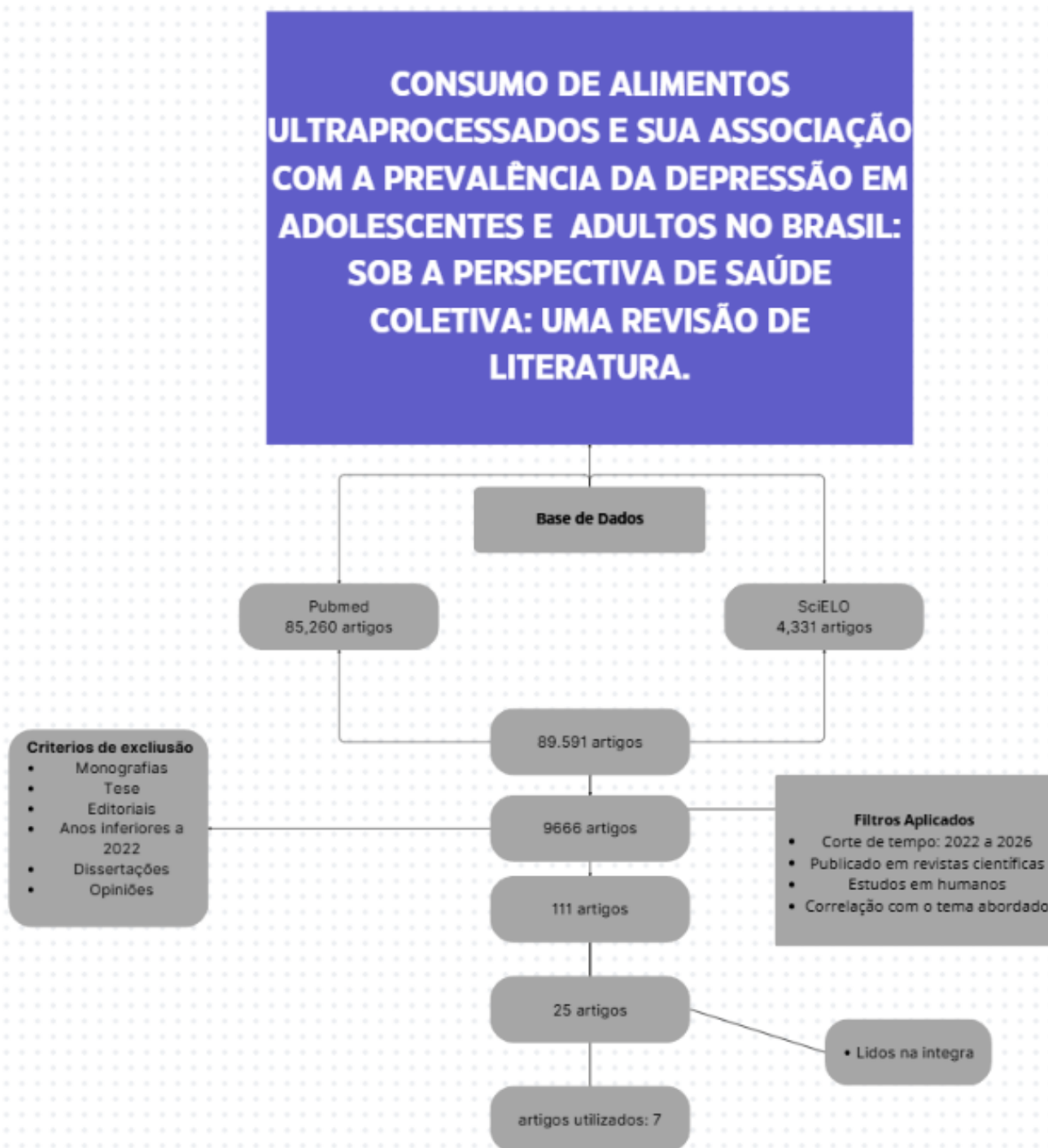
The database analysis phase was conducted rigorously and sequentially, beginning with a search of the databases using previously selected descriptors. Following this, an analysis of the titles of the articles sought was performed, and subsequently, the abstracts were read, with the aim of selecting studies that met the juxtaposed inclusion criteria.

Scientific database. The Electronic Library Online (SciELO) and PubMed (US National Library) were used. Descriptors in Portuguese and English were employed, including the terms " anxiety ," " depression ," "mental health ," and " ultra-processed food," combined using the Boolean operators "AND" and "OR" to perform the searches.

Primary articles published between 2022 and 2026, available in Portuguese and English, that addressed the consumption of ultra-processed foods and their correlation with mental disorders such as depression and anxiety were considered eligible. On the other hand, duplicate articles, as well as monographs, literature reviews, opinions, and dissertations, were excluded, in addition to those that did not have a direct relationship with the theme of the work.

It is important to highlight that some of the studies included in this review do not directly address the consumption of ultra-processed foods, but rather the relationship between the adoption of healthy eating patterns and their connection to symptoms of anxiety and depression. The inclusion of these studies is justified by the need to complement the analysis of the proposed topic.

Figure 1 - Flowchart of the selection of selected articles



Source: developed by the authors, 2026.

Table 1, presented below, summarizes the central elements of the articles selected for this review, ranging from the identification of the authors and chronology to the design, objectives, methods, and a synthesis of the main findings.

Table 1. Summary of articles analyzed for review.

Articles	Author, year publication, place of study	Design, type of study and N	Study objectives	Methodology	Key findings
1	Daneshzad . E. <i>et al.</i> 2022 Karaj , Iran.	clinical trial randomized N = 66 diabetic women with mean ages between 57 and 60 years	To assess the effect of the DASH diet on sleep status, mental health and Hormonal changes in women with type 2 diabetes.	12-week intervention comparing the DASH diet vs. a control diet (conventional eating). Assessment using PSQI (sleep), DASS-21 (mental health), and biochemical tests (HbA1c, AGEs , hormones).	It presents the opposite benefit to the consumption of ultra-processed foods: while the consumption of ultra-processed foods increases the risk of depression, adhering to a diet rich in fiber and antioxidants... (DASH) promotes the reduction of depressive symptoms and improves sleep quality.
2	Bayes , J. <i>et al.</i> 2022 Australia /New Zealand	Comparative study, observational N = 72 Men young people (18–25 years old)	The article sought to investigate whether the diet of Mediterranean may have a positive effect on Depressive disorders in young adults.	Assessments were conducted at three time points: baseline, week 6, and week 12. Adherence was measured using MEDAS, followed by the 21-item BDI-II, with improved quality of life as the secondary outcome. Patients who were not present at all appointments were excluded.	The results demonstrated that depressed young people can significantly alter the quality of their diet in a short period of time under the guidance of a clinical nutritionist. These dietary improvements led to significant improvements in depressive symptoms, with no side effects observed.

3	<p>Ferreira, NV <i>et al.</i></p> <p>2025</p> <p>Brazil</p>	<p>Study of longitudinal cut</p> <p>N= 13,870 servers public aged between 35 and 74 years</p>	<p>Evaluate the association between the consumption of ultra-processed foods</p> <p>The persistence and incidence of depression among adults aged 35 to 74.</p>	<p>Food frequency questionnaires were used to measure the energy density of ultra-processed foods at 3 distinct time points: Wave 1 (2008-2010, n = 15,105), Wave 2 (2012-2014, n = 14,014) and Wave 3. (2017-2019, n = 12.636). A diagnostic classification based on- if in <i>Clinical Interview Schedule Revised</i> (CIS-R)</p>	<p>Among the 13,870 participants without depression at the start of the study, 731 (5.3%) developed depression after 8 years of follow-up, indicating that a diet rich in or based on ultra-processed and ultra-palatable foods is associated with a higher incidence of depression.</p> <p>The analysis revealed that replacing just 10% to 20% of ultra-processed foods with minimally processed foods could reduce the incidence of the disease by up to 22%, highlighting the preventive impact of dietary quality.</p>
4	<p>Achour , Y. <i>et al.</i></p> <p>2025</p> <p>France</p>	<p>Study transversal</p> <p>N = 15,262 adults</p>	<p>To investigate the associations between dietary patterns and major depression in specific groups by sex and age, in order to identify potentially vulnerable sub-populations, which may guide prevention strategies and targeted interventions.</p>	<p>Dietary data were collected using a food frequency questionnaire. PNSS (National Nutrition and Health Program) validated. People with chronic diseases or who use [medication/products] were excluded from the study. psychotropic medications.</p> <p>In parallel to In addition to the dietary questionnaire, depression was assessed using the validated CES-D scale.</p>	<p>Approximately 32.2% of the participants had a prevalence of depressive risk. A positive correlation was found between the intake of ultra-processed foods and the risk of depression in young adults (18-34 years) of both sexes. In women over 35 years of age, adherence to a dietary pattern rich in <i>whole foods</i> (fruits, nuts and vegetables) acted as a protective factor, reducing the chances of depressive episodes. Furthermore, frequent consumption of sugary drinks and canned foods increased mental vulnerability specifically in the young female population.</p>

5	<p>Mesas, A. <i>et al</i></p> <p>2022</p> <p>Brazil</p>	<p>Study transversal</p> <p>N = 94,767 teenage participants, of which (52.4%) were girls and 47.6% were boys.</p>	<p>The objective of this study was to analyze the association between the consumption of ultra-processed foods (AUP) and mental health symptoms in a representative sample of the Brazilian adolescent student population.</p>	<p>The data collection comes from the National School Health Survey (PeNSE 2019), which covered the entire national territory and had adolescents aged 13 to 17 as its target audience. A questionnaire was applied to the adolescents regarding the frequency of ultra-processed food consumption, and subsequently, the number of ultra-processed foods consumed was characterized, divided according to the distribution in the sample by tertiles, generating the following categories: 1st tertile (0 to 3 ultra-processed foods), 2nd tertile (4 to 5 ultra-processed foods), and 3rd tertile (6 to 13 ultra-processed foods).</p>	<p>The study demonstrated a dose-significant response; the greater the consumption of ultra-processed foods, the higher the incidence and frequency of cases and reports of mental health problems.</p>
6	<p>Lane, MM . <i>et al.</i></p> <p>2023</p> <p>Australia</p>	<p>Observational cross-sectional study longitudinal collaborative Melbourne</p> <p>N = 23,299 people aged between 27 and 69 years old</p>	<p>The aim of this study is to examine the Associations between the consumption of ultra-processed foods and increased suffering Psychological factors as an indicator of depression after 15 years.</p>	<p>The follow-up was based on repeated 24-hour food records over 5.4 years, classifying the items using the NOVA scale. The detection of depressive symptoms was performed annually using the CES-D scale. Statistical analysis used Cox proportional hazards models.</p>	<p>It was found that each 10% increase in the proportion of ultra-processed foods in the diet is associated with a 21% increase in the risk of developing depressive symptoms. The results suggest that the non-nutritional components of ultra-processed foods (additives) may play a crucial role in the pathogenesis of depression, regardless of the lipid or caloric profile of the foods.</p>

7	Yuan, S. <i>et al.</i> 2025 China	Cross-sectional study. N = 10,359 adults (18+ years).	Explore whether individuals who consume larger quantities of food ultra-processed s (AUP) have more adverse mental health symptoms, including mild depression, poor mental health days, and anxiety days.	Data analysis of NHANES (2007-2012). AUP consumption was measured as a percentage of total energy intake using the NOVA system (means of (24-hour dietary recalls). Instruments: PHQ-9 for depression and validated questions about mental health days and anxiety in the last 30 days. Adjusted for sex, age, ethnicity, income, smoking, physical activity, and BMI.	The results indicate that diets high in ultra-processed foods increase the risk of impaired mental health. The study also suggests that this relationship may be mediated by alterations in specific blood metabolites caused by this type of diet.
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Source: developed by the authors, 2026.

RESULTS AND DISCUSSION

The research analyzed in this review presented a variety of methodological approaches, including randomized clinical trials, observational comparative studies, longitudinal cohort studies, and cross-sectional studies. This diversity provides a comprehensive understanding of the relationship between the consumption of ultra-processed foods (UPF) and mental health, focusing on depression and anxiety in adolescents and adults.

Overall, the findings show that the authors agree on the negative influence of modern dietary patterns and excessive consumption of ultra-processed products on mental health. However, all studies also highlight the importance of nutritional interventions and public health policies aimed at reducing the consumption of these foods as essential strategies for the prevention and management of depressive disorders in the population.

Primarily, the study by Daneshzad , E. et al. (2022) highlights the protective role of the DASH diet in the mental health of postmenopausal Iranian women with type 2 diabetes. The research results suggest that the DASH diet had a beneficial effect on depression, anxiety, and stress, as well as on sleep patterns in patients with type 2 diabetes. This study shows that the antioxidant capacity of the DASH diet leads to a reduction in oxidative stress, which, associated

with inflammation caused by poor diet, plays a role in psychological disorders through altered brain function. The foods consumed in the DASH diet are high sources of folate and magnesium; these micronutrients play a role in the synthesis of various neurotransmitters, including dopamine, serotonin, and norepinephrine, and may contribute to brain reactions as well as anti-inflammatory effects, which corroborates the results found.

Concurrently, Bayes *et al.* (2022), through their observational study conducted in Australia/New Zealand with young men, which aimed to evaluate the Mediterranean diet in a specific population group often underrepresented in dietary research due to social prejudices suffered by participants, observed that the Mediterranean diet intervention led to significant improvements in depressive symptoms. The study also sought to present dietary treatment as a means of treatment so that research participants have a way to treat themselves without directly seeking psychological care, due to their fear of judgment regarding the social prejudices faced by men of this age who need psychological support. Both studies reinforce the idea that diet quality is a crucial determinant of mental health and that nutritional interventions can be effective in managing and controlling these disorders.

longitudinal study by Ferreira, N. *et al.* (2025), conducted in Brazil with a large sample of 13,870 public servants aged between 35 and 74 years, provided robust evidence of a direct association between the consumption of ultra-processed foods (UPF) and the incidence and persistence of depression. The research aimed to evaluate the association between UPF consumption and the persistence and incidence of depression, observing that a diet rich in ultra-processed foods is associated with a higher incidence of depression. The analysis revealed that replacing just 10% to 20% of ultra-processed foods with minimally processed foods could reduce the incidence of the pathology by up to 22%, highlighting the preventive impact of dietary quality. This result corroborates the hypothesis that dietary intervention can be an effective strategy in the prevention of mental disorders, aligning with the growing body of literature that points to the importance of nutrition in brain health.

This perspective is reinforced by the study by Lane, MM *et al.* (2023), conducted in Australia, which followed 23,299 individuals for 15 years. The observation that each 10% increase in the proportion of UPA in the diet raises the risk of psychological distress corroborates the idea that chronic exposure to chemical additives, refined sugars, and saturated fats exerts a cumulative and deleterious effect on the central nervous system. This phenomenon can be explained, in part, by the inflammatory nature of these foods, which activate pro-inflammatory signaling pathways, such as the NF- κ B pathway, leading to chronic low-grade neuroinflammation, a central mechanism in the pathophysiology of depression.

Life cycle analysis reveals specific vulnerabilities. In their study, Mesas, A. *et al.* (2022), analyzing data from nearly 95,000 Brazilian adolescents, identified a dose-dependent response between the consumption of ultra-processed foods (UPFs) and mental health symptoms. This finding is particularly relevant considering that adolescence is a period of intense synaptic plasticity and prefrontal cortex maturation. Excessive consumption of UPFs, which are low in omega-3 fatty acids, B vitamins, minerals such as zinc and magnesium, and essential amino acids like tryptophan and tyrosine—essential for neurotransmitter synthesis and neuronal protection—can compromise this development, increasing susceptibility to emotional disorders.

The study by Achour, Y. *et al.* (2025), conducted in France, highlights gender and age disparities. The research results show a positive correlation between ultra-processed foods (UPF) and depression in young adults (18-34 years), reflecting the trend of greater dependence on convenient and palatable foods in this age group, often driven by stressful lifestyles and lack of time for meal preparation. Conversely, the protective effect of a diet rich in whole foods observed in women over 35 years of age suggests that nutritional quality may act as a biological protection against psychological stressors, possibly mediated by antioxidants and polyphenols that combat neuronal oxidative stress. Additionally, a population cohort study conducted by Yuan, S. *et al.* (2025) in China, with 30,059 participants from the UK Biobank, investigated the associations between UPF consumption, its circulating metabolic signature, and mental disorders in middle-aged and older adults. The results demonstrated that higher consumption of ultra-high-performance liquids (UPLs) was significantly associated with increased risks of general mental disorders, depression, and anxiety.

This result can be explained by Yin, B. *et al.* (2024), who, although this study was not included in the main sample of this review because it was an experimental metabolic analysis of plasma biomarkers and not a study that specifically addressed dietary consumption, pointed to metabolic dysregulation as one of the most important factors influencing the onset or progression of psychiatric disorders. The metabolic signature related to ultra-processed foods (UPF) was also independently associated with increased risks and partially mediated the relationship between UPF consumption and mental disorders (with mediation proportions ranging from approximately 13% to 61%). The study also associated UPF consumption with increased psychological symptoms such as suicidal ideation and feelings of anxiety.

Although the studies analyzed in this literature review present similar and complementary results, it is important to highlight possible biases and limitations present in the analyzed studies. A large part of the research, due to its cross-sectional or observational design,

is subject to recall and reporting biases in food frequency questionnaires, and does not allow for the definitive establishment of causality between ultra-processed foods and mental disorders. Furthermore, confounding factors, such as physical activity level, socioeconomic status (which may be omitted from the patient's reality), and genetic predisposition, although adjusted for in some cohort studies, can still influence the strength of the observed association between the consumption of ultra-processed foods and the development of mental disorders.

In summary, the findings identified in the studies strongly converge on the premise that high intake of ultra-processed foods acts as a significant and independent risk factor for the development and worsening of depressive and anxiety disorders, both in adolescents and adults. The literature has consistently demonstrated that diets based on *whole foods*, such as the Mediterranean and DASH diets, exert a neuroprotective effect. However, gaps still persist, especially in the need for more long-term randomized clinical trials evaluating specific dietary interventions in populations with diagnosed depression, as well as a greater exploration of the pathophysiological mechanisms sought, such as specific alterations in the gut microbiota and inflammatory pathways. Thus, the evidence suggests that dietary pattern modification should be considered an essential tool in both nutritional psychiatry and public health.

CONCLUSION

In summary, all the articles presented in this paper show a clear relationship between high consumption of ultra-processed foods (UPF) and a higher prevalence and incidence of common mental disorders, focusing on depression and anxiety, in adolescents and adults. The literature analyzed for this review aligns with the understanding that the low nutritional quality of these foods (rich in empty calories), combined with their pro-inflammatory potential and the absence of essential micronutrients, negatively affects the central nervous system, and, for these reasons, aggravates psychiatric symptoms.

Conversely, dietary patterns based on the consumption of whole foods, such as fruits, grains, and unprocessed meats, as well as minimally processed foods, have been shown to act as considerable neurobiological protective factors. Despite the consistency among the results found, there is a perceived need for further studies to elucidate the direct causal pathways and mitigate the methodological limitations of observational studies.

From a public health perspective, this topic is of paramount importance, as dietary patterns constitute a modifiable risk factor. In this context, nutritionists assume a strategic role, not only in integrated clinical trials of mental health, but also in the formulation of public

policies and nutritional education, aiming to reduce the incidence of psychiatric illnesses driven by modern dietary patterns.

Therefore, it is concluded that, although the studies present technical consistency in the association between the consumption of ultra-processed foods and the worsening of mental illnesses, gaps still persist that demand further investigations into the research mechanisms involved and vulnerable groups. The evidence reinforces the relevance of the topic in public health and justifies the strategic role of nutritionists in the implementation of policies and clinical interventions aimed at preventing psychiatric illnesses. Finally, future research should delve deeper into nutritional psychiatry, exploring accessible dietary interventions as part of the standard treatment for mental disorders in the public health system.

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