


Orthorexia in social media: reflections between health and disease


Ortorexia nas mídias sociais: reflexões entre saúde e doença

Mariana Fernandes Costa^{a,b}

 <https://orcid.org/0000-0002-7702-1841>


E-mail: marifcosta@gmail.com

Shirley Donizete Prado^a

 <https://orcid.org/0000-0001-5848-5766>

E-mail: shirley.donizete.prado@gmail.com

Maria Cláudia da Veiga Soares Carvalho^{a,c}

 <https://orcid.org/0000-0001-8286-5689>

E-mail: mariaclaudiaveigasoaresh@yahoo.com.br

^a Universidade do Estado do Rio de Janeiro. Instituto de Nutrição. Rio de Janeiro, RJ, Brasil.

^b Instituto Nacional de Câncer José Alencar Gomes da Silva. Rio de Janeiro, RJ, Brasil.

^c Universidade Federal do Rio de Janeiro. Instituto de Nutrição Josué de Castro. Rio de Janeiro, RJ, Brasil.

Abstract

Our study analyzes articles that address orthorexia in social media and reflects on the role of healthy norms and their balance in the individual's life in contemporary times. The search was conducted between 2015 and 2020 in the VHL Regional Portal, PubMed, Embase, and Scopus databases with the keywords "orthorexia" and "healthy diet." The reference manager used was Zotero[®]. The material was processed by thematic content analysis. The reflections are based on the concept of health articulated with the construction of norms for life by Georges Canguilhem and on the ideas of medicalization, biopower, and biopolitics by Michel Foucault. Nine articles about orthorexia in social media were selected. This analysis generated two main topics: characteristics of orthorexia and influences of social media on orthorexia. Instagram was the most used social media to study content about orthorexia, especially among young women, with an active interest in health and the body. A healthy diet in orthorexia assumes a sense of norm and normal behavior to be followed with no doubt or adaptation. Denaturalizing the healthy diet enables different ways of living the human condition, which values the singular subject in their articulations in the social and cultural context.

Keywords: Healthy Diet; Feeding Behavior; Feeding And Eating Disorders; Social Media.

Correspondence

Mariana Fernandes Costa

Rua Santa Rosa, 91/1704. Niterói, RJ, Brazil. CEP 24240-225.

Resumo

Este trabalho analisa artigos que tratam da ortorexia nas mídias sociais e traz reflexões sobre o papel das normas do saudável e seu equilíbrio na vida do indivíduo na contemporaneidade. A busca de artigos foi realizada entre 2015 e 2020 nas bases de dados BVS Regional, PubMed, Embase e Scopus, com as palavras-chave *orthorexia* e *healthy diet*. O gerenciador de referências utilizado foi Zotero®. O material foi tratado a partir da análise de conteúdo temática. As reflexões estão fundamentadas no conceito de saúde articulado à construção de normas para a vida de Georges Canguilhem e nas ideias de medicalização, biopoder e biopolítica de Michel Foucault. Foram selecionados nove artigos sobre a ortorexia nas mídias sociais. Essa análise gerou dois temas principais: características da ortorexia e influências das mídias sociais na ortorexia. O Instagram foi a mídia social mais utilizada para estudar o conteúdo sobre ortorexia, principalmente entre mulheres jovens, com interesse ativo em saúde e corpo. Uma alimentação saudável na ortorexia assume um sentido de norma e de comportamento normal a ser seguido sem dúvida ou adaptação. Desnaturalizar a alimentação saudável possibilita diferentes formas de viver a condição humana, que valorize o sujeito singular em suas articulações no contexto social e cultural. **Palavras-chave:** Alimentação Saudável; Comportamento Alimentar; Transtornos Da Alimentação; Mídias Sociais.

Introduction

Healthy diet is a topic that has aroused much interest due to the growing concern with a healthier life, associated with the various factors that affect human health, whether genetic, environmental, behavioral, cultural, dietary, and subjective, among others (Sichieri et al. al., 2000). The idea that diet plays an important role in health promotion and disease prevention is increasingly present in the collective consciousness. The focus of discussion on healthy diet is usually organic, physical, and visual, and adequate diet is thought of as a function of following nutritional recommendations. However, health has a multiple and diverse nature, in such a way that considering only one aspect can be very perfectionist and, consequently, rigid and inflexible, thus reducing the possibilities of life (Costa; Carvalho; Prado, 2014).

Dietary norms present in medical-nutritional discourses seek to influence attitudes and practices regarding the quantity and quality of food, incriminating dietary errors as obesity and degenerative diseases. Eating practices are permeated by issues of risk, uncertainty, and trust with which institutional mechanisms seek to legitimize choices and provide security to individuals (Silva, 2008). From this perspective, eating becomes an integral part of the medicalization process, constituting a technology oriented towards self-care and health protection (Zoya, 2015), that is, it is the use of a rational attitude, in an accentuated way, towards food, believing that a healthy diet means eating according to scientific principles considering food only from a nutritional point of view (Viana et al., 2017).

Therefore, the diet is seen as a medicine to improve and/or promote health, disconnected from its cultural, social, and historical meaning (Maciel; Castro, 2013). Thus, medicalization of food is closely linked to the social construction of the notions of healthy diet and the dietary norms of food contemporaneity. This process promotes individual responsibility in relation to the body and the diet, a characteristic strongly associated with orthorexia.

The word orthorexia is a neologism based on the Greek, in which *orthos* means correct, true, and

oréxis, appetite. Thus, it could be translated into “correct appetite,” “correct diet” (Bartrina, 2007). It is the term described for obsessive behavior characterized by fixation on health eating, food quality, and dietary purity. The condition has not been officially recognized as an eating disorder, but the concept, characteristics, interactions, and symptoms are discussed (Martins et al., 2011). Accordingly, the human beings’ search for adaptation to aesthetic values and conduct for an ideal of a disciplined, domesticated body, within the norms of contemporary society, stands out.

Orthorexia was first described in 1997 by the American physician Steven Bratman, author of the book *Health Food Junkies*. This denomination was created by the author to describe his own experience with food. According to the literature, the orthorexia diet consists of progressively eliminating foods, promoting detoxification of the body to prevent contamination by impure substances, such as foods grown with chemical products, industrially processed, with additives and heavy metals in water, refined or non-whole foods, non-fresh or frozen foods, in addition to cooking utensils and storage containers, etc. Thus, foods and methods that allow the body to be purified and that have detoxifying properties are sought of. Any food that is not natural, pure, healthy, or controlled are likely to be rejected (Bratman, 2001; Contreras; Gracia, 2011).

Bratman (2001) also adds that orthorexia seems to be caused by an excessive concern with health, but there are underlying motivations such as fear of diseases, compulsion for complete control of a situation, avoidance of phobias, desire to be thin, improvement of self-esteem, search for spirituality through food, and use of food as a search for identity. Every day becomes an opportunity to correctly eat only foods considered healthy and to punish oneself (fasting, food restriction, or excessive physical exercise) in case one cannot follow the rigid style proposed. This disorder can restrict individuals from their friendships or those who do not follow the same type of diet, considering that frequenting the social environment implies being exposed to other habits that can threaten this conviction.

Underneath, there is a subject with certain characteristics, such as rigidity, demand, search for

perfection, tendency to idealization, and concern with rules and norms. It is common for people to manage several areas of their life according to this profile, with diet being only one expression (Bratman, 2001). Thus, it is understood that the obsession with healthy diet can limit various activities and interests, especially affective relationships, and become physically and psychologically dangerous. However, orthorexia is constantly present in media narratives.

Social media is an increasingly popular and accessible way to collect and share health-related information (Raggatt et al., 2018). Studies have identified problematic features of such content, including stigmatizing language regarding weight, messages related to guilt about food, and praise of thinness, content which many individuals “like” or “follow,” that is, consume (Carrotte; Vella; Lim, 2015). The use of social media is increasing among young adults, and negative effects on body image, depression, social comparison, and eating disorders have been demonstrated. Orthorexia is one of these disorders, verified with high prevalence in populations that are actively interested in health and the body (Bratman, 2001; Turner; Lefevre, 2017).

The orthorexia topic has become an object of research analysis in recent years, gaining more repercussion in the scientific literature, though with a predominance of the biomedical approach (Camargo Jr., 2005; Luz et al., 2019). Therefore, we propose, in this article, from the perspective of qualitative research, to investigate the trend of orthorexia in social media based on the search for articles and to reflect on the role of healthy norms and their balance in the life of the individual in contemporaneity.

Methodology

An integrative bibliographic review of articles published between January 2015 and December 2020 on orthorexia on social media was carried out. The following databases were consulted: VHL Regional Portal, PubMed, Embase, and Scopus, using the keywords “orthorexia” and “healthy diet,” their combinations, and synonyms in title, abstract, and descriptors.

This review has the following steps: identification of the problem and elaboration of the guiding research question; organization of the search strategy for primary studies; data extraction; critical analysis of included studies; synthesis and discussion of results; and presentation of the integrative systematic review (Souza; Silva; Carvalho, 2010).

The guiding question was based on the PICO strategy, in which “P” refers to the study population (social media users); “I,” to the studied intervention (orthorexia); “C,” to the comparison with the intervention (there is no comparison intervention); and “O,” to the outcome of interest (eating practices and body care). Thus, the research question was: “How does orthorexia present itself among social media users?” (Greenhalgh, 2016).

The search was performed by one of the authors, considering both qualitative and quantitative primary studies, without delimitation of geographical zone. To organize the findings, the Zotero® citation manager was used. After screening by title and/or abstract, the criteria for full reading were: articles with a topic alluding to orthorexia on social media, available in full, and published in English, Portuguese, Spanish, or French languages. The selection of studies was independently performed by the research authors and disagreements were decided by consensus. Bibliographic reviews, duplicate publications, and those that used the media only to recruit participants in the research or as a communication tool for conducting interviews were excluded, not being specific material for analysis.

The material was processed by thematic content analysis, adapted by Gomes and Nascimento (2006)

based on Bardin’s (2011) content analysis technique, consisting of: (1) reading the selected texts; (2) identification of key ideas; (3) classification of ideas according to nuclei of meaning; (4) classification of nuclei of meaning into themes; and (5) writing the interpretative synthesis of each theme. For the organization of the analysis, the nucleus of meaning and the theme are part of the same analytical process, the former being the starting point to establish the later; therefore, the theme can include more than one nucleus of meaning and is understood as a broader category.

The theoretical framework used for the reflections of this study is based on the thought of Georges Canguilhem (2011), in his book *On the Normal and the Pathological*, regarding the concept of health articulated with the construction of norms for life, and on the ideas of medicalization, biopower, and biopolitics by Michel Foucault (2011), based on the book *Microphysics of Power*.

Results

Based on the literature review on the topic “orthorexia in the media,” the search process resulted in 249 articles, 238 of which were excluded. After reading 11 articles in full, nine were considered eligible. In Chart 1, the main characteristics of the analyzed articles are described. There are few studies on orthorexia involving the media, and it is rare to find a reflective perspective in articles about the concept and behavior in orthorexia. Instagram was the most used social media in the selected studies.

Chart 1 – Synthesis of the articles that compose the review

Author (Year)/Country	Journal/Database	Study design	Objectives	Media
Greville-Harris, Smithson, Karl (2020)/England	Eating and Weight Disorders/Pubmed	Qualitative analysis	To investigate personal experiences of orthorexia nervosa described in online blogs.	Blogs
Valente et al. (2020)/Netherlands	Appetite/Embase	Mixed method	To include the perspective of those who share content about orthorexia nervosa on Instagram with self-diagnosis to track their development, risk factors, symptoms, and recovery and explore the differences with those who do not have a self-diagnosis.	Instagram

continue...

Chart 1 – Continuation

Author (Year)/Country	Journal/Database	Study design	Objectives	Media
Fixsen, Cheshire, Berry (2020)/ England and USA	Qualitative Health Research/Embase	Qualitative analysis	To investigate orthorexia nervosa from a social construction perspective; to gather perspectives on orthorexia nervosa and the meanings attributed to extremely "healthy" eating practices.	Social networking forum
Pilgrim, Bohnet-Joschko (2019)/ Germany	BMC Public Health/ Pubmed	Mixed method	To analyze the content posted by influencers and communication techniques, as well as propagated body image and the role of health; to evaluate and classify responses to the content, aiming to understand the change in behavior in young people's communication on health-related issues.	Instagram
Santarossa et al. (2019)/Canada	Eating and Weight Disorders/Scopus	Quantitative analysis	To investigate images tagged with #orthorexia on Instagram and analyze the online conversation and profiles of those who share this content.	Instagram
Dickinson, Watson, Prichard (2018)/ Australia	Nutrients/VHL	Quantitative analysis	To describe the nutritional content of clean eating recipes compared with recipes without these claims based on nutritional guidelines.	Clean eating recipe blogs
Raggatt et al. (2018)/Australia	BMC Public Health/ Pubmed	Mixed method	To describe types of contents related to physical inspiration that users access and how they engage with the content; to investigate eating disorders, practice of physical exercises, and psychological suffering of those who access it; and to understand the influence of physical inspiration on health and well-being.	Facebook, Instagram
Turner, Lefevre (2017)/England	Eating and weight disorders/Pubmed	Quantitative analysis	To investigate the relationship between social media use, in particular Instagram, and symptoms of orthorexia nervosa.	Instagram
Carrotte, Vella and Lim (2015)/Australia	Journal of Medical Internet Research/ Pubmed	Quantitative analysis	To identify demographics, mental health, and behaviors related to consumption of three types of social media pages related to health and fitness among youth.	Facebook, Instagram, or Twitter

The main themes present in the debates on orthorexia in social media, identified by thematic content analysis, were: characteristics of orthorexia and influences of social media on orthorexia. Next, we present the reflections based on the main issues raised in the articles on orthorexia and its processes in social media.

Characteristics of orthorexia

Symptoms of orthorexia nervosa can be identified by tests; however, there is no uniformity in the instruments or classification criteria used, and they lack better validation as well (Martins et al., 2011).

Fixsen, Cheshire and Berry (2020) emphasized that as socially constructed disorders, such as orthorexia, are inserted in diagnostic manuals, some points are highlighted. First, with clinically defined conditions, they acquire stigma and delimited identity. Second, their exploration capacity and value in the global market increase. Third, in order to receive or give support, people and professionals feel the need to adopt the language and labels of the disorder. This leads to the following question: who is interested in the inclusion of orthorexia in diagnostic manuals and who seeks its recognition? While some individuals on the healthy diet spectrum may need help and support, there are dangers that lie in medicalizing or “disrupting” what may be a preferred lifestyle.

Canguilhem (2011) contradicted the prevailing thought that pathological phenomena would be simple quantitative variations of normal phenomena. According to the biomedical system, of a positivist nature, there is a reductionist view, focusing only on numbers, not observing the uniqueness and context of the situation. Thus, the author argues that qualitative aspects are necessary in understanding these concepts. The ability to construct norms for life is characteristic of the healthy being, although these norms do not always conform to a classification. According to the author, classification is a social construction that follows the knowledge established and legitimized in Medicine, and the norms are proper to the subject, not even subjects themselves are able to rationally understand everything that is ordered in their body, as the subjects’ process of

adequacy to the environment is continuous and can be surprising. Thus, the constitution of norms and the way of organizing life is key to the understanding of health.

The rules established for classifying diseases, even though based on real experiences, do not express the human condition in its entirety, they are just an aspect of reality, but they present themselves as unique and universal truths. Thus, Canguilhem criticizes the inflexibility of the rules, as the body can be healthy within the disease itself, being able to reorganize and propose new rules. The norm that imprisons the body is not flexible and makes the subject sick, because the healthy human being is capable of creating norms that favor life.

In this sense, every vital status would somehow be normal. The absence of norms would be abnormal, and the pathological status is constituted with norms, in such a way that it could be normal too, as the experience of the living being would be understood as normality, and this would include the disease. The pathological status, then, would be a state that would imply a certain normative way of living, as there would be no life without norms of life. Hence, both statuses can be considered normal, the difference will depend on what a society establishes as normal. Normality is a social and collective category; on the one hand, it dialogues with an “ideal” or with an “average”, comparison between several people within a society. Individuals, in their life context, can say that they are well, happy, or healthy, even if they are classified as sick, if this classification does not include the singular subject.

Therefore, a norm is not enough to classify them as having a disease, one has to think about the subjects’ life and their social and cultural context, as it is not possible to say if the individual is orthorexic only by an instrument. Orthorexia can be included as an eating disorder in the diagnostic manual and there is a tool for its identification, but the proposal is to think about what leads to the unhealthy compliance with the rules and extreme fixation on healthy eating. Thus, it is possible to observe how much the norm operates in the classification, the criteria being, in turn, norms of eating practices.

Carrotte, Vella, and Lim (2015), for example, conducted an online survey aimed at 1,001

young social media users to determine which characteristics predicted the consumption of pages with contents on health and fitness. The participants were asked: "Do you like/follow any of the following types of pages on Facebook, Instagram, or Twitter?". The consumers were predominantly teenage girls. A total of 37.76% participants reported consuming at least one of these three types of content: 30.77% fitinspiration pages; 14.49% detox pages; and 23.48% diet plan/fitness pages.

Conversely, Turner and Lefevre (2017) investigated the relationship between Instagram use and orthorexia nervosa symptoms from an online survey of 680 female social media users following healthy eating profiles. The results suggest a significant relationship between orthorexia nervosa symptoms and Instagram use, with increased use being associated with increased symptoms. The authors also point out that the prevalence of orthorexia nervosa in the participants reflects results found in yoga instructors, nutritionists, Nutrition and Physical Education students, and patients recovering from anorexia nervosa or bulimia nervosa. These are the populations that have an active interest in health and the body, just like the healthy eating community on Instagram.

According to Contreras and Gracia (2011), it seems that the mere fact of being an "eater", "woman," and "adolescent" increases the possibilities of deviation from the norm and the development of diseases related to eating disorders, considering that current studies observe higher prevalence in these groups, following the famous actresses or models. As adolescence and young adulthood are key periods for the development of norms related to health behaviors and body image, social media can influence these norms. Therefore, the context can subjectively and objectively favor the development of orthorexia, in such a way that it is necessary to ensure that this social media content portrays responsible health messages.

Considering the nuances between an obsession with the rules of healthy eating and living with the possibilities of life, the subject will be able to be understood as sick or not. If orthorexic people relativize the norm, manage to redo or make the norm more flexible, they will stop being orthorexic

and will have a good coexistence with the limitations of their life, in their health construction process. A healthy life is a continuous search for solutions to problems.

Furthermore, the norm would always be individual, that is, it would not be the average, but rather related to a limiting notion that would define the maximum of a human being's capacity. The average, by itself, out of context, would not be able to establish the normal or abnormal for a given subject, as certain deviations would not necessarily be pathological indices. In practice, each person develops conditions of normality according to the norms she/he is capable of instituting in life. Hence, orthorexia, understood as a deviation of the subject promoted or encouraged by the media, can result in an experience of suffering in everyday life.

Social media influences on orthorexia

According to the study conducted by Pilgrim and Bohnet-Joschko (2019), Instagram influencers gain the trust and friendship of their followers by projecting visual content focused on body shape and targeted communication techniques. They define diet and physical exercise as factors to be controlled for body perfection. By consuming dietary supplements and wearing tight-fitting branded sportswear, influencers promise a streamlined way to optimize appearance as the key to happiness. The advertising of specific products stands out as the communicative focus. Thus, three categories of communication objectives were identified: knowledge transfer; benevolence; personal comparison and inspiration. Therefore, the researchers concluded that influencers are brand ambassadors, advertisers, and cooperative partners, promoting the chance to achieve the described ideal body, along with mental health and happiness, through the targeted consumption of dietary supplements and sportswear (Pilgrim; Bohnet-Joschko, 2019).

Conversely, in the study conducted by Valente et al. (2020), individuals who share content about orthorexia on Instagram were interviewed and reported that orthorexia is gradually developed and is driven by interaction, mutual reinforcement,

and bio-psycho-interpersonal factors. In addition, three phases that characterize the development of orthorexia were identified: onset, progression, and help-seeking. Regarding the onset, two routes were indicated, both characterized by a “snowball” effect of interacting factors. On the progression of orthorexia, several symptoms were addressed, with the obsession with healthy eating being the most frequent. Most participants were trying to lose weight during orthorexia, but their rationale was health rather than looks. The help-seeking phase refers to the reasons for identifying the problem. Orthorexia had not been noticed by the individuals’ partners until major health problems occurred, which was a barrier to recovery. Although most participants believe that recovery is possible, the respondents agreed that orthorexia is a condition that will always remain in the back of their mind (Valente et al., 2020).

To grasp personal experiences about orthorexia, Greville-Harris, Smithson, and Karl (2020) studied fifteen online blogs written by young women, many of whom played roles in promoting health and well-being, who self-reported to have orthorexia. Three main topics were discussed: initial motivations for a healthier lifestyle; social influences; and when health becomes harmful. The bloggers described how health and diet messages on social media normalize ideas based on fear of food and encourage the notion that detoxifying, restricting, and eliminating food would be the healthiest choice, promoting orthorexic behaviors. However, many of them have suggested that orthorexia was focused on ideals about health and disease prevention, rather than thinness itself (Greville-Harris; Smithson; Karl, 2020).

Based on clean eating recipe blogs, Dickinson, Watson, and Prichard (2018) identified that the evaluated clean eating recipes had a small, significantly higher amount of protein, fat, and fiber than recipes without such claims, but were similar in energy and sugar content, concluding that they may not represent healthier alternatives. They also emphasized that the internet is an increasingly common way for the public to resort to guidelines, and it is useful for health professionals to understand the content circulating in the media to better guide their patients about the quality of

the available information and to develop reliable nutritional publications.

While Canguilhem addressed the singular and the subjects’ conditions to be happy, healthy, and well, that is, the ability to create norms to adapt to the hostility of the environment, Foucault (2011) contributed by discussing this hostility and in what environment, culture, and context the subject is inserted. According to Foucault, medicalization is a concept that can be applied to different areas of life, associated with a discursive practice that shows the strong presence of medical knowledge in the set of discourses about human beings, their nature, and vicissitudes. Medicalization was then deemed as an expression of the diffusion of medical knowledge in the social fabric, of a set of scientific knowledge in common discourse, as an operation of medical practices within a non-therapeutic, but political-social context, with medicine as the background for the entire conception of biopower and biopolitics in microphysics.

Foucault uses the term “biopower” to refer to the practice of modern states and their regulation of those who are subject to it through an explosion of numerous and diverse techniques to achieve the subjugation of bodies and control of populations. With the idea of biopower, the author emphasizes another form of governing the man in the modern world, not only with the characteristic of being docilizing and disciplinary. The ways of living, the cultivation of health, the domains of sexuality, as well as existential suffering, are objects of biopower; therefore, it is a governance strategy to achieve well-being, consisting in a way to control people’s behavior.

Foucault denominates “biopolitics” as the medicine not as sovereign in the exercise of power, but rather as a discourse that composes political strategies for managing life, being a policy that concerns the management of life, particularly as it manifests itself at the level of populations. Hence, the idea of life as a value and of control for health as a moral conduct engages the maintenance of health in the collective space, moralizing the behaviors towards the government of the self and habits in general. Therefore, the medicalization of life emerges in the individuals’ management

of their health, their well-being, as well as their behavior and representations of themselves as a way to obtain a return from society. Thus, what is at stake in orthorexia, as a process of illness of the normativity in the subject, is also the care of the self, a contemporary social imperative that assigns to individuals the responsibility to manage themselves, their social and collective well-being, through practices that seek health, repudiating and removing the risk of disease, in a new model of body control, characteristic of the medicalization process.

Considering self-care and the inflexible compliance with healthy eating norms as an expansion of the field of power indicates paths or forms of getting sick linked to contemporary problems. The senses and meanings of these paths can be confused between achieving salvation, protecting oneself from chronic-degenerative diseases, or isolating oneself in an aseptic world. Studying orthorexia is a conceptual exercise to understand a reorganization of the meanings of what has been stipulated as health, including the cultural and social context of diseases, not only anatomophysiological characteristics, but also a new social organization of bodies and patterns of normality.

Another popular social media trend is “fitinspiration,” which contains images, quotes and advice related to exercise and healthy eating. The research by Raggatt et al. (2018) demonstrated that the most commonly accessed content was posted by personal trainers and athletes (59.4%), followed by posts tagged with the hashtag “fitinspiration” (#fitinspiration) (53.9%) and by “ordinary” people (53.3%). Many followers reported benefits of inspirational content, including greater social support and access to health information; however, they also described that this content can negatively influence their well-being and perception of healthy goals. The influence on their health beliefs and behaviors was explained through four main topics: definition of the “healthy ideal”; failure to achieve the “ideal”; being part of a community; and access to reliable information on health. The authors highlighted as a limitation that most participants were recruited via Facebook and few via Instagram, which is known to be the most common source of inspirational content.

Some factors are pointed out to explain why Instagram, an image-based social media, has been the preferred platform of the healthy eating community. First, the focus on image, which reproduces the effect of superiority for being more likely to be remembered than words. Second, social media allows and encourages selective exposure, as users choose which accounts they want to follow and, subsequently, are continually exposed to the type of content those accounts produce. This limited exposure, in turn, can lead users to believe that a behavior is more prevalent or normal than it actually is, and can lead to perceived social pressures to adhere to such behaviors. Third, it is likely that profiles with many followers can be perceived as authorities, allowing healthy eating celebrities to influence many individuals with a constant, curated feed of images depicting a certain diet or behavior (Turner; Lefevre, 2017).

According to a publication by The Wall Street Journal, the social network Facebook conducted a research that demonstrated how Instagram and its social comparison mechanisms, a phenomenon in which one evaluates their own value in relation to the appearance, wealth, and success of others, affect the mental health of users, especially adolescents. The report that circulated internally and was obtained by the newspaper highlights some points such as: Instagram was designed for greater social comparison than TikTok and Snapchat, emphasizing bodies and lifestyles; adolescents reported, in the study, that they felt “addicted” to Instagram and would like to use it less, but failed to do so; teenagers blame Instagram for the increased rate of anxiety and depression, this reaction was spontaneous and consistent in all groups; over 40% of teenagers in the USA and in the UK reported feeling “unattractive” and started noticing it after using Instagram; and 32% of girls say that when they feel bad about their bodies, Instagram makes them worse. This tendency to share only good times, the pressure to look perfect, and the fact that it is an addictive product can cause teenagers to develop eating disorders, an unhealthy image of their own bodies, and even depression (Wells; Horwitz; Seetharaman, 2021).

This social media has also been identified as having a positive impact for its ability to connect

people in need of support through the creation of online communities that facilitate the sharing of positive and healing content, as demonstrated by Santarossa et al. (2019). Although most of the images in the publications of this study were focused on food, the majority of profiles reflected on orthorexia in the publications and mentioned recovery from eating disorders. Thus, the researchers believe that future studies may better understand how online support networks can be leveraged to encourage recovery from eating disorders.

From Foucault's perspective, the microphysics of power brings the idea of a power disseminated between various institutions, and the subject who reproduces the act of giving the remedy, of providing the solution, of making the intervention, carries in this attitude the institution of the medicalization power, with health being a regularizing state to be constantly monitored and controlled. Thus, according to the reviewed articles, nutritionists, as well as people who work with the body or depend on their physical shape, also seem to be more prone to the development of orthorexia. These professionals are influencers in the media; likewise, they can create actions to protect and monitor people.

In a conception of healthy that prioritizes the averages and the ideal as a norm of human behavior, what can be criticized is that subjects get lost and abandon their feelings, values, and meanings about food to incorporate the norms and new recommendations through the modern scientific rationality, which can lack history, be unappetizing, tasteless, and devoid of memory, but which keep them away from the risk of "future diseases," prioritizing the fear of illness and death as the most important aspect in life (Castiel; Diaz, 2007). From this point of view, when legislating on health, biopower is affirmed, judging behaviors and strictly enforcing the norm of healthy eating. Thus, health acts as a strategy for governing bodies and maintaining life.

Final considerations

Reducing the health status to a universal status, generalizing the rules that apply to any human being, regardless of their characteristics, limits

life to a physiological or pathological pattern of life. For Canguilhem, health is a unique aspect of life, characterized by the possibility of acting and reacting, of getting sick and recovering. Therefore, what is normal is being able to live in the midst of fluctuations, and new events are possible, thus relativizing a classification of the sick subject based on absolute averages or universal recommendations from the medical discourse. By increasingly incorporating aspects of contemporaneity, in which we live in a reconfiguration of what is deemed healthy, the concept of health, in Canguilhem's terms, highlights the process of adaptation to the new conditions and technologies of life that interfere in the constitution of bodies.

In contemporary society, the medicalization process was constructed by defining a normative model based on a pattern of avoidance and food restriction in relation to what one eats and how much one should or should not eat, which corroborates, as Foucault would say, a disciplinary process, of control and standardization of body and health care so as to maintain a certain social order. Hence, the diet order follows the dissemination of biopolitics and biopower, in which "to be on a diet" carries with it the sense of restriction of a life regime, prioritizing practices aimed at control and safety, as a way or attempt to avoid diseases and their possible risks.

Among the selected articles, the characteristics of orthorexia and the influences of social media on orthorexia were the two topics identified. Instagram was the most used social media to study the content shared about orthorexia, addressing perspectives, experiences, symptoms, and behaviors, especially among young women with an active interest in health and body. The media presents an ideal body and drives the consumption of goods presented in publications, creating an alleged dependence when it suggests that only those who create a body shaped by food control and discipline are healthy and beautiful and, therefore, can be happy.

These conclusions illustrate the need to understand the extent to which media narratives contribute to the promotion or minimization of orthorexia, that is, to what extent the content related to health and fitness is affecting people's lives to think about future interventions. Thus,

further research is needed to better distinguish orthorexia from other types of eating disorders, with the need to investigate biopsychosocial motivators and identify ways to facilitate access to effective treatments for those who suffer. It is also worth mentioning that this study did not limit the continents, in such a way there may be contextual factors between the countries to be explored. Orthorexia is a topic to be discussed from different perspectives due to its complexity. This article brings just a few possible reflections and interpretations based on eating practices and body care in media-related orthorexia.

Therefore, in this context of orthorexia, healthy diet, although polysemic, assumes a sense of rule and normal behavior to be followed with no doubt or adaptation. Denaturalizing healthy diet enables to make room for different ways of living the human condition of health and eating, enhancing the multiplicity of life paths, in an ethical condition and presupposition of existence that values the individuality of each subject in society, especially in their articulations in the social and cultural context.

References

- BARDIN, L. *Análise de conteúdo*. São Paulo: Edições 70, 2011.
- BARTRINA, J. A. Ortorexia o la obsesión por la dieta saludable. *Archivos Latinoamericanos de Nutrición*, Caracas, v. 57, n. 4, p. 313-315, 2007.
- BRATMAN, S.; KNIGHT, D. *Health food junkies: orthorexia nervosa: overcoming the obsession with healthful eating*. New York: Broadway Publisher, 2001.
- CAMARGO JR., K. R. A biomedicina. *Physis: Revista de Saúde Coletiva*, Rio de Janeiro, v. 15, p. 177-201, 2005. DOI: 10.1590/S0103-73312005000300009
- CANGUILHEM, G. *O normal e o patológico*. 7. ed. Rio de Janeiro: Forense-Universitária, 2011.
- CARROTTE, E. R.; VELLA, A. M.; LIM, M. S. C. Predictors of “liking” three types of health and fitness-related content on social media: a cross-sectional study. *Journal of Medical Internet Research*, Toronto, v. 17, n. 8, e205, 2015. DOI: 10.2196/jmir.4803
- CASTIEL, L. D.; DIAZ, C. A. D. *A saúde persecutória: os limites da responsabilidade*. Rio de Janeiro: Fiocruz, 2007.
- CONTRERAS; J.; GRACIA, M. *Alimentação, sociedade e cultura*. Rio de Janeiro: Editora Fiocruz, 2011.
- COSTA, M. F.; CARVALHO, M. C. V. S.; PRADO, S. D. *Dietas da moda e transtornos alimentares: a construção de sentidos na busca do “corpo perfeito” e da “vida saudável”*. 2014. Tese (Doutorado) -Universidade do Estado do Rio de Janeiro, Rio de Janeiro, 2014.
- DICKINSON, K. M.; WATSON, M. S.; PRICHARD, I. Are clean eating blogs a source of healthy recipes? A comparative study of the nutrient composition of foods with and without clean eating claims. *Nutrients*, Basel, v. 10, n. 10, p. 1440, 2018. DOI: 10.3390/nu10101440
- FIXSEN, A.; CHESHIRE, A.; BERRY, M. The social construction of a concept - orthorexia nervosa: morality narratives and psychopolitics. *Qualitative Health Research*, Thousand-Oaks, v. 30, n. 7, p. 1101-1113, 2020. DOI: 10.1177/1049732320911364
- FOUCAULT, M. *Microfísica do poder*. 29. ed. Rio de Janeiro: Edições Graal, 2011.
- GOMES, R.; NASCIMENTO, E. F. A produção do conhecimento da saúde pública sobre a relação homem-saúde: uma revisão bibliográfica. *Cadernos de Saúde Pública*, Rio de Janeiro, v. 22, n. 5, p. 901-911, 2006. DOI: 10.1590/S0102-311X2006000500003
- GREENHALGH, T. *Health evidence network synthesis report: cultural contexts of health - the use of narrative research in the health sector*. 49. ed. Copenhagen: Who Regional Office For Europe, 2016.
- GREVILLE-HARRIS, M.; SMITHSON, J.; KARL, A. What are people’s experiences of orthorexia nervosa? A qualitative study of on-line blogs. *Eating and Weight Disorders: Studies on Anorexia, Bulimia and Obesity*, Berlin, v. 25, n. 6, p. 1693-1702, 2019. DOI: 10.1007/s40519-019-00809-2

