

## From the medicalization of food to the gourmetization of medicines: analysis of the advertising campaign that turned an effervescent tablet into a national craze

Da medicalização da comida à gourmetização do medicamento: análise da campanha publicitária que transformou um comprimido efervescente em febre nacional

De la medicalización de los alimentos a la gourmetización de los medicamentos: análisis de la campaña publicitaria que convirtió un comprimido efervescente en fiebre nacional

*Adriana Aguiar Aparício Fogel*<sup>1,2,3,a</sup>

[adriana.fogel@gmail.com](mailto:adriana.fogel@gmail.com) | <https://orcid.org/0000-0002-0913-7498>

*Sandro Tôrres de Azevedo*<sup>4,5,6,7,b</sup>

[sandro.torres@eco.ufrj.br](mailto:sandro.torres@eco.ufrj.br) | <https://orcid.org/0000-0002-1813-2779>

*Patrícia Padrão*<sup>1,2,8,c</sup>

[patriciapadrao@fcna.up.pt](mailto:patriciapadrao@fcna.up.pt) | <https://orcid.org/0000-0001-6310-4956>

*José Azevedo*<sup>1,2,3,d</sup>

[azevedo@letras.up.pt](mailto:azevedo@letras.up.pt) | <https://orcid.org/0000-0002-6738-1827>

<sup>1</sup> University of Porto, Institute of Public Health, Epidemiology Research Unit. Porto, Portugal.

<sup>2</sup> University of Porto, Institute of Public Health, Laboratory for Integrative and Translational Research in Population Health. Porto, Portugal.

<sup>3</sup> University of Porto, Faculty of Arts and Humanities. Porto, Portugal.

<sup>4</sup> Federal University of Rio de Janeiro, Institute of Philosophy and Human Sciences, School of Communication. Rio de Janeiro, RJ, Brazil.

<sup>5</sup> Oswaldo Cruz Foundation, Institute of Scientific and Technological Communication and Information in Health, Postgraduate Program in Information and Communication in Health. Rio de Janeiro, RJ, Brazil.

<sup>6</sup> Federal University of Rio de Janeiro, Research Group on Advertising, Health, and Society. Rio de Janeiro, RJ, Brazil.

<sup>7</sup> Federal University of Rio de Janeiro, School of Communication, Laboratory of Advertising Communication Applied to Health and Society. Rio de Janeiro, RJ, Brazil.

<sup>8</sup> University of Porto, Faculty of Nutrition and Food Sciences. Porto, Portugal.

<sup>a</sup> Master of Education from the Federal University of the State of Rio de Janeiro.

<sup>b</sup> Doctoral degree in Language Studies from the Fluminense Federal University.

<sup>c</sup> Doctoral degree in Food Consumption and Nutrition Sciences from the University of Porto.

<sup>d</sup> Doctoral degree in Psychology from Cardiff University.

## RESUMO

O aumento da longevidade humana veio acompanhado de uma maior preocupação com os hábitos alimentares e de uma banalização das dietas prescritas, favorecendo um contexto de medicalização da comida, no qual a fronteira entre alimento e medicamento fica imprecisa. Isto tem sido usado mercadologicamente pelas indústrias alimentícias, farmacêuticas e de suplementos alimentares. Este artigo visa discutir como o ecossistema publicitário contemporâneo e a ciberpublicidade são utilizados para naturalizar a presença de suplementos e medicamentos na dieta cotidiana. Usou-se como estudo de caso uma campanha publicitária vietnamita, em que um comprimido foi posicionado como ingrediente culinário. A partir de outros casos descritos na literatura, discutem-se os resultados encontrados no contexto ocidental. Nas considerações finais, apresentam-se alguns desafios regulatórios; apontam-se perspectivas para pesquisas futuras; e defende-se a educação como elemento fundamental para a construção de uma sociedade em que a saúde seja valorizada e exigida como bem coletivo e direito de todos.

**Palavras-chave:** Alimentação; Comunicação e saúde; Literacia mediática; Medicalização da comida; Publicidade.

## ABSTRACT

As human longevity increases, a greater concern with eating habits is visible. Furthermore, the number of people who trivialize prescribed diets increases. This context favors the medicalization of food, in which the boundary between food and medicine is blurred. Industries take advantage of this situation to promote several products. This article discusses how the contemporary advertising ecosystem and the cyber advertising techniques are used to naturalize the presence of supplements and medications in the daily diet. We used as a case study a Vietnamese campaign, in which a tablet was positioned as a culinary ingredient. Based on other cases described in the literature, the results found in the Western context are discussed. In the last section, some regulatory challenges are presented, prospects for future research are pointed out, and education is defended as fundamental for the development of citizens who value Public Health as a collective good and a right of all.

**Keywords:** Food; Communication and health; Media literacy; Medicalization of food; Advertising.

## RESUMEN

El aumento de la longevidad humana ha venido acompañado de una mayor preocupación por los hábitos alimentarios y de una banalización de las dietas prescritas, favoreciendo un contexto de medicalización de la alimentación, en el que la frontera entre alimento y medicamento se esfuma. Esto viene siendo utilizado comercialmente por industrias alimentarias, farmacéuticas y de complementos alimenticios. Este artículo tiene el objetivo de discutir como el ecosistema publicitario contemporáneo y la publicidad cibernética son usados para naturalizar la presencia de suplementos y medicamentos en la dieta diaria. Se utilizó como estudio de caso una campaña publicitaria vietnamita, en la que se posicionó un comprimido como ingrediente culinario. Con base en otros casos descritos en la literatura, se discuten los resultados encontrados en el contexto occidental. En las reflexiones finales, se presentan algunos desafíos regulatorios; se señalan perspectivas para futuras investigaciones; y la educación es defendida como elemento fundamental para la construcción de una sociedad en la que se valore y exija la salud como bien colectivo y derecho de todos.

**Palabras clave:** Alimentación; Comunicación y salud; Literacia mediática; Medicalización de los alimentos; Publicidad.

**Author's contributions:**

Study conception and design: Adriana Aguiar Aparício Fogel.

Data acquisition, analysis, or interpretation: Adriana Aguiar Aparício Fogel, Sandro Tôrres de Azevedo, Patrícia Padrão and José Azevedo.

Manuscript drafting: Adriana Aguiar Aparício Fogel, Sandro Tôrres de Azevedo, Patrícia Padrão and José Azevedo.

Critical review of intellectual content: Adriana Aguiar Aparício Fogel, Sandro Tôrres de Azevedo, Patrícia Padrão and José Azevedo.

**Conflict of interest declaration:** none.

**Funding sources:** Foundation for Science and Technology (FCT) and European Social Fund (ESF) through the award of a doctoral scholarship (2021.08877.BD) to Adriana Aguiar Aparício Fogel.

**Ethical considerations:** none.

**Additional thanks/Contributions:** we thank the editors for their contributions to the article.

**Article history:** submitted: 8 Mar. 2023 | accepted: 31 Jul. 2023 | published: 29 Sep. 2023.

**Previous submission:** none.

**CC BY-NC License Non-commercial Attribution.** This license allows others to access, download, copy, print, share, reuse and distribute the article, provided it is for non-commercial use and with a source citation, checking the due authorship credits and referring to Reciis. In such cases, no permission is required from the authors or publishers.

---

## INTRODUCTION

Lifestyle is known to have a major influence on the development of chronic non-communicable diseases (NCDs), which are among the leading causes of death today. Examples of NCDs are cardiovascular diseases, cancer, and metabolic diseases such as obesity and type 2 diabetes. One important factor that can contribute to the development of these diseases or prevent them is dietary choice. However, even though healthy eating is a common topic in the media and in people's daily routines, the number of people with NCDs is still very high. In 2019 alone, these diseases were responsible for 74 out of every 100 deaths in the world (World Health Organization, 2019).

The high consumption of ultra-processed foods is related to these rates. Ultra-processed foods are highly palatable food products that are often nutritionally unbalanced. Many ultra-processed foods are high in energy, salt, fat, and sugar. However, having these characteristics is not enough to classify something as ultra-processed. Some products identified as light and diet also make up this group. To be classified as ultra-processed, the product must contain colorings, preservatives or other additives, used for the sole purpose of increasing its consumer appeal. Regardless of whether they are high or low in calories, these products should be avoided because of their impact on individual and global health. However, these products are easy to access, sold cheaply and ubiquitous in the media and public spaces, stimulating their consumption (Monteiro *et al.*, 2013). Consumers are expected to be able to make healthy food choices within this environment of ultra-processed food abundance.

Another factor to consider when it comes to food is the difficulty of dichotomizing food into healthy and unhealthy. The overall dietary pattern needs to be assessed. Furthermore, there is a multiplicity of different opinions on the matter (Poulain, 2015). In this arena of information overload, multinationals operating in the food sector are highly influential (Hawkes, 2006). For them, the medicalization of food has proved very

lucrative (Chamberlain, 2004). Global food companies are using nutritionism<sup>1</sup> to increase their power and positioning in the international market. This happens in different ways, depending on the dietary concerns that are being addressed: for nutritional deficiencies, there are fortified products (with added vitamins and minerals, for example); for problems related to NCDs, there are reformulated foods (with reduced salt, sugar and saturated fat) and there are also functional foods, which are those that have ingredients often associated with increased longevity, performance and life quality (Clapp; Scrinis, 2017).

Nutritionism is part of the medicalization of food, which is part of a broader context that includes the medicalization of everyday life. Medicalization is an essential concept in medical sociology that is wide-ranging. Having been consolidated with the advance of neoliberalism it places the individual as the main party responsible for their health, individualizing and blaming subjects in the process of changing their behavior (Chamberlain, 2004; Crawford, 2019; Kerpel, 2021; Lefrève, 1983; Viana *et al.*, 2017).

This broad concept of medicalization has been criticized (Bell; Figert, 2012; Kerpel, 2021; Van Dijk *et al.*, 2020; Zorzanelli; Ortega; Bezerra Júnior, 2014). It is therefore important to point out that there are already other concepts used within the area. These include nutritionalization and pharmacologization. Nutritionalization is a recent concept. Although pharmacologization is older it continues to contest the space with medicalization. The debates among theorists in the field are lively and dynamic, and there are difficulties in drawing clear boundaries between the terms (Abraham, 2011; Bell; Figert, 2012; Kerpel, 2021; Poulain, 2015; Williams; Martin; Gabe, 2011). Nevertheless, we need to justify our choice of medicalization. One reason was its predominance on search engines over the course of time. In June 2011, the frequency of these terms on Google was compared: there were 419,000 results for “medicalization” and 7,000 for “pharmaceuticalization” (Bell; Figert, 2012). In July 2023, when performing the same search, we found 5,320,000 results for “medicalization” and 25,200 for “pharmaceuticalization”. In Portuguese, 588,000 results were found for “medicalização” and 2,430 for “farmacologização”. “Nutricionalização” led to only 101 results and “nutritionalization” had 1,730.

The widespread use of the term medicalization has been criticized but may also explain the figures reported above. Nowadays it encompasses multiple objects and contexts (Zorzanelli; Ortega; Bezerra Júnior, 2014) including advertising, which further justified our preference for this term. An example of its use in the field of advertising is the study by Zwier (2009), which highlights the importance of more vigilant regulation of adverts for food products that claim to be healthy but whose healthiness is questionable. The author considers that attributes such as “rich in whole grains” (p. 112), although they may be true, do not attest to whether the product is beneficial to health in its entirety, and she denounces the fact that these appealing features have been used to sell ultra-processed products that are harmful to health (Zwier, 2009). The products she studied are examples of how the food industry profits from the medicalization of food.

Several other sectors of the economy profit from the medicalization of life (Baker *et al.*, 2021; Kaczmarek, 2022; Maturo, 2014; Mayes, 2014; Zwier, 2009). Food supplements are one of them. Their growth may be due to the trivialization of prescription diets, which used to be recommended exclusively to individuals with specific nutritional restrictions or needs. By transforming a meal into the object of a prescription, the boundary between food and medicine becomes blurred (Chamberlain, 2004; Viana *et al.*, 2017).

Chamberlain (2004) points out that the boundary between food and food supplements<sup>2</sup> is blurred to a greater degree. These supplements, presented in powder, pill or tablet form, with suggested dosages and contraindication instructions, were once restricted to pharmacies and stores aimed at specific consumers, such as athletes. However, they are now available on supermarket shelves, making them easily accessible

---

1 Nutritionism is characterized by reducing the value of food to the individual nutrients contained in it (Scrinis, 2013).

2 The Brazilian Health Surveillance Agency (Anvisa, 2020) differentiates between medicines and food supplements. This differentiation is explained in detail in a document containing 165 questions and answers.

and widely consumed. The medicalization of food, i.e., the increasing porosity of the border between food and medicine, is the basis of this work.

This porosity deserves special attention when it comes to food supplements because the use of supplements requires care and attention. Even vitamin C, a relatively safe supplement, can cause side effects. If consumed in excess, it can increase the likelihood of kidney stones in susceptible individuals (Dosedel *et al.*, 2021).

The boundary between food and medicine/supplement has also blurred in the business world. One recent example was the 2014 acquisition of Jasmine, a Brazilian company in the health and functional food products sector, by Nutrition & Santé, a subsidiary of the Japanese pharmaceutical company Otsuka (Santos, 2018).

A few years earlier, Coser (2010) had already stated his concern about the purchase of a pharmaceutical company by a company specializing in consumer goods.<sup>3</sup>

All this background is important for the discussion that will be based on the case study presented here. The aim of the article is to discuss how the contemporary advertising ecosystem and cyber advertising are used to naturalize the presence of food supplements not only on supermarket shelves, but also in consumers' kitchens, transforming them into ingredients that promise to increase health and provide a special and attractive taste to home-made dishes, thus raising the status of these products, configuring what is called here a process of gourmetization (Santos, 2018).

This paper brings to the context of cyber advertising a question raised by Coser (2010) in the chapter "How much advertising is there in a medicine?". In it, the author cites a survey by the Ibope institute which states that "the market for over-the-counter medicines is increasingly close to that of consumer goods, including in its marketing strategies" (Coser, 2010, p. 100, own translation).

The following sections are structured as follows: to construct and support the theoretical basis used in the analysis, some characteristics of the contemporary advertising ecosystem (Perez, 2016) and cyber advertising (Atem; Tavares, 2015; Azevedo, 2012; Casaqui, 2014) are presented.

In the case study section, the object of analysis is a Redoxon® campaign for the product Redoxon® Triple Action. Highlighted by Contagious, a company that claims to provide intelligent advertising solutions, the campaign in Vietnam sought to persuade consumers to use the pill as a culinary ingredient.

In the discussion, the results found are debated within the Western context. Although the examples used haven't had such a high media profile, they do show the gourmetization of food supplements and medicines through the cyber advertising techniques favored by the contemporary advertising ecosystem.

The concluding remarks emphasize the importance of investing in education that stimulates critical thinking; some regulatory problems and challenges are presented; and opportunities for future research are pointed out.

## THE CONTEMPORARY ADVERTISING ECOSYSTEM AND CYBER ADVERTISING

The concept of the advertising ecosystem assumes that the main objective of advertising is to build meaningful links between individuals and brands. It is also assumed that in contemporary culture the online and offline environments are in constant dialog and that, therefore, this bond-building extends beyond any possible limits set by specific media. Some concepts have also been broadened, such as the brand, which now encompasses products, services, ideas, proposals (Perez, 2016) and even people (Karhawi, 2017).

---

<sup>3</sup> <https://www.hypera.com.br/a-hypera-pharma> The company, which at the time of the purchase was called Hypermarcas, now has a new name - Hypera Pharma - and has focused on the pharmaceutical niche.

Therefore, all advertising actions and relationships whose purpose is to connect people and brands fit into this ecosystem. As such, it encompasses several concepts. In an exemplary and non-exhaustive<sup>4</sup> list, the following are part of this ecology:

[...] promotion, merchandising, insert, product placement, gamification, blitz, activation, relationship marketing, branded content, concept store, flashmobs, apps, etc., as well as their structures and systems (internet, TV, radio, cinema, street, home, all screens, and everything else that comes up) (Perez, 2016, p. 9, own translation).

Therefore, any example of persuasive advertising fits into this ecosystem. Explicit or implicit advertising, inserted in the media or in social engagement actions, cultural activities, and entertainment (Machado; Burrowes; Rett, 2020).

This multitude of concepts, structures and systems has led to the incorporation of other characters and professionals into the advertising market, coming from the most diverse fields of knowledge: from the human and social sciences (anthropologists, semioticians, philosophers), the arts (DJs, photographers, filmmakers, designers), engineering and mathematics (programmers, statisticians, computer scientists) and others (Perez, 2016).

Due to the subject of this study, we have included influencers in the group of others, as some researchers already see them as a professional profile in the field of communication (Karhawi, 2017, 2021).

To be considered an influencer, they need to adopt a professional practice that involves “relationships with brands, companies and people converted into monetary gains” and they are expected to “act in this market, play by the specific rules of this field, produce on the required platforms, exercise skills and competencies specific to this new profession”. (Karhawi, 2017, p. 60, own translation). These skills and competencies must be scrutinized by communication professionals, who should assess the opportunities and vulnerabilities inherent in associating the brand with these actors to minimize the risks of crises and maximize the effects of this partnership. It is necessary to choose influencer profiles that are in tune with the brand’s values and whose track record provides some assurance that the digital influence strategies drawn up jointly between the influencer and the brand will achieve the expected effect (Karhawi, 2021).

It’s important to differentiate between professional influencers and consumers who produce content, because current advertising techniques encourage everyone to participate, but monetary relationships only exist with the former.

It is in this dynamic ecosystem of multiple actors, enhanced by the daily use of various digital devices, whether connected to the internet or not, that cyber advertising emerges. It takes features from traditional advertising and adds others. Stemming from the cyber root, a new model of advertising emerges, based on the trinomial interactivity-relevance-experience (Azevedo, 2012). The model is new, exponentially more dialogical and with considerably more diverse instruments. However, it retains the characteristics of mass advertising, including its “function as a subjectivizing machine for consumers, and as an engine for reproducing capitalist logic and its way of organizing life (a biopolitics)” (Atem; Tavares, 2014, p. 130, own translation). This biopolitics represents a shift from “classical biopolitics” - characterized by the government of populations - to a “biopolitics of consumption”, aimed at the consumer subject and carried out through advertising narratives (Hoff; Holtz; Fraga, 2020, p. 270, own translation).

Traditional advertising and cyber advertising are also similar in that they consider it important to know the consumer, their behaviors, their media consumption (including traditional mass media), and to create the most appropriate narrative for each profile. The stages of planning, creation, production, and evalua-

---

4 Some of the concepts presented and others that are not listed can be better understood by reading the Glossary of Advertising Terms (2016).

tion of results remain the same. However, in cyber advertising, these stages take place in a more intense, continuous, and interwoven flow in order to respond to the imperative need to “look at consumers non-stop” and ensure that the brand is in uninterrupted contact with them (Atem; Tavares, 2014, p. 130-131, own translation).

Cyber advertising does not put an end to traditional advertising, nor does it aim to do so. It represents an upgrade of advertising practices to a new version, with more features and improved performance. It is a form of advertising that is in tune with contemporary reality. Cyber advertising is capable of efficiently and strategically incorporating the impact of the consumer’s ability to actively interfere in the communication environment and to do so continuously in real time, through the creation, production, editing and distribution of content (Azevedo, 2012).

Cyber advertising typically urges the consumer to “participate in the campaigns, to co-construct their narrative, to be the brands’ co-narrator” (Atem; Tavares, 2014, p. 131, own translation). This consumer-advertiser interaction takes place according to scripts that have been pre-established by the corporate agency (Casaqui, 2014), based on “powerful strategies for monitoring and engaging this mass of content producers, which ends up forcibly transforming the consumer into an ally for the dissemination of positive messages about the brand” (Azevedo, 2012, own translation). There are cases in which “without the interaction, online and offline, of this hyperconsumer (also called prosumer), there is no campaign” (Atem; Tavares, 2014, p. 131, own translation). This is true of the case study that is the subject of this article.

## **CASE STUDY: REDOXON® TRIPLE ACTION**

According to Flyvbjerg (2006), one of the selection criteria for case studies is that they should be paradigmatic. This was the parameter here: highlighted by Contagious, an intelligent service that analyzes global campaigns to decode trends and inspire the advertising market with innovative ideas. The campaign that is the subject of this study was broadcast in Vietnam. The analysis is based on data extracted from videos and reports found in English. Sources directly related to the campaign were chosen to highlight the advertising strategies adopted (Bayer, [2022]; Bayer Vietnam, 2021; EssenceMediacom, 2022a, 2022b; Vietnamese..., 2022).

The campaign took place in 2021, but the background is important. Redoxon® Triple Action tablets, a compound of vitamin C, vitamin D and zinc, only hit the Vietnamese market in 2020, at the same time as the outbreak of the Covid-19 pandemic. At that time, due to the high contamination rate of the virus causing the disease (SARS-CoV-2) and the high mortality rate seen worldwide, several governments adopted emergency measures such as social isolation and the shutdown of non-essential activities (Hoff; Holtz; Fraga, 2020). In this tense climate, communication about health, hygiene and well-being gained prominence. The vitamin market became ultra-competitive, and several brands and products already known among local consumers positioned themselves as immunostimulants. This posed additional challenges for Bayer (the advertising company that owns the Redoxon® brand) and MediaCom<sup>5</sup> (the advertising agency responsible for launching the product in Vietnam). To capture a niche in this market, the companies understood that it would be necessary to position the effervescent tablet as indispensable in the daily routine of those who aspire to a healthy lifestyle, but to do so in a different way (EssenceMediacom, 2022a; Vietnamese..., 2022).

Consumer surveys revealed that Redoxon® was considered tasty. Based on this data, the taste of Redoxon® became central to the planning of the campaign: it was the product’s main differentiator compared to its competitors. Another important factor for the advertising strategy was the audience’s

---

5 In 2023, MediaCom merged with the Essence agency to create EssenceMediaCom, one of the Group M agencies, an advertising conglomerate that works with food and beverage multinationals such as Coca-Cola and Mars.

interest in recipes to make at home: searches for this topic had grown by 97% between 2020 and 2021. The advertiser and the agency also considered the dichotomy between pleasure and health, which is common in discourses on food (EssenceMediacom, 2022a; Vietnamese..., 2022).

From the data they gathered, they started the Turn Your Guilty Pleasure into a Healthy Pleasure campaign, which had two priority target audiences: mothers aged between 25 and 35, who put their health first and would switch to Redoxon® to strengthen their family's immune system; and mothers in this same age group who would include Redoxon® as part of their "new normal" (Bayer, [2022]), an expression that was commonly used to identify the period immediately after the lockdowns caused by covid-19.

Putting the information together (the pleasant taste, the search for good health and the audience's interest in culinary recipes), the agency and advertiser identified that there was a favorable environment for Redoxon® to stretch beyond the nutritional supplement segment and into the food segment. A manifesto video was then created to position Redoxon® as a culinary ingredient to be included in the preparation of daily meals (EssenceMediacom, 2022a; Vietnamese..., 2022).

Cyber advertising practices were developed to gourmetize the pill. Such strategies are favored by the contemporary advertising ecosystem, as can be seen in the following examples.

The head of Bayer's account at MediaCom Vietnam, Ngan Nguyen, highlights three elements of the campaign: "catch, connect, convert", which makes explicit the intention to build links between consumers and the brand (EssenceMediacom, 2022a).

The brand attracted the audience's attention with the manifesto video. It was followed by five others, which contained step-by-step recipes that were easy to make. These recipes were created by a local celebrity chef (Câm Thiên Long) and a nutritionist (Dào Thị Yén Phi), influencers who were able to create a link between the previously unknown brand and Vietnamese mothers. Ways of preparing jams, salad dressings, drinks and jelly were shared by the brand on its YouTube<sup>6</sup> channel and Facebook page. All the videos had a link that made it easy to convert interest into sales. Clicking on it took the consumer to Shopee, an e-commerce platform, where they could access an exclusive promotion: Redoxon® Triple Action at special prices and free kits containing the tablets and all the other ingredients needed to prepare the recipe at home (Bayer, [2022]). Bayer Vietnam (2021) points out that the videos taught the recipes in a simple and attractive way, which made it possible to achieve a resounding response from the audience: more than 1 million reactions were recorded, according to results shared by the brand (Bayer Vietnam, 2021).

The chef and nutritionist were chosen for their influence and ability to create connections. Another benefit was that they could use their professional credentials to endorse Redoxon® recipes, giving them the credibility, they needed to ensure that the transformation from pill to culinary ingredient was assimilated by the audience. At the same time, there was a breakdown of the dichotomy of healthy food being perceived as not tasty, and tasty food being perceived as unhealthy (EssenceMediacom, 2022b). These actors helped persuade the consumer to believe that including Redoxon® in food solved this dichotomous issue. Delicious recipes, created by a chef, and a combination of ingredients presumably capable of boosting immunity, validated by a nutritionist. That was the promise.

Other influencers took part in the action. The brand suggests that they participated spontaneously: celebrity mothers, inspired by the recipes created by the duo, shared more than 400 videos on social media. A well-known local blogger specializing in culinary matters was also part of the team (Bayer Vietnam, 2021)<sup>7</sup>.

---

6 The list of videos with the recipes is available on YouTube (Redoxon Vietnam, 2021) and, although the videos are in the local language, you can understand the basic idea: to dilute the effervescent tablet in water and then use it in sweet or savory recipes. The dishes have an interesting aesthetic, and the color of the pill always stands out.

7 The text states: "The series has inspired the creation of more than 400 videos by celebrity mothers on social media like Thuy Tien, Minh Ha, Tu Vi, Loan Hoang, food blogger Helen and many more who took inspiration from the recipes using Redoxon® Triple Action" (Bayer Vietnam, 2021).

We must emphasize that the data released by the advertising agency calls this supposed spontaneity into question. Strategies to broaden engagement with the audience and to build this concept of using the product as an ingredient in family meals involved partnerships with opinion leaders, food platforms, and public relations activities (Bayer, [2022]; EssenceMediacom, 2022a; Vietnamese..., 2022).

These characters managed to attract the attention of 4 million Vietnamese people on social media, which turned the habit of cooking with Redoxon® Triple Action into a trend (Bayer Vietnam, 2021). From the perspective of Karhawi (2017), these actors' participation is understood to be part of the brand's strategy to engage the audience and gourmetize the tablet. They are characterized as members of the current advertising ecosystem, and as individuals who make professional use of brand communication. The reputation that these opinion formers (or influencers) had built, managed, and maintained over time was appropriated by Bayer to build a bridge between its product and consumers, making it easier for this nutritional supplement to be assimilated in the form of a tasty, healthy, and accessible culinary ingredient.

In addition to the participation of endorsers capable of engaging the audience with the brand's strategy, another component of cyber advertising used in the campaign was constant monitoring, which made it possible to modulate and guide the "interactivity-relevance-experience" trinomial (Azevedo, 2012, p. 6, own translation).

The campaign's online strategies were initially centered around the themes of food, recipes, family, health, and travel. The aim was to achieve the best positions within these categories on search engines. After initial contact, the consumer's steps were monitored to achieve as many conversions as possible. Mini-games and live broadcasts of product promotions by people who received commission from the brand were used (Bayer, [2022]). All the results and data collected from the platforms were analyzed quantitatively and qualitatively to generate new ideas and strategies (Bayer, [2022]; EssenceMediacom, 2022a).

A report on the campaign reveals that analyzing consumer behavior and the trends at each moment was essential throughout the advertising campaign and not just in the planning phase. The data revealed that time spent in lockdown increased interest in tips and recipes for cooking at home. It was also noted that consumers used to share their creations and their culinary knowledge on various networks and platforms (Vietnamese..., 2022). The idea of partnering with the mobile app Cooky emerged from these analyzes. According to the Mobile Marketing Association, Cooky is the most important community for exchanging recipes and cooking tips among all those available on the web (Bayer, [2022]). The platform was an interesting niche for the campaign's objectives, not only because of its consumer profile, but also because of the type of content it produced. The environment there would be conducive to breaking down any barriers that might exist to the use of Redoxon® as an ingredient and doing so in an organic way.

Cooky was one of the channels used by the brand to publicize a contest which rewarded the best recipe using Redoxon® Triple Action. All competing recipes had to be created and shared by consumers on social media. Data collected was also used to set the contest launch date: waiting for the moment when the audience was ready and engaged enough to respond to the invitation (EssenceMediacom, 2022b). The climax was an invitation to consumers - especially mothers, who were the campaign's priority target audience - to participate simultaneously in an action aimed at obtaining a Guinness World Record™. The response was positive. Bayer's Redoxon® Triple Action broke the record for the highest number of recipe videos with one ingredient in common shared on Facebook in one hour<sup>8</sup> (Bayer Vietnam, 2021). This can be seen in Figures 1 and 2.

---

8 The result is also published on the Guinness World Records website (2021).



Figure 1 - Screenshot of the video announcing the results of the campaign, showing consumer engagement with the activity suggested by the brand.

Source: print extracted from EssenceMediacom (2022b).



Figure 2 - Image of Bayer Vietnam's record certificate.

Source: Bayer Vietnam (2021).

The Guinness World Records™ seal was genuine, but it is also the result of the contemporary advertising ecosystem. Today, to support the would-be record holder throughout the record-breaking journey, the company has a “creative records consultancy” with “dedicated account managers” (Guinness World Records, [2022]). This creative team is dedicated to combining the brand’s key messages and values and offering ideas for records that can become innovative marketing actions, “which engage their audience with authenticity, making a positive and lasting impact” (Guinness World Records, [2022]).

The results of the campaign prove that the strategy developed for the product was successful. In one year, sales increased by 158% on physical channels and 738% on digital channels. The aim of positioning the tablet as a culinary ingredient, which is what we call here the gourmetization of the drug, was also achieved by the brand: in a survey conducted by Kantar, 77% of respondents said they would consider using the product for this purpose (Bayer, [2022]).

## DISCUSSION

Through this Vietnamese case study, we have shown how the contemporary advertising ecosystem and cyber advertising have allowed an effervescent food supplement to be positioned as a culinary ingredient.

However, the messages transmitted by advertising campaigns only acquire meaning within the environment that they are received. The interpretations of their connotations are susceptible to the intervention of the worldviews of the target audiences (Machado; Burrowes; Rett, 2020). Based on this assumption, using a Vietnamese campaign as a case study is a limitation of the work.

In fact, unfamiliarity with the language and lack of immersion in the local culture are limiting elements for an in-depth analysis of the rhetorical and aesthetic details of the advertising pieces. To base our study on this type of analysis would be unfeasible.

However, we believe that the focus on strategies, as well as the theoretical bases chosen, justifies the relevance of the work and allows us to extrapolate the discussions raised by this case study to other socio-cultural spaces. This extrapolation is challenging, but important for creating transnational public policies to promote health (Rowbotham *et al.*, 2020).

In our study, this is possible because the characteristics of the environment where the messages were received are not restricted to Vietnam. The medicalization of life, nutritionism and assigning responsibility to the subject for changes in behavior are all topics that feature in research carried out in Brazil and in various other countries, as presented in the introduction to this article.

The sharing of recipes and cooking tips in the digital environment is a globally observable phenomenon (Goodman; Jaworskab, 2020). Brands demanding individual responsibility for self-management and health is one aspect of the biopolitics of consumption seen within the neoliberal rationality. This feature can also be extrapolated to other realities (Hoff; Holtz; Fraga, 2020). Furthermore, the impact of lockdown and covid-19 on the habit of cooking at home also goes beyond the Vietnamese context. In Brazil, a study conducted by Fispal Food Service in partnership with the consultancy FGV Jr. revealed that 73.3% of the 800 interviewees started cooking more during the pandemic. Among these, 78% agree, totally or partially, that they intend to continue cooking at home frequently (Fispal Food Service, 2022).

All these factors together suggest that Bayer would find a favorable environment for the reception of its strategies in other socio-cultural contexts, including Brazil.

We hypothesize that the strategy of intervening in the worldviews of the target audiences would be successful in contexts here in the West as well. To support this hypothesis, we will use evidence found in the literature that has some similarity with the issues raised in our case study.

In a survey carried out in Europe at the beginning of 2021, 42% of respondents said they consumed vitamins and other supplements to strengthen their immune system. The items they consumed most were vitamin C, multivitamins, vitamin D and probiotics (Hancocks, 2021; Shridhar, 2021).

In Brazil, data from the Brazilian Association of the Food Industry for Special Purposes (Abiad) shows that there is at least one consumer of food/nutritional supplements in 59% of Brazilian households. According to this research, proteins are very important in the country. In addition to vitamins and minerals, they are also on the list of most consumed products in the category. The data shows that only 51% of recommendations are made by health professionals. The survey doesn't state where the 49% of supplement consumers

who do this without any supervision source their information. However, it is possible to hypothesize that online information is relevant: 68% of those interviewed use the internet as their most frequent source of information and 96% are on social networks (Abiad, 2020).

These platforms are important components of the contemporary advertising ecosystem, and have favored the gourmetization of another food supplement, whey protein. Whey protein is a residual - and potentially polluting - component of the dairy industry, but it has become a widely consumed and sought-after product due to its nutritional characteristics, especially its protein and peptide content (Smithers, 2008). In the last two decades, this supplement has fueled a multi-billion-dollar industry and has been incorporated into a range of products from potato chips to beer (King; Weedon, 2020).

The use of whey protein in homemade recipes is not rare. A recent qualitative study of three digital influencers' Instagram profiles revealed that they encourage the use of the product in high-protein recipes. The influencers studied were a nutritionist, who at the time of the research was studying for a master's degree in nutrition, and two businesswomen. They had more than 1.5 million followers each. Two of them had more than double that. In the profile of the nutrition professional, who was pregnant at the time of data collection, recipes using whey protein were common (Mota *et al.*, 2019). Homemade recipes that use this food supplement as an ingredient are not restricted to Instagram. They can easily be found on media that don't only target fitness audiences. This can be seen in the recipe channel hosted on the Globo.com portal (Receitas..., 2021), as well as the Cookpad platform (33 Receitas..., [2022]) which, like the Cooky app used in the Vietnamese campaign, is an environment for sharing recipes and cooking tips between members of the community. Cookpad is available in more than 70 countries, in more than 30 languages (Cookpad, [2022]).

For all these reasons, we consider whey protein to be an identifiable case of supplement gourmetization in the West, capable of growing significantly more if a brand conducts cyber advertising actions like those carried out by Bayer in Vietnam.

As far as Bayer in Brazil is concerned, the company has been adopting different tactics to dilute the perception of Redoxon® as a supplement and place it in the context of daily use and as a food product. For example, we can mention the campaign for the product Redoxitos®, a vitamin C supplement in the form of gummies, available in three flavors (orange, strawberry or grape). Although it is sold in packs of 25, the recommendation is not to exceed one a day<sup>9</sup>. One of its advertising initiatives involved the use of children's characters from the Pixar/Disney film "Inside Out" (JESUS, 2016), a strategy that even drew the attention of the National Advertising Self-Regulation Council (Conar), which, in July 2016, initiated a case against the campaign on the internet, TV, cinema and at points of sale (Conar, 2016)<sup>10</sup>.

Registered under No. 016/16, the case describes that the promotion - and its offshoots - included what Conar's board of directors understood to be "association of the product with Disney animation characters aimed at children, distribution of gifts, activities in shopping malls and movie theaters and dissemination on blogs aimed at children, without clear identification of advertising activity" (Conar, 2016, own translation).

Nevertheless, the advertiser (Bayer) and the agency (ED Interactive) claimed "that the whole campaign is aimed at parents and not at children. They denied imperative consumer appeal aimed at minors and any other disrespect for ethical rules" (Conar, 2016, own translation). The defense claimed that in relation to blog posts, the company and the agency "merely invited some mom bloggers to watch the Disney animation, offering them gifts" (Conar, 2016, own translation). After analysis the initial decision was to close the case. However, Conar's management appealed and the chamber responsible for reviewing the case unanimously

9 Information obtained from the manufacturer's website (Redoxon, c2020).

10 To access go to <http://www.conar.org.br/>: decisões > casos : 2016 > Julho > Crianças e Adolescentes 016/16, em recurso ordinário - REDOXITOS - PROMOÇÃO DIVERTIDAMENTE.

decided to issue a warning to Bayer and its agency, on the grounds that the sum of the elements characterizes a communication strategy that is “at the very least extremely risky in terms of advertising a product with restricted consumption” aimed at children (Conar, 2016, own translation).

One of the aesthetic aspects of cyber advertising is a tendency for brands to “disappear”. Through a hybridization with the wider culture, the brand softens its rhetoric of consumer appeal (Atem *et al.*, 2015, p.12, own translation). When cyber advertising is used by drug brands, it makes inspection more difficult and encourages regulatory rules to be circumvented, as in the case of Redoxitos®, which was almost shelved and only received a warning.

A similar finding was noted in relation to a campaign for the painkiller and antipyretic Novalgina®. It showed how the use of branded content, a strategy that mixes information, advertising, and entertainment, in which the brand is inserted into the narrative without interrupting the user experience and without directly seeking to sell, can favor non-compliance with regulatory items (Castro Alves; Abreu, 2022).

This obfuscation that takes place when using cyber advertising, whether of the brand or the medicinal function of the advertised product can also be seen in campaigns by the company Hypera Pharma. On its website, Hypera Pharma claims to be “a leader in the non-prescription drug market, with iconic brands that have been recognized by Brazilians for decades” and “one of the largest media investors in Brazil, with dozens of advertising campaigns every year in traditional and digital media” (Hypera Pharma, 2022, own translation). Among these campaigns are #HistoriasdeAfter (IIDA, 2021) and #BondedaCurtição (Engov..., 2021), created to promote Engov After®, “a new drink concept in Brazil, refreshing and tasty, specially formulated to give an UP after intense moments” (Engov..., 2021, own translation). These campaigns illustrate the use of cyber advertising to gourmetize Engov®, a medicine intended to relieve the symptoms of headaches and allergies.

Based on the results of the case study and the examples discussed, we consider it relevant to update the advertising regulation of medicines and food/nutritional supplements in the context of cyber advertising, especially since this is currently done a posteriori. Within the scope of advertising inspection, both the National Health Surveillance Agency (Anvisa), Conar and the Consumer Protection and Defense Program (Procon) only take action once the irregular advertisement has subjected the population to a concrete risk (Castro Alves; Abreu, 2022; Jesus, 2016; Nascimento, 2005).

Based on these examples, we also encourage reflection on the future of food culture. Food has nutritional and physiological effects, which are often different from those resulting from nutritional supplements. In addition, it is essential that its affective, hedonic, and sociocultural attributes are preserved (KERPEL, 2021). Our case study on the promotion of Redoxon® Triple Action reveals that skillfully applied cyber advertising techniques persuade the consumer to believe that everything they are being told can be attained through a pill.

Studies on the food industry show that the taste of food is easily manipulated using additives. There is data on the effects of the closer ties between the tobacco industry and the food industry, both in terms of production techniques and advertising (MOSS, 2015), which have contributed to ultra-processed foods, often rich in these additives, becoming a threat to health (Hawkes, 2006; Monteiro *et al.* 2013). It is already known that the way people eat today is one of the causes of the global syndemic, i.e., concomitant obesity, undernutrition, and climate change (Swinburn *et al.*, 2019).

History has shown that eating habits change and something unusual can become common. The concept of good and bad food is not inherent in food; it is a socially constructed idea. Since these criteria are the result of a learning process, they change over time and space (Chamberlain, 2004; Montanari, 2013) and the current time-space relationship lasts one click (Azevedo, 2012).

Therefore, to inhibit the impact of multinationals on food culture, it is necessary to develop a range of literacies, especially advertising and food literacy.

The advertising literacy model proposed by Malmelim (2010), and corroborated by Machado, Burrowes and Rett (2020), comprises four dimensions: the informational dimension, which is manifested in the ability to extract information from the media and judge its veracity; the aesthetic/visual component, in which all implicit and explicit audiovisual components are evaluated; the rhetorical dimension, which implies being able to identify the persuasive elements that make up the message and how these visual, stylistic and discursive components are manipulated and customized according to the audience you want to reach; and finally, promotional literacy, which implies understanding the commercial bias that exists in all brand communication and not just in advertising itself. Within the contemporary advertising ecosystem, these skills may be able to prevent consumers from falling “into the communication traps of advertising messages that, at first glance, seem more like journalistic information or entertainment, for example.” (Machado; Burrowes; Rett, 2020, p. 139-140, own translation).

In the context of this paper, food literacy is also fundamental. Bringing food/nutritional supplements into the kitchen means bringing artificial flavors and food additives into homemade dishes, with no guaranteed benefits. This is a risk that food literacy can prevent. The Food Guide for the Brazilian population states that “the effect of individual nutrients has progressively been shown to be insufficient to explain the relationship between diet and health” (Brazil, 2014, p. 16, own translation). In addition, self-medication/self-prescription and the adverse effects caused by supplements are considered a public health issue. This has worried experts and authorities (Domingues; Marins, 2007; Molin *et al.*, 2019). Another aggravating factor of the medicalization of food is that it dilutes the public role of health in the food sector. This dilution is detrimental to society because the individualization of the problem reduces the urgency with which the social and behavioral causes of the disease are addressed, be it obesity, undernutrition or hunger (Lefrève, 1983; Swinburn *et al.*, 2019).

However, positive results can be used as a benchmark for public agents. After all, it's high time the state incorporated current media communication techniques to reproduce what brands do with consumers, but from an ethical and civic perspective. The state's use of the advertising ecosystem is tantamount to adopting, in the field of communication, some of the principles that underpin basic health care: universality, equity, decentralization, regionalization and citizen participation (Araújo; Cardoso, 2007).

## FINAL CONSIDERATIONS

We began this paper with a case study examining how the advertising ecosystem and cyber advertising techniques can be used to naturalize and gourmetize the use of food supplements in everyday diets. We added references that could establish dialogues between the results found in the Vietnamese context and the global context, with a focus on Brazil. At this stage, other case studies were incorporated into the debate to address the application of these strategies to the advertising of supplements as well as medicines.

Our article shows that closer ties between the drug/supplement industry and the food industry have the potential to impact contemporary food culture in a similar way to that caused by the close ties between the tobacco industry and the food industry. However, this could occur in a much shorter space of time, due to the current global setup. This hypothesis deserves attention and further study.

Finally, we argue that the advertising ecosystem and cyber advertising techniques could provide a solution. The same marketing mechanism used by large companies can be used in public communication policies promoting education, health, and well-being. The same techniques that encourage the consumption of ultra-processed foods, supplements and medicines can be used for prevention, vaccination, and awareness campaigns, and to publicize political and social causes and other demands. To this end, we believe it is

essential to invest in education that encourages critical thinking. Advertising literacy, food literacy and other topics that contribute to promoting citizenship need to be introduced to schools.

We believe it is possible to create a critical and purposeful educational ecosystem, with the participation of market players, academia, public policy, and citizens in general. There is an urgent need to move towards a society in which health is seen and demanded as a collective good and a right for all, and not as an individual commodity and a source of profit for minorities.

## REFERENCES

33 RECEITAS de *whey protein*. **Cookpad**, [2022]. Available from: <https://cookpad.com/pt/busca/whey%20protein?event=search.history>. Accessed: 8 Aug. 2022.

ABRAHAM, John. Evolving sociological analyses of 'pharmaceuticalisation': a response to Williams, Martin and Gabe. **Sociology of Health & Illness**, Oxford, v. 33, n. 5, p. 726-728. 2011. DOI: <https://doi.org/10.1111/j.1467-9566.2011.01353.x>. Available from: <https://onlinelibrary.wiley.com/doi/10.1111/j.1467-9566.2011.01353.x>. Accessed: 11 Aug. 2023.

AGÊNCIA SANITÁRIA DE VIGILÂNCIA SANITÁRIA (ANVISA). Gerência Geral de Alimentos. **Perguntas e respostas: suplementos alimentares**. 6. ed. Brasília, DF: Anvisa, 2020. (Macrotema de alimentos). Available from: <http://antigo.anvisa.gov.br/documents/33916/2810640/Suplementos+Alimentares/a6fd2839-6d80-496a-becb-8b2122eff409>. Accessed: 9 Aug. 2022.

ARAÚJO, Inesita Soares de; CARDOSO, Janine Miranda. **Comunicação e saúde**. Rio de Janeiro: Editora Fiocruz, 2007.

ASSOCIAÇÃO BRASILEIRA DA INDÚSTRIA DE ALIMENTOS PARA FINS ESPECIAIS (ABIAD). **Pesquisa de Mercado ABIAD: Hábitos de consumo de suplementos alimentares**. [São Paulo]: ABIAD, 2020. Infográfico. Available from: <https://abiad.org.br/2021/wp-content/uploads/2020/09/Infografico-1-Pesquisa-Suplementos-Alimentares-2020.pdf>. Accessed: 12 jul. 2022.

ATEM, Guilherme Nery *et al.* Ciberpublicidade e a estética da transparência. *In*: CONGRESSO BRASILEIRO DE CIÊNCIAS DA COMUNICAÇÃO, 36., Rio de Janeiro, 4-7 Sept. 2015. **Anais [...]**. São Paulo: Intercom, 2015. Available from: <https://www.portalintercom.org.br/anais/nacional2015/resumos/R10-0924-2.pdf>. Accessed: 11 Aug. 2023.

ATEM, Guilherme Nery; TAVARES, Mariana Ayres. O *pathos* discursivo na ciberpublicidade. *In*: ATEM, Guilherme Nery; OLIVEIRA, Thaiany Moreira de; AZEVEDO, Sandro Tôres de. **Ciberpublicidade: discurso, experiência e consumo na cultura transmidiática**. Rio de Janeiro: E-Papers: 2014. p. 121-138.

AZEVEDO, Sandro Tôres de. A ciberpublicidade como novo modelo de fazer publicitário: análise da campanha "Quem faz nossa história é você". *In*: CONGRESSO BRASILEIRO DE CIÊNCIAS DA COMUNICAÇÃO, 35., Fortaleza, 3-7 Sept. 2012. **Anais [...]**. São Paulo: Intercom, 2012. Available from: <http://www.intercom.org.br/papers/nacionais/2012/resumos/r7-2156-1.pdf>. Accessed: 11 Aug. 2023.

BAKER, Phillip *et al.* First-food systems transformations and the ultra-processing of infant and young child diets: The determinants, dynamics and consequences of the global rise in commercial milk formula consumption. **Maternal & Child Nutrition**, Oxford, v.17, n. 2, e13097. 2021. DOI: <https://doi.org/10.1111/mcn.13097>. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1111/mcn.13097>. Accessed: 11 Aug. 2023.

BAYER: Redoxon — Turn Your Guilty Pleasure into Healthy Pleasure. **Mobile Marketing Association**, New York City, [2022]. Available from: [https://www.mmaglobal.com/case-study-hub/case\\_studies/view/70963](https://www.mmaglobal.com/case-study-hub/case_studies/view/70963). Accessed: 2 Aug. 2022.

BAYER VIETNAM. **Redoxon Triple Action Vietnam achieves Guinness World Record with social media self-care food preparation campaign**. Ho Chi Minh City, 25 Nov. 2021. Available from: <https://www.bayer.com/en/vn/redoxon-triple-action-vietnam>. Accessed: 2 dez. 2022.

BELL, Susan E.; FIGERT, Anne E. Medicalization and pharmaceuticalization at the intersections: Looking backward, sideways and forward. **Social Science & Medicine**, Oxford, v. 75, n. 5, p. 775-783. 2012. DOI: <https://doi.org/10.1016/j.socscimed.2012.04.002>. Available from: <https://www.sciencedirect.com/science/article/pii/S0277953612003188?via%3Dihub>. Accessed: 11 Aug. 2023.

BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. **Guia alimentar para a população brasileira**. Brasília, DF: Ministério da Saúde, 2014.

CASAQUI, Vander. Contratos comunicativos da comunicação publicitária contemporânea: sentidos da produção e do consumo nas estratégias de publicização. In: ATEM, Guilherme Nery; OLIVEIRA, Thaiané Moreira de; AZEVEDO, Sandro Tôrres de. **Ciberpublicidade**: discurso, experiência e consumo na cultura transmidiática. Rio de Janeiro: E-Papers: 2014. p. 31-48.

CASTRO ALVES, Daniele de; ABREU, Fernanda Ferreira de. Branded content e o ofuscamento do caráter mercadológico na publicidade de medicamentos: estudo de caso do analgésico Novalgina. **Cambiassu**, São Luis, v. 17, n. 29, p. 26-46, 2022. DOI: <https://doi.org/10.18764/2176-5111v17n29.2022.2>. Available from: <https://periodicoseletronicos.ufma.br/index.php/cambiassu/article/view/19064>. Accessed: 14 Aug. 2023.

CHAMBERLAIN, Kerry. Food and health: expanding the agenda for health psychology. **Journal of Health Psychology**, London, v. 9, n. 4, p. 467-481, 2004. DOI: <https://doi.org/10.1177/1359105304044030>. Available from: <https://journals.sagepub.com/doi/10.1177/1359105304044030>. Accessed: 11 Aug. 2023.

CLAPP, Jennifer; SCRINIS, Gyorgy. Big food, nutritionism, and corporate power. **Globalizations**, The United Kingdom, v. 14, n. 4, p. 578-595. 2017. DOI: <https://doi.org/10.1080/14747731.2016.1239806>. Available from: <https://www.tandfonline.com/doi/full/10.1080/14747731.2016.1239806>. Accessed: 11 Aug. 2023.

COOKPAD. **Cookpad careers**. Londres: Cookpad, [2022]. Available from: [www.cookpadteam.com](http://www.cookpadteam.com). Accessed: 8 Aug. 2022.

CONSELHO NACIONAL DE AUTORREGULAÇÃO PUBLICITÁRIA (CONAR). Representação nº 016/16, em recurso ordinário. Redoxitos: Promoção Divertidamente. **Conar**, São Paulo, Jul. 2016. Available from: [www.conar.org.br](http://www.conar.org.br). Accessed: 6 Aug. 2022.

COSER, Orlando. **As metáforas farmacológicas com que vivemos**: ensaios de metapsicofarmacologia. Rio de Janeiro: Garamond, 2010.

CRAWFORD, Robert. Salutarismo e medicalização da vida cotidiana. **Revista Eletrônica de Comunicação, Informação & Inovação em Saúde**. v. 13, n. 1, p. 100-121, 2019. DOI: <https://doi.org/10.29397/reciis.v13i1.1775>. Available from: <https://www.reciis.icict.fiocruz.br/index.php/reciis/article/view/1775>. Accessed: 11 Aug. 2023.

DOMINGUES, Sabrina Fontes; MARINS, João Carlos Bouzas. Utilização de recursos ergogênicos e suplementos alimentares por praticantes de musculação em Belo Horizonte - MG. **Fitness & Performance Journal**, Rio de Janeiro, v. 6, n. 4, p. 218-226. 2007. Available from: <https://www.redalyc.org/articulo.oa?id=75117214002>. Accessed: 14 Aug. 2023.

DOSEDEL, Martin *et al.* Vitamin C: sources, physiological role, kinetics, deficiency, use, toxicity, and determination. **Nutrients**, Basel, v. 13, n. 2, p. 615. 2021. DOI: <https://doi.org/10.3390/nu13020615>. Available from: <https://www.mdpi.com/2072-6643/13/2/615>. Accessed: 11 Aug. 2023.

ENGOV. **Bula Engov**. São Paulo: Hyper Farma, 2022. Available from: <https://www.engov.com.br/bula>. Accessed: 6 Aug. 2022.

ESSENCEDIACOM. **Behind the campaign – Healthy Treat Twist**. Londres, 7 abr. 2022a. Facebook: EssenceMediacom @EssenceMediacom. Available from: [https://m.facebook.com/EssenceMediacom/videos/behind-the-campaign-healthy-treat-twist/971472166905304/?\\_rdr](https://m.facebook.com/EssenceMediacom/videos/behind-the-campaign-healthy-treat-twist/971472166905304/?_rdr). Accessed: 3 Aug. 2022.

ESSENCEDIACOM. **Redoxon Vietnam – Healthy Treat with a Tasty Twist**. London: EssenceMediacom, 15 mar. 2022b. 1 vídeo (3 min). Available from: <https://youtu.be/xFCksikcxQkl>. Accessed: 3 Aug. 2022.

FISPAL FOOD SERVICE. Como agradar o consumidor que cozinha em casa e é mais exigente. **Food Connection**, Brazil, 31 Jan. 2022. Food Service. Available from: <https://www.foodconnection.com.br/food-service/como-agradar-o-consumidor-que-cozinha-em-casa-e-e-mais-exigente>. Accessed: 5 Aug. 2022.

FLYVBJERG, Bent. Five misunderstandings about case-study research. **Qualitative Inquiry**, United States, v. 12, n. 2, p. 219-245. 2006. DOI: <https://doi.org/10.1177/1077800405284363>. Available from: <https://journals.sagepub.com/doi/10.1177/1077800405284363>. Accessed: 14 Aug. 2023.

GOODMAN, Michael K; JAWORSKAB, Sylvia. Mapping digital foodscapes: digital food influencers and the grammars of good food. **Geoforum**, The United Kingdom, v. 117, p. 183-193. 2020. DOI: <https://doi.org/10.1016/j.geoforum.2020.09.020>. Available from: <https://www.sciencedirect.com/science/article/pii/S0016718520302463>. Accessed: 14 Aug. 2023.

ENGOV lança nova plataforma de entretenimento para posicionar marca. Engov lança nova plataforma de entretenimento para posicionar marca. **Portal Press**, São Paulo, 22 Nov. 2021. Anunciantes. Available from: <https://grandesnomesdapropaganda.com.br/anunciantes/engov-lanca-nova-plataforma-de-entretenimento-para-posicionar-marca/>. Accessed: 16 Jul. 2022.

GLOSSARY of advertising terms. **History of Advertising Trust**, London, c2016. Available from: [https://www.hatads.org.uk/documents/GLOSSARY\\_OF\\_ADVERTISING\\_TERMS.pdf](https://www.hatads.org.uk/documents/GLOSSARY_OF_ADVERTISING_TERMS.pdf). Accessed: 20 Sept. 2023.

GUINNESS WORLD RECORDS. **Campanhas e conceitos criativos de marketing**. London: Guinness World Records, [2022]. Available from: <https://www.guinnessworldrecords.com.br/business-marketing-solutions/creative-campaigns/>. Accessed: 4 Aug. 2022.

GUINNESS WORLD RECORDS. **Most videos of people adding toppings to food uploaded to Facebook in one hour**. London: Guinness World Records, 2021. Available from: <https://www.guinnessworldrecords.com/world-records/648375-most-videos-of-people-adding%C2%A0toppings-to-desserts-uploaded-to-facebook-in-one-hou>. Accessed: 4 Aug. 2022.

HANCOCKS, Nikki. Euromonitor Immunity Report: how to appeal to the holistic health shopper. **NutraIngredients**, The United Kingdom, 23 Jul. 2021. Available from: <https://www.nutraingredients.com/Article/2021/07/23/Euromonitor-Immunity-Report-How-to-appeal-to-the-holistic-health-shopper>. Accessed: 31 Jul. 2022.

HAWKES, Corinna. Uneven dietary development: linking the policies and processes of globalization with the nutrition transition, obesity and diet-related chronic diseases. **Globalization and Health**, London, v. 2, n. 1, p. 1-18. 2006. DOI: <https://doi.org/10.1186/1744-8603-2-4>. Available from: <https://globalizationandhealth.biomedcentral.com/articles/10.1186/1744-8603-2-4>. Accessed: 11 Aug. 2023.

HOFF, Tânia Marcia Cezar; HOLTZ, Ana Catarina; FRAGA, Lucas Lopes. Publicidade e biopolítica do consumo na pandemia: análise da interface comunicação e saúde no contexto da covid-19. **Comunicação & Inovação**, São Caetano do Sul, v. 21, n. 47, p. 267- 282, 2020. Available from: [https://seer.uscs.edu.br/index.php/revista\\_comunicacao\\_inovacao/article/view/7295](https://seer.uscs.edu.br/index.php/revista_comunicacao_inovacao/article/view/7295). Accessed: 14 Aug. 2023.

HYPERA PHARMA. **Home**. São Paulo: Hyper Pharma, 2022. Available from: <https://www.hypera.com.br/a-hypera-pharma>. Accessed: 16 jul. 2022.

IIDA, Kelly. Engov After faz ação com 150 influenciadores. **GKPB**, São Paulo, 14 May 2021. Publicidade. Available from: <https://gkpb.com.br/65715/engov-after-150-influenciadores/>. Accessed: 16 Jul. 2022.

JESUS, Paula Renata Camargo de. “Personagens e mascotes na publicidade infantil. Aspectos persuasivos e estratégicos na campanha publicitária da vitamina para crianças Redoxitos”. In: CONGRESSO BRASILEIRO DE CIÊNCIAS DA COMUNICAÇÃO, 39., São Paulo, 5-9 Sept. 2016. **Anais** [...]. São Paulo: Intercom, 2016. Available from: <https://www.portalintercom.org.br/anais/nacional2016/resumos/R11-2508-1.pdf>. Accessed: 14 Aug. 2023.

KACZMAREK, Emilia. Promoting diseases to promote drugs: the role of the pharmaceutical industry in fostering good and bad medicalization. **British Journal of Clinical Pharmacology**, Oxford, v. 88, n. 1, p. 34-39, 2022. DOI: <https://doi.org/10.1111/bcp.14835>. Available from: <https://bpspubs.onlinelibrary.wiley.com/doi/10.1111/bcp.14835>. Accessed: 11 Aug. 2023.

KARHAWI, Issaaf. Crises geradas por influenciadores digitais: propostas para prevenção e gestão de crises. **Organicom**, São Paulo, v. 18, n. 35, p. 45-59, 2021. DOI: <https://doi.org/10.11606/issn.2238-2593.organicom.2021.172213>. Available from: <https://www.revistas.usp.br/organicom/article/view/172213>. Accessed: 14 Aug. 2023.

KARHAWI, Issaaf. Influenciadores digitais: conceitos e práticas em discussão. **Communicare**, São Paulo, v. 17, Edição Especial de 70 anos da Faculdade Cásper Líbero, p. 46-61, 2017. Available from: <https://static.casperlibero.edu.br/uploads/sites/5/2020/12/comunicare17-especial.pdf>. Accessed: 11 Aug. 2023.

KERPEL, Raquel. **Medicalização da alimentação e da nutrição**: conceitos e estratégias. Orientador: Fernando Hellmann. 2021. 133f. Tese (Doutorado em Saúde Coletiva) – Universidade Federal de Santa Catarina, Santa Catarina, 2021.

KING, Samantha; WEEDON, Gavin. Embodiment is ecological: the metabolic lives of whey protein powder. **Body & Society**, The United Kingdom, v. 26, n. 1, p. 82-106, 2020. DOI: <https://doi.org/10.1177/1357034X19878775>. Available from: <https://journals.sagepub.com/doi/full/10.1177/1357034X19878775>. Accessed: 14 Aug. 2023.

LEFRÈVE, Fernando. A função simbólica dos medicamentos. **Revista de Saúde Pública**. São Paulo, v. 17, n. 6, p. 500-503, 1983. DOI: <https://doi.org/10.1590/S0034-89101983000600007>. Available from: <https://www.scielo.br/j/rsp/a/dPRtFF49KS7mhMGvzXR78kd/?lang=pt#>. Accessed: 11 Aug. 2023.

MACHADO, Monica; BURROWES, Patricia; RETT, Lucimara. Proposta de um modelo de Lliteracia para as novas enunciações publicitárias. **Animus: Revista Interamericana de Comunicação Midiática**, Santa Maria, v. 19, n. 40, p. 124-143, 2020. DOI: <https://doi.org/10.5902/2175497740462>. Available from: <https://periodicos.ufsm.br/animus/article/view/40462>. Accessed: 14 Aug. 2023.

MALMELIN, Nando. What is advertising literacy? Exploring the dimensions of advertising literacy. **Journal of Visual Literacy**, United States, v. 29, n. 2, p. 129-142, 2010. DOI: <https://doi.org/10.1080/23796529.2010.11674677>. Available from: <https://www.tandfonline.com/doi/abs/10.1080/23796529.2010.11674677>. Accessed: 14 Aug. 2023.

MATURO, Antonio. Fatism, self-monitoring and the pursuit of healthiness in the time of technological solutionism. **Italian Sociological Review**, Verona, v. 4, n. 2, p. 157-171, 2014. DOI: <https://doi.org/10.13136/isr.v4i2.80>. Available from: <https://italiansociologicalreview.com/ojs/index.php/ISR/article/view/80>. Accessed: 11 Aug. 2023.

MAYER, Christopher. Governing through choice: Food labels and the confluence of food industry and public health discourse to create 'healthy consumers'. **Social Theory and Health**, The United Kingdom, v. 12, p. 376-395, 2014. DOI: <https://doi.org/10.1057/sth.2014.12>. Available from: <https://link.springer.com/article/10.1057/sth.2014.12>. Accessed: 11 Aug. 2023.

MOLIN, Thaís Ramos Dal *et al.* Marco regulatório dos suplementos alimentares e o desafio à saúde pública. **Revista de Saúde Pública**, São Paulo, v. 53, n. 90, 2019. DOI: <https://doi.org/10.11606/s1518-8787.2019053001263>. Available from: <https://www.revistas.usp.br/rsp/article/view/163451>. Accessed: 14 Aug. 2023.

MONTANARI, Massimo. **Comida como cultura**. 2. ed. São Paulo: Editora SENAC, 2013.

MONTEIRO, C. A. *et al.* Ultra-processed products are becoming dominant in the global food system. **Obesity Reviews**, Oxford, v. 14, n. S2, p. 21-28, 2013. DOI: <https://doi.org/10.1111/obr.12107>. Available from: <https://onlinelibrary.wiley.com/doi/10.1111/obr.12107>. Accessed: 11 Aug. 2023.

MOSS, Michael. **Sal, açúcar, gordura**: como a indústria alimentícia nos físgou. Rio de Janeiro: Intrínseca, 2015.

MOTA, João de Jesus Oliveira *et al.* Análise de conteúdos de *posts* sobre alimentação divulgados por influenciadoras digitais na rede social Instagram. **DEMETRA: Alimentação, Nutrição & Saúde**, Rio de Janeiro, v. 14, p. e39076, 2019. DOI: <https://doi.org/10.12957/demetra.2019.39076>. Available from: <https://www.e-publicacoes.uerj.br/index.php/demetra/article/view/39076>. Accessed: 14 Aug. 2023.

NASCIMENTO, Álvaro. **“Ao persistirem os sintomas o médico deverá ser consultado”**: Isto é regulação? São Paulo: Sobravime, 2005.

PEREZ, Clotilde. Ecosistema publicitário: o crescimento sígnico da Publicidade. *In*: CONGRESSO BRASILEIRO DE CIÊNCIAS DA COMUNICAÇÃO, 39., São Paulo, SP, 5-9 set. 2016. **Anais [...]**. São Paulo: Intercom, 2016. Available from: <https://www.portalintercom.org.br/anais/nacional2016/resumos/R11-3347-1.pdf>. Accessed: 11 Aug. 2023.

POULAIN, Jean-Pierre. The affirmation of personal dietary requirements and changes in eating models. *In*: FISCHLER, Claude (ed.). **Selective eating**: the rise, the meaning and sense of “personal dietary requirements”. Paris: Éditions Odile Jacob, 2013. p. 253-264.

RECEITAS com *whey protein*: aprenda 8 opções fáceis. **Receitas**, Brasil, 18 Aug. 2021. *Fitness*. Available from: <https://receitas.globo.com/dietas/fitness/receitas-com-whey-protein-aprenda-8-opcoes-faceis.ghtml>. Accessed: 14 Aug. 2023.

REDOXON. **Redoxitos® Vitamina C em gominhas**. São Paulo: Bayer, c2020. Available from: <https://www.redoxon.com.br/produtos/redoxitos-vitamina-c/>. Accessed: 6 Aug. 2022.

REDOXON VIETNAM. **Khám Phá Ngay Nhiều Cách Dùng Redoxon Triple Action**. Ho Chi Minh City: Bayer, 2021. 5 vídeos. Publicado pelo canal Redoxon Vietnam. *Playlist*. Available from: <https://www.youtube.com/playlist?list=PLoDwA3-MLyZP-ldOBhxgj0lx6yMaeM3Eq>. Accessed: 3 Aug. 2022.

ROWBOTHAM, Samantha *et al.* 30+ years of media analysis of relevance to chronic disease: a scoping review. **BMC Public Health**, Londres, v. 20, p. 1-21, 2020. DOI: <https://doi.org/10.1186/s12889-020-8365-x>. Available from: <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-020-8365-x>. Accessed: 14 Aug. 2023.

SANTOS, Maureen. Do *fake* saudável à gourmetização. **Heirich Böll Stiftung**, Rio de Janeiro, 1 Sept. 2018. Available from: <https://br.boell.org/pt-br/2018/09/02/do-fake-saudavel-gourmetizacao>. Accessed: 31 Jul. 2022.

SCRINIS, Gyorgy. **Nutritionism: the science and politics of dietary advice**. New York: Columbia University Press, 2013.

SHRIDHAR, Amrutha. **Changing attitudes in health and nutrition: rise of immunity-boosting strategies**. Londres: Euromonitor International, 2021. Available from: <https://go.euromonitor.com/white-paper-consumer-health-210722-health-and-nutrition-survey.html>. Accessed: 31 Jul. 2022.

SMITHERS, Geoffrey W. Whey and whey proteins—From 'gutter-to-gold'. **International Dairy Journal**, The United Kingdom, v. 18, n. 7, p. 695-704, 2008. DOI: <https://doi.org/10.1016/j.idairyj.2008.03.008>. Available from: <https://www.sciencedirect.com/science/article/pii/S0958694608000344>. Accessed: 14 Aug. 2023.

SWINBURN, Boyd A. *et al.* The global syndemic of obesity, undernutrition, and climate change: the Lancet Commission report. **The Lancet**, London, v. 393, n. 10173, p. 791-846, 2019. DOI: [https://doi.org/10.1016/S0140-6736\(18\)32822-8](https://doi.org/10.1016/S0140-6736(18)32822-8). Available from: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)32822-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32822-8/fulltext). Accessed: 14 Aug. 2023.

VAN DIJK, Wieteke *et al.* Medicalization defined in empirical contexts—a scoping review. **International Journal of Health Policy and Management**, Kerman, v. 9, n. 8, p. 327-334, 2020. DOI: <https://doi.org/10.15171/ijhpm.2019.101>. Available from: [https://www.ijhpm.com/article\\_3726.html](https://www.ijhpm.com/article_3726.html). Accessed: 14 Aug. 2023.

VIANA, Márcia Regina *et al.* A racionalidade nutricional e sua influência na medicalização da comida no Brasil. **Ciência & Saúde Coletiva**, Rio de Janeiro, v. 22, n. 2, p. 447-456, 2017. DOI: <https://doi.org/10.1590/1413-81232017222.25432015>. Available from: <https://www.scielo.br/j/csc/a/Yh7qHCBhCMV9Qtrv5JyHzzw/?lang=pt#>. Accessed: 11 Aug. 2023.

VIETNAMESE vitamin supplement rebrands as cooking ingredient. **Contagious**, London, 26 Apr. 2022. Campaign of the week. Available from: <https://www.contagious.com/news-and-views/campaign-of-the-week-vietnams-redoxon-rebrands-as-cooking-ingredient-boosts-sales>. Accessed: 2 Aug. 2022.

WILLIAMS, Simon J.; MARTIN, Paul; GABE, Jonathan. The pharmaceuticalisation of society? A framework for analysis. **Sociology of Health & Illness**, Oxford, v. 33, n. 5, p. 710-725. 2011. DOI: <https://doi.org/10.1111/j.1467-9566.2011.01320.x>. Disponível em: <https://onlinelibrary.wiley.com/doi/10.1111/j.1467-9566.2011.01320.x>. Accessed: 11 Aug. 2023.

WORLD HEALTH ORGANIZATION (WHO). Global Health Estimates: Life expectancy and leading causes of death and disability. **The Global Health Observatory**, Geneva: WHO, c2019. Available from: <https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates>. Accessed: 28 Jul. 2022.

ZORZANELLI, Rafaela Teixeira; ORTEGA, Francisco; BEZERRA JÚNIOR, Benilton. Um panorama sobre as variações em torno do conceito de medicalização entre 1950-2010. **Ciência & Saúde Coletiva**, Rio de Janeiro, v. 19, n. 6, p. 1859-1868. 2014. DOI: <https://doi.org/10.1590/1413-81232014196.03612013>. Available from: <https://www.scielo.br/j/csc/a/nqv3K7JRXxmrBvq5DcQ88Qz/?lang=pt>. Accessed: 11 Aug. 2023.

ZWIER, Sandra. Medicalisation of food advertising. Nutrition and health claims in magazine food advertisements 1990–2008. **Appetite**, London, v. 53, n. 1, p. 109-113. 2009. DOI: <https://doi.org/10.1016/j.appet.2009.05.017>. Available from: <https://www.sciencedirect.com/science/article/pii/S0195666309005340?via%3Dihub>. Accessed: 11 Aug. 2023.