

Review Article

Media and eating behavior in adolescence

Mídia e comportamento alimentar na adolescência

Carime Bittar^a , Amanda Soares^b 

^aUniversidade de São Paulo – USP, São Paulo, SP, Brasil.

^bUniversidade Católica de Santos – UNISANTOS, Santos, SP, Brasil.

How to cite: Bittar, C., & Soares, A. (2020). Media and eating behavior in adolescence. *Cadernos Brasileiros de Terapia Ocupacional*. 28(1), 291-308. <https://doi.org/10.4322/2526-8910.ctoAR1920>

Abstract

Introduction: Adolescence is a period marked by physical, behavioral, and psychosocial changes and by transformations related to the formation of the self-image. **Objective:** To verify the relation between media and eating choices in body image and the possible development of eating disorders in adolescents. Specifically the aim was to identify how patterns exposed by the media influence the construction of adolescent's body image and how this relation can modify the eating choices and make them more vulnerable to eating disorders.

Method: literature review of original scientific articles and review using the databases Medline, PubMed and SciELO in English and Portuguese, from 1992 to 2016. We included the publications that contained at least one of the descriptors used and that associated eating behavior with adolescents.

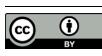
Results: The media, in the present days, exert great power in the construction of the corporal image and in the formation of esthetical standards, which affect the adolescents in their phase of vulnerability. To these characteristics and others related to age, young people end up changing their eating patterns, becoming potential risks for the development of eating disorders. **Conclusion:** Adolescents are a risk group for the development of eating disorders and media is a contributing factor in dysfunctional eating behavior.

Keywords: Adolescent, Feeding Behavior, Body Image, Video-audio Media.

Resumo

Introdução: A adolescência é uma fase marcada por mudanças físicas, comportamentais e psicosociais e também por transformações relacionadas à formação da autoimagem. **Objetivo:** Verificar a relação entre mídia e escolhas alimentares na imagem corporal e no possível desenvolvimento de transtornos alimentares em adolescentes. Especificamente objetivou-se identificar como os padrões expostos pela mídia influenciam na construção da imagem corporal de adolescentes e como essa relação pode modificar as escolhas alimentares e deixá-los mais vulneráveis aos transtornos alimentares. **Método:** Foi realizada uma revisão de literatura que utilizou as bases de dados Medline, PubMed e a biblioteca

Received on Apr. 2, 2019; 1st Revision on June 23, 2019; 2nd Revision Aug. 7, 2019; Accepted on Sept. 16, 2019.

 This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

SciELO, em inglês e português, no período de 1992 a 2016. Foram incluídas as publicações que continham pelo menos um dos descriptores utilizados e que associavam o comportamento alimentar com adolescentes. **Resultados:** Nos dias atuais, a mídia exerce grande poder na construção da imagem corporal e na formação de padrões estéticos, os quais afetam os adolescentes em sua fase de vulnerabilidade. Considerando essas características e outras relacionadas com a idade, os jovens acabam modificando seus padrões alimentares, tornando-se vulneráveis para o desenvolvimento de transtornos alimentares. **Conclusão:** Os adolescentes são um grupo de risco para o desenvolvimento de transtornos alimentares e a mídia é um fator contribuinte no comportamento alimentar disfuncional.

Palavras-chave: Adolescentes, Comportamento Alimentar, Imagem Corporal, Mídias Audiovisuais.

1 Introduction

The age in which we live is distinguished from all precedents. It is named postmodern by many intellectuals marked by globalization and the technological revolution that has reduced borders between countries, peoples, and customs. Immediate communication generates reciprocal influences all around the world. The sociologist Zygmunt Bauman (2001) created the concept of *liquid modernity* to define the present. In several of his works, such as in "Intimations of Postmodernity," he used the term "liquid" as opposed to "solid" to interpret the main characteristic of our age: fluidity. According to Bauman (1999) since the technological revolution, contemporary life forms resemble fluidity, not maintaining the same identity for long, because social relationships and human ties are marked by fragility and vulnerability. These changes have been occurring since the second half of the twentieth century, and, in this new scenario, according to the author, time overlaps with space; people move, that is, they communicate without leaving their place. Liquid, fluid time allows the instantaneous and the temporary. Also, according to Bauman (1992), unlike previous times that kept their form and values for a long time, our time produces less certainty. On the one hand, the sense of individual freedom grew in this society; on the other hand, this does not necessarily guarantee a state of satisfaction since while it provides more freedom, it transfers to the individuals the responsibility for their actions. Faced with an uncertain future, the dominant feeling is to live the present only for oneself, and this instability and lack of perspective generate anguish and a feeling of loneliness. For the Polish sociologist, the fact that people are connected by the World Wide Web gives them neither the creation of stable bonds nor the experience of real sharing.

This understanding of contemporary society is based on the analysis conducted here regarding the eating behavior of adolescents. This is because the fluidity of changes also generates the intertwining between external and internal values to a given culture. As we read in *Culture praxis*, today we can ask to what extent geophysical factors, both natural and artificial boundaries, separate the identities of peoples and

cultures since in any contemporary sociocultural formation the distinctions between “inside” and “outside” are blurred (Bauman, 1999, p. 72).

Thus, considering adolescents as an age group in transition, living under the full technological revolution, and the effects of the media, it is clear how much this group is subject to the vulnerabilities inherent in this condition. This is because, in the specific aspect that motivated the research here, we must consider that the social changes mentioned above apply to all aspects of life and very intensely to the very way of eating. For example, in Brazil until the 1980s, unlike highly industrialized countries, it was uncommon to eat in public settings. This cultural change, resulting from economic transformations, has mainly affected the dietary patterns of children, youth, and adolescents of present generations, as they were born in an industrialized and globalized society. This means that this population is more susceptible to market values than previous generations, including the incorporation of aesthetic standards typical of this logic. Therefore, the desire to adhere to models brings them anguish and frustration.

2 Method

We performed a literature review using the Medline, PubMed databases, and the SciELO electronic library to identify scientific articles published from 1992 to 2016. This period was demarcated by the research objective, which consisted of verifying the behavior of adolescents under the influence of the media, a phenomenon that has been growing rapidly since the 1990s. This growing influence is evidenced by the dates of the articles presented in both Appendices, as they show a concentration of publications since the end of that decade, signaling the interest by the subject in more recent years. In the indexers, we used the terms “adolescentes,” “comportamento alimentar,” “imagem corporal,” “transtornos alimentares,” “mídia” and their English correspondents “adolescents,” “eating behavior,” “body image,” “eating disorder” and “media.” This search included publications in English and Portuguese that contained at least one of the selected descriptors and associated eating behavior with adolescents. About 150 articles were found. However, by making their classification, 55 articles were more related to the specific objective of this research. All were important for the general understanding of the subject, but only those that were used to support this article are listed in Appendices A and B, which is 10 in English and 25 in Portuguese.

3 Results and Discussion

3.1 The cult to the thinness

Beauty-related thinness is a pattern that has been created in the West since the second half of the twentieth century. Probably the most striking image of this trend was the British model Leslie Lawson, better known as Twiggy. Only 16 years old, with short hair and sunken eyes, she was displayed in an almost anorexic image that became known worldwide, becoming a precursor to thinness in the 1960s. With the rise of media power, the spread of this pattern has been amplified, reaching its peak since the 1990s.

Souto & Ferro-Bucher (2006) highlight that the emphasis of contemporary society on the ideal of thinness, the intense media advertisements about a multitude of dietary regimes and products, as well as the growth of gyms and magazines on the subject, provide the sociocultural environment that justifies weight loss, bringing with it a symbolism that physical beauty provides self-control, power and "modernity". However, this idealized body image is an impossible or inappropriate pattern, incompatible for most of the population.

For the authors Andrade & Bosi (2003), the cult to the thinness is directly associated with the image of power, beauty and social mobility, generating a contradictory, "schizophrenizing" picture, considering that, through the written and television media, the food industry sells fat, with the appeal to hypercaloric foods, while society charges thinness.

Media, a term used in Brazil to refer to the means of communication dedicated to disseminating information, is no neutral. Today, it plays a decisive role in creating and disseminating ideas, behaviors and, therefore, exerting a strong ideological function over society as a whole, unlike in previous times, in which the family, the churches and the school were the main educational institutions. Setton (2002) specifically discusses the media as a pedagogical instrument and its role in the school, noting that it has changed social relationships that were previously stable. Due to its presence in contemporary life, its relationship with adolescents is a fundamental fact for understanding their eating behavior.

With the onset of adolescence, food choices become more autonomous and independent. However, this greater autonomy in decision making seems to be associated with an increase in inappropriate eating behaviors, contrary to what would be desirable (Neumark-Sztainer et al., 2011).

For Fisberg (2000, apud Bertin et al., 2008, p. 436),

This eating behavior is linked to the patterns expressed by the age group to which they belong, by the consumption of foods with high energy value and low in nutrients, omission of meals, early ingestion of alcoholic beverages and tendency to dietary restrictions, whose practices may contribute to changes in the nutritional status.

In this context, understanding the eating behavior requires reflection on the act most intrinsic to human survival and involving historical and sociological aspects: who is the eating individual? Where and how does he eat? Why does he feed one way and not another? The discussion about these questions involves interdisciplinary dimensions of Health and Psychology, as well as socioeconomic and marketing factors (Köster, 2009).

Increased media access in adolescence has been associated with weight gain and lower physical fitness in adulthood, body dissatisfaction, inability to control body weight, and the risk behaviors for eating disorders (Benowitz-Fredericks et al., 2012).

According to Coimbra (2001), the power of the media is one of the most important social equipment to produce dominant schemes of meaning and interpretation in the world. From this perspective, "being beautiful" and "being thin"

is configured as a model of unity propagated by the media that produce ways of existing and relating.

The increasing prevalence of eating disorders, the growth of the media, and the expansion of health, diet, and dietary information are factors that should be studied. Thus, the specific contribution of this article is the approach of the relationship between media and food choices that may affect body image and the possible development of eating disorders in adolescents.

Therefore, it is important to consider adolescence not only as a biological phase of life but to relate it to the different social contexts in which it is inserted. Lopes et al. (2008, p. 65) pointed out:

The debate about the conceptions related to youth and adolescence is essential, because from them their ways of being in the world will be portrayed and interpreted and, moreover, the way society is organized in the attention to these phases of life, especially the way in which the rights and duties of adolescents and young people are configured and what are the social and political actions claimed.

Thus, studying the eating behavior of adolescents involves more complex issues that go beyond the biological act, as they also relate to their psychosocial context.

3.2 Adolescence and body image

Adolescence is a phase that precedes adulthood. It is commonly understood as a preparation for it, although we know that there is no separation between “preparing for something” and the act of living. This is because, essentially, there is only living, a continuous process without rigid demarcations.

Adolescence is generally understood as a phase of existence characterized by the transition between childhood and adulthood. However, historically, these passages varied, and there was not always an understanding of them. Also, even with globalization, there are societies in which adolescence does not exist.

For the World Health Organization, adolescents, aged between 10 and 19 years old, is defined as a period of life that deserves particular attention. In Brazil, it is legally determined by the Child and Adolescent Statute as an age group that extends from 12 to 18 years old (Brasil, 2002). Castro et al. (2010) state that this period is characterized by several physical, behavioral, and psychosocial changes, among others, and it is marked by transformations related to the formation of the individual's self-image. The diversity and intensity of these changes together with rebellious attitudes, an attempt at independence, a desire for transgression, and a lack of concern for a distant future can influence eating habits and other behaviors that tend to impact on health and wellbeing of these adolescents.

In most industrialized societies, characteristics related to the discovery and experience of multiple social and emotional aspects are incorporated during adolescence. As a transitional phase, for most of the authors who supported this research, adolescents may engage in risky behaviors that are capable of compromising their physical and mental health. Several behaviors can be risky such as the use of

alcohol, cigarettes, and other drugs, risky sexual behavior, antisocial behavior, suicidal behavior, unhealthy eating habits, improper physical activity, among others (Zappe & Dell'Aglio, 2016).

For Frois et al. (2011), this phase of life is called adolescence, which is the process of valuing typical characteristics that, in theory, precede adult social duties and roles, such as the construction and appropriation of body identity and the experimentation of new body references.

Also, for the authors in this search, adolescents are faced with new affective, hormonal and physical demands. Therefore, the body image will need to adjust to their new demands. According to Castro et al. (2010), their body image can be defined as the perception of the individual's body based on the sensations and experiences lived throughout life. It can be influenced by several factors of physical, psychological, environmental, and cultural origin within the subjectivity of each human being, such as gender, age, media, beliefs, race, and values.

Body image is the mental figure formed about body size, appearance, and shape (Schilder, 1999). This construct is multifaceted and involves two dimensions: perceptual and attitudinal. The perceptual dimension refers to the accuracy in judging body size (Ferreira et al., 2014). The attitudinal dimension can be subdivided into three components: cognitive, behavioral and affective.

The cognitive component is about the beliefs and thoughts related to the body (Ferreira et al., 2014). According to the same authors, investments in the body to improve physical appearance as the main criterion for self-evaluation are cognitive aspects of body image. Body-related behaviors characterized the behavioral component of body image. Avoidance and body check stand out among them as they evaluate parameters of the individual in judging their success or failure in weight control (Shafran et al., 2004). Thus, individuals dissatisfied with their body image tend to present rituals of weighing, measuring and comparing their body with other individuals (Fairburn et al., 1999). These behaviors occur because, in Western societies, characterized by increasing consumption and competitiveness, people are induced to pursue a particular body pattern.

Finally, the affective component is about the feelings of the body. It involves body dissatisfaction, which can be understood as the negative evaluation of their body (Ferreira et al., 2014) and is currently observed in both women and men (Cafri et al., 2005; Murnen, 2011). Also, it can be influenced by several factors, such as media, age, gender, Body Mass Index (BMI), physical activity practice, among others (Damasceno et al., 2006). Frois et al. (2011, p. 74) state that:

In this process of construction and cyclic reconstruction of body image are all situated - children, young people, adults and the elderly, but it is during adolescence that a typical process of mourning occurs in the infant body, which allows a significant change in the body positioning in the body world.

Thus, even the process of the body image reconstruction is a constant possibility throughout life, this demand in adolescence becomes unquestionable, because the contradictions presented do not revolve only around the desire to have a different

body but a relentless change of the body driven by hormonal and physical issues, generating demands for structural adjustment.

Damasceno et al. (2006, p. 85) point out that: "Older people seem to be less influenced, or perhaps due to biological factors, have less desire to have a worked out body", showing less body dissatisfaction compared to younger people".

Several studies showed that older individuals are less demanding about their appearance. However, young people are more exposed to the effects of the cultural industry and are compelled to desire a "perfect body" dictated by the same industry, a factor that can generate anguish, frustration, and suffering. This means that the more a society is subjected to the logic of consumption and the cultural industry, the more it causes these feelings in its adolescents.

Studies have shown that body dissatisfaction can lead to inappropriate eating behaviors in search of the supposedly ideal body (Alves et al., 2008; Bosi et al., 2008). These behaviors may be related to the development of eating disorders (Phillippi & Alvarenga, 2004).

Frois et al. (2011) added that young people seek idealized figures, which is typical of their existential phase. They build these idealizations based on identifying figures but based on safe and satisfying parenting figures that act with clear boundaries, indicating reasonable authority and sustaining a body image that the adolescent can seek opposition, desire new paradigms, and later on appropriating of body identity. Having parents with a non-conflictive organization of their corporeality, in harmony with the way they see and relate in the world, is indicative of healthy ways for adolescents to face conflicts with body image. Thus, the adolescent can build a satisfactory body identity for himself, a body image congruent with his experiences, perceptions, and subjectivities. In other words, having a healthy family reference on how to deal with their bodies, adolescents will be better able to cope with the imposition of patterns typical of the consumer society and the cultural industry.

3.3 Eating behavior

According to the sources consulted in this research, the behavior is understood as a joint function of phylogenetic factors that operate during the evolution process of a given species, and of ontogenetic factors, which operate in the interactions of a given organism of that species with its environment (Catania, 1999).

According to Quaioti & Almeida (2006), eating behavior reflects interactions between the physiological, psychological state, and environmental conditions of an individual.

The growing search for a better understanding of eating behavior has been observed in the literature since the 1990s. However, according to Toral (2006), few authors have an explicit definition, and it is common to limit the debate of the theme to the understanding of their influences, which include a complex range of nutritional, demographic, social, cultural, environmental and psychological factors.

For Carvalho et al. (2013), eating behavior can be defined as all forms of living with food. Similar to the concept of Garcia (1999) and found in the study by Vaz & Bennemann (2014), the eating behavior refers to attitudes related to eating practices in

association with sociocultural attributes, such as the individual's intrinsic subjective aspects and of a community that are involved in the act of eating or the food itself.

Philippi et al. (1999, apud Matias & Fiore, 2010, p. 55) in their studies stated that "Eating behavior is a set of actions related to food, which begins with decision, availability, preparation, utensils, times, and division of meals and ending with ingestion".

Therefore, as defined by Atzingen (2011), eating behavior ends up becoming very complex, because eating is a social activity that goes beyond the basic needs of food, indispensable to the development of vital values, common to every human being, and associated with social relationships, the choices inserted in each individual through generations and the sensations provided by the senses.

When eating, the individual seeks to meet their physiological and hedonic needs. Therefore, this behavior can never be defined based on the individual as something unique and isolated but based on their relationships with the environment. This is because it cannot be forgotten that in human society all individuals are subject to the social relationships of their time and, even if they want to, they have little chance of completely changing this society during their existence. In human society, there is no "me" without "we," and this relationship between individual and society is especially strained during adolescence.

Returning to the specific point of this study, we emphasize that the profound body, psychological, and social transformations that occurred in adolescence affect eating behavior (Nunes & Guimarães, 2009).

Adolescents undergo physical, social, and psychological changes at this stage of life and also their eating behavior is influenced by these transformations, being affected by internal and external factors. Internal factors are related to self-image, values, preferences, physiological needs, psychosocial development, etc., while external factors correspond to family group habits, social and cultural rules, media influence, socializing with friends, and their own experiences of the individual (Gambardella et al., 1999).

Adolescents are a nutritionally vulnerable group, considering their increased nutritional needs, dietary and lifestyle patterns, and their susceptibility to environmental influences (Philippi, 2008; World Health Organization, 2005). Thus, their access to food and nutrition information and monitoring of food consumption are important to identify a risk behavior.

3.4 Media and behavior

As stated earlier, the media, synonymous with "social media," includes vehicles responsible for the dissemination of information, such as radio, newspapers, magazines, television, video, among others (Gomes, 2001).

Today, the media is one of the institutions responsible for education in the modern world, bringing both benefits and harms, accounting for the transmission of values and standards of conduct and socializing many generations (Setton, 2002).

The technological revolution has completely changed how information is obtained, the types of communication and even the way people live together. The study developed by Beleli (2015) discusses the importance that the image assumed in this

new context in which affinities are initially perceived through the circulation of photos, influencing the selection and choice of partners. For her, having a state-of-the-art mobile phone not only inserts the individuals in modern imaginations but also gives them a certain power over information, including as content producers, enabling the expansion of the circulation of various moralities.

As mentioned earlier, this is a datum that characterizes our age as opposed to earlier times experienced by humanity. On the one hand, this is an achievement that brought people together and made information easier. On the other hand, according to Toral (2006), quite incisively and even aggressively, the media dictates rules and changes behaviors.

In the specific case of adolescents, Fischer (2002) warns that the media undeniably contribute to learning about the ways of behaving and constituting themselves. The author believes that this influence goes beyond a basic source of leisure, becoming an extremely powerful place in the production and circulation of a series of values, conceptions, and representations related to everyday learning about who we are, what we should do with our body, among other questions. Thus, perceptions about ourselves and what it is to be a healthy person change historically, as shown by the research of Sibilia & Jorge (2016). They examined how the “medicalization of life” in media discourses influences the production of subjectivities. According to the authors,

These media manifestations reinforce the legitimacy of scientific knowledge and multiply the beliefs based on its effectiveness, and promote the ideal profile that we should aim for and that everyone should try to achieve, suggesting that wellbeing and high productive performance are available for all who fight for it (Sibilia & Jorge, 2016, p. 40).

Currently, advertising is another important influence on eating behavior. Several studies have shown a positive association between the hours spent watching television and the weight of individuals (Laus, 2012).

Contento (2010), Nestle et al. (1998), Pollard et al. (2002) state that the media is capable of shaping numerous aspects related to food, and, according to Laus et al. (2011), this influence occurs through food consumption patterns and the established ideals of beauty.

As a consequence of the media's obsession with displaying attractive bodies, many people seek an idealized physical appearance, reinforcing values and norms that condition with attitudes and behaviors related to body size and weight (Russo, 2005).

Thus, the desire to change their body proportions often leads people to dietary manipulations that can have negative health consequences (Spear, 2002) and, in some cases, even leading to death.

Based on this, some researchers have been studying the effect of media images on eating behavior and have already found evidence that these cultural norms have a significant impact on their diet. Experimental studies of the association between these variables have used questionnaires as an evaluation measure of the amount of food ingested after visualizing stimuli or attitudes suggestive of eating disorders (Laus, 2012).

3.5 Eating disorders

Eating disorders (EDs) are multidimensional phenomena resulting from the interaction of personal, family, and socio-cultural factors, characterized by intense concern with food, weight, and body (Souto & Ferro-Bucher, 2006).

For Leal et al. (2013), the EDs have a multifactorial etiology, that is, they are different interacting factors for the development and perpetuation of the disease. They also add that eating disorders have diagnostic criteria based on psychological, behavioral, and physiological characteristics, which are characterized by severe disturbances in eating behavior and body image.

According to Souza et al. (2014, p. 2):

Eating disorders (ED) are characterized by significant changes in eating attitudes and marked dissatisfaction with body image. Typical ED peculiarities related to classic symptoms are severely restrictive diets, irregular food intake, food aversions, compulsions, and purging, and compensatory behaviors.

Eating disorders usually have their first manifestations in childhood and adolescence (Appolinário & Claudino, 2000). For Castro et al. (2010), the non-acceptance of their bodies by adolescents is positively associated with depression and eating disorders, such as anorexia and bulimia. There has also been an accelerated increase in the prevalence of overweight and obesity among adolescents in various parts of the world, including Brazil.

According to Souto & Ferro-Bucher (2006, p. 695), “the western sociocultural panorama of extreme valorization of thinness, with the pressure to lose weight interacting with other biological, psychological, and family factors generates a concern with the body and a pathological dread of getting fat”.

The most well-known cases are anorexia nervosa (AN) and bulimia nervosa (BN). When a disorder does not meet all diagnostic criteria for AN or BN, it is called an unspecified eating disorder (UEAD) (American Psychiatric Association, 1994).

For Gonçalves et al. (2013), anorexia is characterized by a desire for thinness, which leads to monotonous and ritualized eating behavior and significant weight loss, especially in children or adolescents whose low caloric intake is reflected in developmental delay. It can be a restrictive type (energy intake and carbohydrate and lipid consumption limited) and a purgative type (in which frequent episodes of binge eating and purging occur).

BN can be classified according to the compensatory method adopted in purgative (characterized by induction of vomiting or abuse of laxatives and diuretics) or non-purgative (marked by the practice of intense physical activity or fasting). The authors also add that among UEAD, there are subclinical AN and BN, binge eating (clinical or subclinical), purging (clinical or subclinical), among others, including UEAD that do not fit the described subtypes.

4 Final Considerations

This research concluded that the media had become an educational body that defines, regulates and disciplines bodies, dictating aesthetic standards according to market interests. Adolescence is a period of life of great change, fragility and emotional instability, in which the individual is building a body identity and seeking body references. Considering this important transition, we found that the media produces feelings of body dissatisfaction in adolescents from the moment they disseminate and propagate a certain model of the "ideal body". This is because their food choices strongly influenced by the aesthetic standard that the media establishes, do not allow them to reach this model.

At this stage of life, physical, psychological, and social transformations make adolescents vulnerable in all aspects, including nutritional, as they become more autonomous and begin to make their own food decisions. However, immaturity, which is inherent in this stage of life, is a factor inhibiting the realization that these decisions, even though they appear to be the result of their sole and sole will, are not. Even though the degree of individual freedom has increased in today's society, it is limited in the face of media power.

According to the sources used for this study, adolescents are a risk group and become more vulnerable and susceptible to developing eating disorders and being affected by certain diseases. As a powerful device in recent years, the media contributes to creating dysfunctional eating behaviors. However, for the onset of eating disorders, which are multifactorial in origin, other factors are influential, such as parental models and genetic predisposition.

Relating the results of the research to the sociological conception mentioned at the beginning of this article, and specifically in the case of adolescents, networking and media effects become factors that generate anxiety and feelings of loneliness, factors capable of generating psychological disorders, and inappropriate eating behaviors.

Finally, we return to the characteristics of today's society, marked by constant change. This fluidity requires a comprehensive understanding of the issue of adolescence and its forms of eating, and we should consider the interaction of various factors and the social context in which adolescents are inserted. Such factors are the individual and social groups and classes. In a time marked by great contradictions and social inequalities such as we live in the early 21st century, while some have abundance, others have nothing. While some feed exclusively to satisfy hunger and survive, others are driven by factors that go beyond physiological needs. Adolescents are inserted in this sphere of subjective order as they are more subject to the power of the media and the aesthetic standard it determines. Breaking this is difficult for them, but if society is always in the process, it means that it is possible to challenge the very logic that governs it.

An example of this possibility is that at the time these final lines were written, adolescents became news in various parts of the world. On March 15, 2019, they held "Fridays for future" school strikes in defense of the environment and the survival of the planet, a movement that began in 2018 with protests by the Swedish student of 15 years old, Greta Thunberg. With a creative mosaic of posters, the teens conveyed to the world a critical message in the form of a question: "What is this world that adults

have bequeathed to us?" These manifestations are a sign that society is moving, despite the prevailing logic. They inspire us with the following question about prospects: If adolescents can defend the planet's survival, why won't they be able to protest the aesthetic dictatorship imposed by the media?

References

- Alves, E., Vasconcelos, F. A., Calvo, M. C., & Neves, J. (2008). Prevalência de sintomas de anorexia nervosa e insatisfação com a imagem corporal em adolescentes do sexo feminino do município de Florianópolis, Santa Catarina, Brasil. *Cadernos de Saúde Pública*, 24(3), 503-512. PMid:18327438. <http://dx.doi.org/10.1590/S0102-311X2008000300004>.
- American Psychiatric Association – APA. (1994). *Diagnostic and statistical manual of mental disorders (DSM-IV)*. Washington: APA.
- Andrade, A., & Bosi, M. L. M. (2003). Mídia e subjetividade: impacto no comportamento alimentar feminino. *Revista de Nutrição*, 16(1), 117-125. <http://dx.doi.org/10.1590/S1415-52732003000100012>.
- Appolinário, J. C., & Claudino, A. M. (2000). Transtornos alimentares. *Revista Brasileira de Psiquiatria*, 22(Supl. 2), 28-31. <http://dx.doi.org/10.1590/S1516-44462000000600008>.
- Atzinger, M. C. B. C. (2011). *Sensibilidade gustativa de adultos de uma instituição universitária do município de São Paulo* (Tese de doutorado). Universidade de São Paulo, São Paulo.
- Bauman, Z. (1992). *Intimations of postmodernity*. London: Routledge.
- Bauman, Z. (1999). *Culture as praxis*. London: SAGE Publications Ltd.
- Bauman, Z. (2001). *Modernidade líquida*. Rio de Janeiro: Editora Zahar.
- Beleli, I. (2015). O imperativo das imagens: construção de afinidades nas mídias digitais. *Cadernos Pagu*, 44, 91-114. <http://dx.doi.org/10.1590/1809-4449201500440091>.
- Benowitz-Fredericks, C. A., Garcia, K., Massey, M., Vasagar, B., & Borzekowski, D. L. (2012). Body image, eating disorders and the relationship to adolescent media use. *Pediatric Clinics of North America*, 59(3), 693-704, ix. PMid:22643174. <http://dx.doi.org/10.1016/j.pcl.2012.03.017>.
- Bertin, R. L., Karkle, E. N. L., Ulbrich, A. Z., Stabelini Neto, A., Bozza, R., Araujo, I. Q., & Campos, W. (2008). Estado nutricional e consumo alimentar de adolescentes da rede pública de ensino da cidade de São Mateus do Sul, Paraná, Brasil. *Revista Brasileira de Saúde Materno Infantil*, 8(4), 435-443. <http://dx.doi.org/10.1590/S1519-38292008000400009>.
- Bosi, M. L. M., Luiz, R. R., Uchimura, K. Y., & Oliveira, F. P. (2008). Comportamento alimentar e imagem corporal entre estudantes de educação física. *Jornal Brasileiro de Psiquiatria*, 57(1), 28-33. <http://dx.doi.org/10.1590/S0047-20852008000100006>.
- Brasil. (2002, 16 de julho). Lei nº 8069, de 13 de julho de 1990. Dispõe sobre o Estatuto da Criança e do Adolescente e dá outras providências. *Diário Oficial [da] República Federativa do Brasil*, Brasília, seção 1.
- Cafri, G., Thompson, J. K., Ricciardelli, L., McCabe, M., Smolak, L., & Yesalis, C. (2005). Pursuit of the muscular ideal: physical and psychological consequences and putative risk factors. *Clinical Psychology Review*, 25(2), 215-239. PMid:15642647. <http://dx.doi.org/10.1016/j.cpr.2004.09.003>.
- Carvalho, P. H. B., Filgueiras, J. F., Neves, C. M., Coelho, F. D., & Ferreira, M. E. C. (2013). Checagem corporal, atitude alimentar inadequada, insatisfação com a imagem corporal de jovens universitários. *Jornal Brasileiro de Psiquiatria*, 62(2), 108-114. <http://dx.doi.org/10.1590/S0047-20852013000200003>.
- Castro, I. R., Levy, R. B., Cardoso, L. O., Passos, M. D., Sardinha, L. M. V., Tavares, L. F., Dutra, S. P., & Martins, A. (2010). Imagem corporal, estado nutricional e comportamento com relação a peso entre adolescentes brasileiros. *Ciência e Saúde Coletiva*, 15(Supl. 2), 3099-4108. <http://dx.doi.org/10.1590/S1413-81232010000800014>.

- Catania, A. C. (1999). *Aprendizagem: comportamento, linguagem e cognição*. Porto Alegre: Artes Médicas Sul.
- Coimbra, C. M. B. (2001). Mídia e produção de modos de existência. *Psicologia: Teoria e Pesquisa*, 17(1), 1-4. <http://dx.doi.org/10.1590/S0102-37722001000100002>.
- Contento, I. R. (2010). Overview of determinants of food choice and dietary change: implications for nutrition education. In I. R. Contento. *Nutrition education: linking research, theory, and practice* (pp. 28-49). Burlington: Jones & Barlett Learning.
- Damasceno, V. O., Vianna, V. R. A., Vianna, J. M., Lacio, M., Lima, J. R. P., & Novaes, J. S. (2006). Imagem corporal e corpo ideal. *Revista Brasileira de Ciência e Movimento*, 14(1), 87-96. <http://dx.doi.org/10.18511/rbcm.v14i2.691>.
- Fairburn, C. G., Shafran, R., & Cooper, Z. (1999). A cognitive behavioral theory of anorexia nervosa. *Behaviour Research and Therapy*, 37(1), 1-13. PMid:9922553. [http://dx.doi.org/10.1016/S0005-7967\(98\)00102-8](http://dx.doi.org/10.1016/S0005-7967(98)00102-8).
- Ferreira, M. E. C., Castro, M. R., & Morgado, F. F. R. (2014). *Imagem corporal: reflexões, diretrizes e práticas de pesquisa*. Juiz de Fora: Editora da UFJF.
- Fischer, R. M. B. (2002). O dispositivo pedagógico da mídia: modos de educar na (e pela) TV. *Educação e Pesquisa*, 28(1), 151-162. <http://dx.doi.org/10.1590/S1517-97022002000100011>.
- Frois, E., Moreira, J., & Stengel, M. (2011). Mídias e a imagem corporal na adolescência: o corpo em discussão. *Psicologia em Estudo*, 16(1), 71-77. <http://dx.doi.org/10.1590/S1413-73722011000100009>.
- Gambardella, A. M. D., Frutuoso, M. F. P., & Franch, C. (1999). Prática alimentar dos adolescentes. *Revista de Nutrição*, 12(1), 5-19. <http://dx.doi.org/10.1590/S1415-52731999000100005>.
- Garcia, R. W. D. (1999). Representações sociais da alimentação e saúde e suas repercussões do comportamento alimentar. *Ciência & Saúde Coletiva*, 7(2), 51-68.
- Gomes, P. B. M. B. (2001). Mídia, imaginário de consumo e educação. *Educação & Sociedade*, 22(74), 191-207. <http://dx.doi.org/10.1590/S0101-73302001000100011>.
- Gonçalves, J., Moreira, E. A. M., Trindade, E. B. S. M., & Fiates, G. M. R. (2013). Transtornos alimentares na infância e na adolescência. *Revista Paulista de Pediatria*, 31(1), 96-103. PMid:23703051. <http://dx.doi.org/10.1590/S0103-05822013000100016>.
- Köster, E. P. (2009). Diversity in the determinants of food choice: a psychological perspective. *Food Quality and Preference*, 20(2), 70-82. <http://dx.doi.org/10.1016/j.foodqual.2007.11.002>.
- Laus, M. F. (2012). *Influência do padrão de beleza veiculado pela mídia na satisfação corporal e escolha alimentar de adultos* (Tese de doutorado). Universidade de São Paulo, Ribeirão Preto.
- Laus, M. F., Costa, T. M. B., & Almeida, S. S. (2011). Body image dissatisfaction and its relationship with physical activity and body mass index in Brazilian adolescents. *Jornal Brasileiro de Psiquiatria*, 60(4), 315-320. <http://dx.doi.org/10.1590/S0047-20852011000400013>.
- Leal, G. V., Tucunduva, P. S., Ozores, P. V., Athanássios, C. T., & Santos, A. M. (2013). O que é comportamento de risco para transtornos alimentares em adolescentes?. *Jornal Brasileiro de Psiquiatria*, 62(1), 62-75. <http://dx.doi.org/10.1590/S0047-20852013000100009>.
- Lopes, R. E., Adorno, R. C. F., Malfitano, A. P. S., Takeiti, B. A., Silva, C. R., & Borba, P. L. O. (2008). Juventude pobre, violência e cidadania. *Saúde e Sociedade*, 17(3), 63-76. <http://dx.doi.org/10.1590/S0104-12902008000300008>.
- Matias, C. T., & Fiore, E. G. (2010). Mudanças no comportamento alimentar de estudantes do curso de nutrição em uma instituição particular de ensino superior. *Nutrire*, 35(2), 53-66.
- Murnen, S. K. (2011). Gender and body images. In L. Smolak. *Body image: a handbook of science, practice, and prevention* (pp. 173-179). London: The Guilford.
- Nestle, M., Wing, R., Birch, L., DiSogra, L., Drewnowski, A., Middleton, S., Sigman-Grant, M., Sobal, J., Winston, M., & Economos, C. (1998). Behavioral and social influences on food choice. *Nutrition Reviews*, 56(5), 50-54. PMid:9624880. <http://dx.doi.org/10.1111/j.1753-4887.1998.tb01732.x>.

- Neumark-Sztainer, D., Wall, M., Larson, N. I., Eisenberg, M. E., & Loth, K. (2011). Dieting and disordered eating behaviors from adolescence to young adulthood: findings from a 10-year longitudinal study. *Journal of the American Dietetic Association*, 111(7), 1004-1011. PMid:21703378. <http://dx.doi.org/10.1016/j.jada.2011.04.012>.
- Nunes, C. B., & Guimarães, W. A. (2009). *Alterações do comportamento alimentar na adolescência: anorexia, bulimia e obesidade* (Monografia do curso de psicologia). Universidade Vale do Rio Doce, Governador Valadares.
- Philippi, S. T. (2008). Alimentação saudável e a pirâmide dos alimentos. In S. T. Philippi. *Pirâmide dos alimentos: fundamentos básicos da nutrição* (pp. 1-29). Barueri: Manole.
- Philippi, S. T., & Alvarenga, M. (2004). *Transtornos alimentares: uma visão nutricional*. São Paulo: Manole.
- Pollard, J., Kirk, S. F. L., & Cade, J. E. (2002). Factors affecting food choice in relation to fruit and vegetable intake: a review. *Nutrition Research Reviews*, 15(2), 373-387. PMid:19087412. <http://dx.doi.org/10.1079/NRR200244>.
- Quaioti, T. C. B., & Almeida, S. S. (2006). Psychobiological determinants of food behavior: an emphasis on environmental factors contributing to obesity. *Psicología USP*, 17(4), 193-211. <http://dx.doi.org/10.1590/S0103-65642006000400011>.
- Russo, R. (2005). Imagem corporal: construção através da cultura do belo. *Movimento & Percepção Espírito*, 5(6), 80-90.
- Schilder, P. (1999). *A imagem corporal: as energias construtivas da psique*. São Paulo: Martins Fontes.
- Setton, M. G. J. (2002). Família escola e mídia: um campo com novas configurações. *Educação e Pesquisa*, 28(1), 107-116.
- Shafran, R., Fairburn, C. G., Robinson, P., & Lask, B. (2004). Body checking and its avoidance in eating disorders. *International Journal of Eating Disorders*, 35(1), 93-101. PMid:14705162. <http://dx.doi.org/10.1002/eat.10228>.
- Sibilia, P., & Jorge, M. F. (2016). O que é ser saudável? Entre publicidades modernas e contemporâneas. *Galáxia*, (33), 32-48. <http://dx.doi.org/10.1590/1982-25542016225865>.
- Souto, S., & Ferro-Bucher, J. S. N. (2006). Práticas indiscriminadas de dietas de emagrecimento e o desenvolvimento de transtornos alimentares. *Revista de Nutrição*, 19(6), 693-704. <http://dx.doi.org/10.1590/S1415-52732006000600006>.
- Souza, A. C., Pisciolaro, F., Polacow, V. O., Cordás, T. A., & Alvarenga, M. S. (2014). Atitudes em relação ao corpo e à alimentação de pacientes com anorexia e bulimia nervosa. *Jornal Brasileiro de Psiquiatria*, 63(1), 1-7. <http://dx.doi.org/10.1590/0047-2085000000001>.
- Spear, B. A. (2002). Nutrição na adolescência. In K. Mahan & S. Escott-Stump. *Krause: alimentos, nutrição & dietoterapia* (pp. 247-260). São Paulo: Roca.
- Toral, N. (2006). *Estágios de mudança de comportamento e sua relação com o consumo alimentar de adolescentes* (Dissertação de mestrado). Universidade de São Paulo, São Paulo.
- Vaz, D., & Bennemann, R. (2014). Comportamento alimentar e hábito alimentar: uma revisão. *Revista Uniná Review*, 20(1), 108-112.
- World Health Organization – WHO. (2005). *Nutrition in adolescence: issues for the health sector: issues in adolescent health and development*. Geneva: WHO.
- Zappe, J. G., & Dell'Aglio, D. D. (2016). Variáveis pessoais e contextuais associadas a comportamentos de risco em adolescentes. *Jornal Brasileiro de Psiquiatria*, 65(1), 44-52. <http://dx.doi.org/10.1590/0047-2085000000102>.

Author's Contributions

This article is the result of research on the influence of the media on the eating behavior of adolescents. Carime Bittar and Amanda Soares were responsible for data collection and analysis, writing, and review of the text. All authors approved the final version of the text.

Corresponding author

Carime Bittar

e-mail: carimebf@hotmail.com

Appendix A. Productions in english.

Article Title	Authorship	Date of Publication
Behavioral and social influences on food choice	Marion Nestle; Rena Wing; Learn Birch; Lorelei DiSogra; Adam Drewnowski; Suzette Middleton; Madeleine Sigman-Grant; Jeffery Sobal; Mary Winston; Christina Economos.	1998
A cognitive behavioral theory of anorexia nervosa	Christopher G. Fairburn; Roz Shafran; Zafra Cooper.	1999
Factors affecting food choice in relation to fruit and vegetable intake: a review	Jennie Pollard; Sara F. L. Kirk; Janet Elizabeth Cade.	2002
Body checking and its avoidance in eating disorders	Roz Shafran; Christopher G. Fairburn; Paul Hyman Robinson; Bryan Lask.	2004
Diversity in the determinants of food choice: a psychological perspective	Egon Peter Köster.	2009
Gender and body images	Sarah K. Murnen.	2011
Dieting and disordered eating behaviors from adolescence to young adulthood: findings from a 10-year longitudinal study	Dianne Neumark-Sztainer; Melanie Wall; Nicole I. Larson; Marla E. Eisenberg; Katie Loth.	2011
Body image dissatisfaction and its relationship with physical activity and body mass index in Brazilian adolescents.	Maria Fernanda Laus; Telma Maria Braga Costa; Sebastião Sousa Almeida.	2011
Overview of determinants of food choice and dietary change: implications for nutrition education	Isobel R. Contento.	2010
Body image, eating disorders and the relationship to adolescent media use	Carson Benowitz-Fredericks; Kaylor Garcia; Brintha Vasagar; Meredith Massey.	2012

Appendix B. Productions in portuguese.

Article Title	Authorship	Date of Publication
Prática alimentar dos adolescentes	Ana Maria Dianezí Gambardella; Maria Fernanda Petrolí Frutuoso; Claudia Franch.	1999
Aprendizagem: comportamento linguagem e cognição	Anthony Charles Catania.	1999
A imagem corporal: as energias construtivas da psique	Paul Schilder.	1999
Representações sociais da alimentação e saúde e suas repercuções no comportamento alimentar	Rosa Wanda Diez Garcia.	1999
Transtornos alimentares	José Carlos Appolinário; Angélica M Claudino.	2000
Mídia, imaginário de consumo e educação	Paola Basso Menna Barreto Gomes.	2001
O dispositivo pedagógico da mídia: modos de educar na (e pela) TV	Rosa Maria Bueno Fischer.	2002
Família escola e mídia: um campo com novas configurações	Maria da Graça Jacintho Setton.	2002
Mídia e subjetividade: impacto no comportamento alimentar feminino	Angela Andrade; Maria Lúcia Magalhães Bosi.	2003
Transtornos Alimentares: uma visão nutricional	Sonia Tucunduva Philippi; Marle Alvarenga.	2004
Imagen corporal: construção através da cultura do belo	Renata Russo.	2005
Imagen corporal e corpo ideal	Vinicius Oliveira Damasceno; Viviane Ribeiro Ávila Vianna; Jeferson Macedo Vianna Marcio Lacio; Jorge Roberto Perrout Lima; Jefferson Silva Novaes.	2006
Estágios de mudança de comportamento e sua relação com o consumo alimentar de adolescentes	Natacha Toral.	2006
Alterações do comportamento alimentar na adolescência: anorexia bulimia e obesidade	Cidinéia Barreto Nunes; Wellita de Almeida Guimarães.	2009
Imagen corporal, estado nutricional e comportamento com relação ao peso entre adolescentes brasileiros	Inês Rugani Ribeiro de Castro; Renata Bertazzi Levy; Letícia de Oliveira Cardoso; Michelle Delboni dos Passos; Luciana Monteiro Vasconcelos Sardinha; Letícia Ferreira Tavares; Sheila Potente Dutra; André Martins.	2010
Mídias e a imagem corporal na adolescência: o corpo em discussão	Erica Frois; Jacqueline Moreira; Márcia Stengel.	2011

Article Title	Authorship	Date of Publication
Influência do padrão de beleza veiculado pela mídia na satisfação corporal e escolha alimentar de adultos	Maria Fernanda Laus.	2012
O que é comportamento de risco para transtornos alimentares em adolescentes?	Greisse Viero da Silva Leal; Sonia Tucunduva Philippi; Viviane Ozores Polacow; Táki Athanássios Cordás; Marle dos Santos Alvarenga.	2013
Transtornos alimentares na infância e na adolescência	Juliana de Abreu Gonçalves; Emilia Addison M. Moreira; Erasmo Benício S. de M. Trindade; Giovanna Medeiros R. Fiates;	2013
Checagem corporal, atitude alimentar inadequada, insatisfação com a imagem corporal de jovens universitários	Pedro Henrique Berbert de Carvalho; Juliana Fernandes Filgueiras; Clara Mockdece Neves; Fernanda Dias Coelho; Maria Elisa Caputo Ferreira.	2013
Imagem corporal: reflexões diretrizes e práticas de pesquisa.	Marcela Rodrigues de Castro; Fabiane Frota da Rocha Morgado; Maria Elisa Caputo Ferreira.	2014
Comportamento alimentar e hábito alimentar: uma revisão	Diana Souza Santos Vaz; Rose Mari Bennemann.	2014
Variáveis pessoais e contextuais associadas a comportamentos de risco em adolescentes	Jana Gonçalves Zappe; Débora Dalbosco Dell'Aglio.	2016
O imperativo das imagens: construção de afinidades nas mídias digitais	Iara Beleli.	2015
O que é ser saudável? Entre publicidades modernas e contemporâneas	Paula Sibilia; Marianna Ferreira Jorge.	2016