

## **Analysis of food practices in undergraduates of Physical Education and Nutrition: beyond biomedical knowledge**

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**ABSTRACT:** *The aim of this article is to analyze food practices of University students of the graduations in Physical Education and Nutrition of a higher education institution located in the city of Rio de Janeiro, Brazil. The methodology adopted consisted in articulate ethnographic observation and interviews with these students. The biomedical discourse of eating healthy and moderation in eating permeates the theoretical scope of these courses and is usually reproduced systematically by these students. Under them, there is an expectation that they are examples of nutritionally healthy eating practices. We noticed that students often face a paradox between eating knowledge and practices. We observed that reproducing the biomedical discourse capitalizes them, both talking about what should be ingested, as well as what they actually eat. Thus, following the norms of the biomedical field can represent an element of social distinction. In contrast, diverging these norms can also mean a distinction, an adequacy to the group ethos, to the social relationships imbricated there. With this study, we conclude that these groups reiterate the biomedical discourse on one side and react on the other, sometimes in a movement of approach, other times in a movement of deviation.*

**KEYWORDS:** *Feeding Behavior, Health Occupations, Nutritional Sciences, Physical Education and Training, Students.*

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### **I. INTRODUCTION**

Food is a daily and frequent action. It is a subject of interest to several sciences because, in addition to its complexity, it establishes an intimate relationship with the biological and social reproduction of human groups [1]. Besides undeniable human need, food also incorporates cultural, religious, anthropological, socioeconomic and psychological values. Among the many facets that compose the complex phenomenon of food, a story full of nuances unfolds, strongly conditioned by power relations and social distinctions [1,2]. The recommendations disseminated by the field of Health Sciences reiterate that nutrition must be nutritionally balanced, both qualitatively and quantitatively. This hegemonic discourse in the field ignores other facets and privileges the biomedical knowledge in its clinical, biochemical and/or epidemiological aspects [1].

In this sense, balanced diet and physical exercises conglomerate two pillars when it comes to health and quality of life. Graduations in Physical Education and Nutrition come into this context. They emanate norms that are commonly the motto of policies for disease prevention and health promotion. In fact, biomedicine is inserted in a context of relations of power and knowledge that produces normative discourses and practices [3], implementing a current biological and social order [4]. This normative, hygienic, disease and health discourse – related to hygienist and eugenicist knowledge existing since the 18th-19th century – is based on supposed medical legitimacy [5].

Thus, according to the collective imaginary, agents of the health field, including nutritionists and Physical Education teachers, should be more likely than other individuals to adopt dietary practices consistent with maintaining a healthy organism. There are expectations that undergraduates of these courses, as well as other health professionals, are models of dietary practices based in the hegemonic patterns of food, nutrition and health [6].

In this way, because health is not only acquired through theoretical knowledge and information sharing, the social imaginary preaches that the health professionals themselves must embody what they speak, needing to maintain a constant care of themselves. In this way, a double responsibility falls upon them: not only to know and speak about what they know, but also to do what they preach. The society expects, then, that what they say about eating is equal to what they do in relation to eating, since the example is socially considered more meaningful than words [6].

For the present study, we understand eating habits as habits dictated by desire and imagination [2]. Thus, we have human food as a biocultural phenomenon, or, in other words, a biopsychosocial fact, that is, a total social fact [1]. Eating habits are acquired by cultural, anthropological, socioeconomic and psychological

aspects, which involve the environment of the people [7].

Our focus, therefore, detaches itself from the biological side –commonly present in the Nutrition Sciences – and turns to the social and cultural aspects of food. Thus, the present article aims to analyze food practices of university students of undergraduate courses in Physical Education and Nutrition of a public university located in the city of Rio de Janeiro, Brazil.

## **II. THEORETICAL AND METHODOLOGICAL PATH**

The present article was based on a broader sociological and anthropological study, in which the greatest methodological concern was with the description, understanding and interpretation of the phenomena observed in two specific groups linked to the area of Health Sciences: undergraduate students in Physical Education and Nutrition at a public university in Rio de Janeiro. We gave these graduates a critical/understanding look to describe, in an effort to comprehend, the senses and meanings of eating practices and the discourse about these praxis. For that, theoretical-conceptual options were adopted concerning the works of the German sociologist Max Weber (1864-1920) [8,9].

It is from Weber [10] that the concept of *social relations* is appropriate in this research. For the author, they are a network entangled with social actions that are oriented towards each other and are maintained by the expectation of the social agents that others will continue to behave as expected. Although very tenuous, this game of maintaining expectations is the only force that keeps the human groups together [10].

The concept of *field* used here comes from the French sociologist Pierre Bourdieu (1930-2002) [11] and constitutes a symbolic space, where function a social system consisted of relations of force and monopolies, struggles and strategies, interests and profits that condition the discourses of the agents surveyed. In this way, the field is the place, the playing space of a competitive fight. In this struggle, what is at set is the monopoly of authority in the determined field, defined inseparably, as technical capacity and social power; or as the monopoly of competence, understood as the capacity to speak and act legitimately, that is, in and with an authoritative manner, socially granted to a determined agent [11].

Aiming to guarantee the theoretical-conceptual and methodological content to perform sociological interpretations, we adopted different research instruments to conduct this study. Thus, we chose the methodological strategy to articulate direct and participant ethnographic observation [12,13] in addition to informal and in-depth interviews [14,15] with some undergraduate students of Physical Education and Nutrition. The field research occurred between the years of 2012 to 2014.

As subjects represent different roles in different contexts, adopting postures and more formal or informal languages, depending on each situation, to contemplate the scope of this research, we establish as observation places the various spaces of the university. It included corridors, classrooms, canteens, libraries, university restaurant, eating areas, academic centers, gym, fitness center and elevators, as well as the surroundings of the university where there are bars and restaurants.

Formal interviews were recorded and held in university classrooms. All participants of the present study signed an informed consent form in accordance with the guidelines regarding human research delineated in the resolution 466/2012 of the National Health Council.

## **III. THE ETHNOGRAPHIC FIELD AND FOOD**

The chosen environment to develop this research was a public university located in Rio de Janeiro. This institution of higher education has twelve floors, each one with six blocks, which are interconnected by stairs, ramps and footbridges. Regarding the food options, we noticed that there are canteens, which are located on the ground floor, on some floors and in the corridors of certain blocks. Most of the canteens have tables and chairs, where students usually sit in groups or even alone, usually accompanied by smartphones, notebooks, tablets and other electronic paraphernalia.

In the visits to the canteens, we noticed many fast snacks. Among the foods for sale, we saw common and integral oven pie, cheese bread, pizza, crepe, yakisoba, açaí, fruit salad, chocolate truffle, chocolate covered carrot cake (packaged in transparent paper and cut into cubes), candies, chewing gum, chocolate bars, cereal bars and various biscuits, as well as slices of cakes and salty pies. There is also the sale of meals in the form of self-service, à la carte, ready meals, salads, pasta, sandwiches and hamburgers.

Among the beverage options there are refrigerant, soft drinks, coffee, coffee with milk, hot chocolate, cappuccino, teas, juice in cup, can and box, natural juices, vitamins, natural guarana and energetic drinks. In some places, there are drinking fountain, some in operation and others with defect.

Entering the Institute of Nutrition of the university researched, we found that there is an eating area for students to make snacks and meals. There are microwaves, refrigerators, sinks, an extensive table with chairs set close to their sides and air-conditioning. In the refrigerator in this eating area, the students leave pots with lunch or snacks – usually wrapped in plastic bags or cloths – and drinks.

At lunchtime, around noon, this eating area is often quite busy with students, who line up to warm up their packed lunch in the microwave. Some students even leave before the end of class to ensure that they warm

up their meals without waiting in line. After the inauguration of the university restaurant, some students stopped bringing their packed lunch, but others still bring food from home. One of the reasons reported as a reason to still bring food was the time spent in the line of the university restaurant, which in the period of the field survey even exceeded an hour of waiting. On sunny days, some students take umbrellas to get some shade in the sunny spaces of the line.

Regarding the floor where the Physical Education course is located, there is a canteen next to the Academic Center. In the Academic Center of Physical Education, there is a sofa, a table, a refrigerator and a microwave. Despite the proximity to the Academic Center, some students criticize this canteen because of the high prices. Some of them – dissatisfied with the price of some foods and drinks (except for energy drink and coffee, estimated at a “fair price”) – go to the canteen located in the opposite corridor, where there are the courses of History and Social Sciences. The only inconvenient, according to them, is because they have to walk more, as one of them reported: *“I buy in History, I only complain because having to go there being on the side of a canteen is annoying”*.

In the university surroundings, there are also options of places to eat, with offerings of fried pies, pasta, sandwiches, pizzas, crepes, restaurants with self-service meals and à la carte. As a student said: *“If you have some money in your pocket, you will not go hungry”*. In addition to these places with food for sale, there are also bars, whose most famous is located in front of one of the gates of the university, just across the street.

At the university, there is a university restaurant, which is a full meal option for university students. Regarding the menu, there is always the option of two “proteins” – one of them thought for those who do not eat meat –, rice, beans and varied salads (there is always lettuce and tomato). Among the alternatives of dessert, there are fruits or sweets. There are also juice and water, on the same table where there are the olive oil, vinegar, salt sachets and napkins.

We see the increase in the number of students on the days when the menu offers stroganoff (meat or chicken), lasagna and popsicle (with varied flavors such as coconut, lemon and condensed milk). At the end of the meal, you can choose coffee and/or tea (with or without sugar, with a sweetener on the counter where these four thermal bottles and disposable cups are). A student in the Nutrition course, in one of the interviews, when asked if the university restaurant had helped with the nutrition issue at university, said: *“It helped a lot! Very good! And the food is delicious, right? And I think it’s good to have juice, dessert... I think it’s super yummy. It made it very easy, of course”*.

However, not everyone attends the university restaurant as much as they would like. Despite the relatively affordable price for students, many fail to eat in the university restaurant because of the long waiting time in the line and the tight schedule for the next class. The price of each meal for students is R\$ 3.00 and R\$ 2.00 for those who entered the university through the quota system. Payment is made by uploading the university card to machines located on the ground floor. Some students prefer to have lunch and arrive late in class. During the field research period, the university restaurant opened for lunch between 11:00 a.m. and 2:00 p.m.

The three distribution lines for food and their tables and chairs prove to be insufficient to accommodate the number of students, teachers and staff attending the restaurant. Some students who stay in university until night, due to study in the library, university internship and other situations, sometimes consume a snack or cookies instead of lunch, leaving to go to the university restaurant at dinner time, which is served from 5:00 p.m. to 8:00 p.m.

#### **IV. THE HOLY TRINITY: THE DISCOURSE OF THE HEALTH SCIENCES FIELD**

It is everywhere: billboards, magazines, newsstands, social networks and television (in specific programs such as advertising breaks and during soap operas, serials and movies). Directly or indirectly, what it preaches bombard us every single day. The new generation does not escape this discourse already so naturalized by our society and is already born under the aegis of the dictatorship that the holy trinity preaches: to do regular physical exercises, to maintain a nutritionally balanced diet and to sleep for about eight hours (uninterrupted) a night. Three pillars considered indispensable for stable health[6].

In this way, the holy trinity functions as a health tripod – metaphor that serves us perfectly (and perhaps even cruelly) to represent it. All of its components are in line with the same objective: “acquisition” and “maintenance” of health and quality of life. However, if any one of them is not “respected”, the entire structure is put at risk, compromising the sustainability of health. Hence its atrocious character: it is not enough to prioritize one, or to be able to contemplate only two elements. Either the three are followed together with unquestionable discipline, or the ability to remain healthy will be put to the test. Like a tripod, if one of the feet is unbalanced, the whole structure soon collapses. Thus, it is likely that eventually the body will take the negligence of one or more of its “sacred” components. As a mother who does not distinguish love for her three children, the holy trinity does not allow the exclusion of any of its components from the healthy life package[6].

In this sense, this tripod works similar to a religion. His disciples, then, regardless of seeing or feeling its immediate results, must follow its commandments with faith (believing, even without seeing or feeling),

seeking redemption (health, well-being, quality of life) and fleeing from purgatory (diseases, morbidities, diseases). It is a moralistic and normative vision, corresponding to a constant concern with responsibility and blame, present especially in the health field [16].

Given as the panacea for many problems in the health field, the enlistment to the holy trinity promises a (tendentiously seductive) list of benefits. People usually desire them, but not everyone wants or is willing to pay the price. In these cases, some students share the following idea: *“he who does not have time to take care of his health will have to take time to take care of the disease”*.

We then have this discourse of “health”, “healthy”, “well-being”, “quality of life”, “health promotion”, “disease prevention”, which is taught and reproduced by health professionals. We emphasize, however, that the tripod of health is not the board of the law, in other words, it is not an absolute truth accepted in any and every place, by any person, it is not a common sense, banal, accepted in all fields. Physical exercise, balanced eating and restorative sleep are a representation of the health field, a point of view of the biomedical sciences.

Therefore, within Physical Education and Nutrition, this discourse makes all sense. The health tripod is a specific construction of this field. It is a proper sense of this space. Thus, even though our focus is to discuss in the light of the Human and Social Sciences, we consider it pertinent to dedicate some paragraphs to place the lector on the universe that we seek to understand. Therefore, we believe that presenting the norms that bombard the students of these graduations becomes primordial to understanding the senses and meanings that are built upon the following or noncompliance of these norms. The students are already so “trained” in this form that when I asked a student of Physical Education about what health was for her, she began to talk about the concept formulated by the World Health Organization (WHO): *“According to WHO [there were some laughs in the classroom, where there were two more students] is social, physical and mental welfare”*.

I wondered, then, if she agreed with this concept. She replied, shaking her head to the side, in a sign of relativisation: *“I agree, as I also agree that no one has complete health, right? Nobody is here healthy”*. The thick vowels reproduce the remission to the idyllic biomedical meaning of health. She went on: *“We need to be in the middle always”*.

Another student continued:

*I think we are very far from being healthy within the context that the media preaches... What the media preaches as health? People that is skinny, who has the body aesthetically cute [...]. These things, so they are difficult for us to break, right? And here comes the question: what is health for us? For me, it may not be what is for you [...]. It is subjective [...]. For me, health would be what I, I do not know, I can not do today, for example, I would like to run more often, walk more often, I would like to eat better, in the sense of having time to eat and today I will not have the money to eat, for instance.*

The speech above reproduces the hegemonic discourse of the health field, where the student reinforces the binomial exercise-food. However, she adds an element that can make her eating unfeasible: the economic issue. She continued talking and revealed other facets of this complex concept of health:

*Because we learn this is not the money you have, it's the culture that you have. So if you have a cultural capital different from mine, there's no use in eating a yogurt with granola if you have no culture of yogurt [...]. It's not about money, do you understand? I think we have a very strong cultural issue. And to be healthy, for me, that would be it. It would be able to do some things I find important that I can not, for example, stay at home reading a book. But I can't... So, I think health is very relative and it is very far from being what the media preaches [...]. Then the person arrives at the gym, not only in the gym but also in the university, with that will of “change the world”. If we do not have the training yet to be able to impose ourselves, we will try to talk, try to explain, unsuccessfully... And we get frustrated, because people, they are not worried about health, because health for them is a culture, different from our culture. Health for them, I'm sorry, but it's to get at the gym and be 35 years old and look like 20 and have people just looking at her and not anybody else ... And we see this a lot, it is a reality.*

In relation to sleep, we observe that its mention is recurrent in Physical Education. We can then argue that rest is a construction of the Physical Education discourse, which can be confirmed in the speech of a graduate of this course, with is also a bodybuilding athlete: *“Sleeping is the best medicine. If you do not program strategic disconnections, your body shuts down for you... Our life has to have a balance between training, food and rest... And rest, as well as food, should be at the top of the daily concern”*.

As to the holy trinity, we have that, in other courses, there is not this concern mentioned above. In other environments, this tripod assumes other meanings, there are different tensions. That is, this speech is specific to a space, restricted to a particular field. We have, then, that each field constructs its own discourses. Therefore, we emphasize that the holy trinity referred to is inherent in the health area. In this way, for a Physical Education and a Nutrition student this speech makes a lot of sense, which does not mean that people from other areas will also think this way.

Therefore, in the universe surveyed, we observe that this triple approach is a standard of excellence in the health field, the reference of an ideal that people are induced to achieve. The tripod is how people should be. This can be interpreted as something you want because it is placed inside the field. This ideal ends up being

caught up in the thinking of some students who believe they are sinners (in a kind of Christian guilt) when they cannot keep up with their standards.

## **V. SENSES AND MEANINGS OF EATING**

One of the great contributions of the Human and Social Sciences to the phenomenon of human feeding is to attribute meaning to it [1,17,18]. Senses and meanings can be understood as symbolic expressions, human beings' specific ways of associating images and representations with socially lived actions and relationships, as well as with the world around them. Meaning is a conventional and arbitrary idea attributed to the signifier (sound) and to the sign (sound fixation/symbol of sound). Meaning is therefore a more or less conscious (rationalized) sociocultural attribution, including different degrees of discursiveness. On the other hand, the senses refer to significance in the context of an imaginary and symbolic universe, not necessarily rational, capable of producing individual and collective identities, social relations and bonds that go beyond the conscious logic of discourse [19].

In such a way, sense is the bond between the individual and the objective world, materialized in meanings [20]. Food and its contexts are full of senses, symbols, and classifications [17]. To interpret the senses and meanings built up in health practices is a necessary challenge that justifies the perspective of an interpretive science. Accordingly, we can get closer to understand the current culture [21].

There are many senses and meanings imbricated in eating practices. Some concepts of Bourdieu [22] are articulated in the social differentiation of this study, like the *habitus*. Table manners and food tastes reproduce *habitus* and implant the subject in a lifestyle that is associated with a certain social position legitimized by a group [21]. This refers to the following idea: tell me how you eat and I will tell you where you live [23].

According to Norbert Elias (1897-1990), behavior is a pattern that people follow, so incorporated that teenagers have only one alternative: to submit to the standard of behavior demanded by society, or to be excluded from living in a decent environment [24]. A food behavior, such as the consumption of light foods may represent a pattern of behavior that inserts the subject into a social class considered average. However, we will need to present more elements in order to clarify the context. To situate the social context represents a selection of elements of this context. It is part of the construction of senses and meanings around the object of this work. About the light food, for example, it brings up the idea of a "self-care" that represents a refinement for a middle class [25].

Some of these definitions are an abstract and variable category that is not directly related to concrete issues, but to the meaning given to them. It does not necessarily depend on the concrete value of a given material, but on the mode of appropriation in the subjective sense. Social relations construct them within the group itself. In this sense, food can represent diverse social and cultural functions [26].

Some sociocultural functions that can be attributed to eating are: satisfying hunger and feed the body; initiate and maintain personal and business relationships; demonstrate the nature and extension of social relationships; provide a focus for community activities; express love and affection; expressing individuality; proclaim the distinction of a group; demonstrate belonging to a group; overcome psychological or emotional stress; signify social status; rewards or punishments; strengthen self-esteem and gain recognition; exercise political and economic power; prevent, diagnose and treat physical and mental illness; symbolize emotional experiences; manifest piety or devotion; represent security; express moral feelings and signify wealth [26].

Food is a fact that transcends biology and is intrinsically related to culture. Therefore, eating is not, and has never been, merely a biological activity. Food is something more than a collection of nutrients elected according to a solely dietary or biological rationale. In this way, eating and feeding are two phenomena that may be connected or completely disconnected. Eating is a cultural and social phenomenon, while nutrition is a physiological and health issue [1].

Food is a universal means of expressing sociability and hospitality. The proximity or narrowing of social relations can be expressed through the types of food and meals they make together, as well as their frequency, constituting as an act of commensality. Food itself is used symbolically to represent certain social forms and personal feelings [1], and can symbolize the consciousness of belonging or separation between social groups.

An example in relation to eating comes from the criticism of a student in the Nutrition course. When the subject of nutrition for the undergraduate students in the classroom came up, one of the students laughed, a little clumsy, as she was holding a package containing cheese breads. This humorous situation reinforces discrimination, the stereotype that nutritionists carry with regard to these kind of foods. The laughter of shame did not look like someone who is feeling guilty, but someone who was caught in the act, who was surprised to do something supposedly undue under the biomedical gaze, but reinforcing that she does not eat only what she says, but consume food because she likes it.

To interpret the giggle in this context refers to the wink of an eye described by Clifford Geertz [27]. From this simple act, the author demonstrates that we can interpret the same phenomenon in several ways.

Following the description of the scene, another student defended her – even without any accusation –, speaking in an ironic way of the canteen on the floor where the Nutritioncourse is: “No, the problem is that our canteen here is great, right? I think the [Nutrition] Institute should have a priority. Even more here. It should be the best place”.

Such speech seemed to justify it, accusing the canteen as an element that caused such a choice. We can raise as an analysis instrument the fact that the student has already internalized that she is doing something she should not do, according to the biomedical recommendations. She confirmed, with this speech, that what is said should be equal to what is done. If it is not, in her opinion, it is wrong. In this case, the right thing to do is act accordingly to what is said, but it is not what the student is doing. This difference between what is spoken and what is done is understood as *décalage* [1,28,29].

On the same day, there was the opportunity to interview the student who “defended” her classmate. Talking about what she usually has for breakfast, she said: “I only take one Nescau before leaving home. I do not feel hungry in the morning. Just this hour, when it’s about nine-thirty, I’m getting hungry. I eat here. There’s nothing healthy to eat there. So, I always eat cheese bread, because it’s the least bad”.

Another example is the speech of a student of Physical Education, a practitioner of Powerlifting: “What for many may seem crazy, for me is an option and a lifestyle. Madness for me is to eat hamburgers, potato chips, cakes, hot dogs, candy... But I respect the other’s options”.

There is also the example is the speech of another Physical Education student: “What’s the problem eating roast beef with brown rice in the morning? Better than this stupid French bread with margarine, which everyone eats... It must be scrawled behind the board of the ten commandments: you will eat [crap] your whole life and you will never question the meaning of it, you will eat, since everyone eats”.

After this statement, he giggle to relax. Regarding the brown rice in the student’s speech, we can bring what Montanari [2] says about white bread, which was an inaccessible luxury to part of the population in the Middle Ages. Then, in the nineteenth century, when the white flour became popular, it went from luxury, from something different, cliché, to everyday, prestigious like all refined products. Today, whole-grain bread (and whole meal flour), which was once considered a coarse food, gains prestige in the traditional sense, in a *bricolage*, according to Santos [30], quick and operational daily, in which the traditional one appears from an old-fashioned or conflicting appearance with modernity.

## **VI. THE STUMBLE IN THE TIGHTROPE: A PARADOX BETWEEN KNOWLEDGE AND PRACTICES IN THE HEALTH FIELD**

In this topic, we present the stumble in the tightrope, where we seek to demonstrate the other side of the rectilinear speech in the health area. The stumbling is linked to non-compliance with the “rules” disseminated in the biomedical discourse. The stumble in the tightrope refers to the maintenance of the balance it preaches.

In relation to eating practices, we have that neither the university professor, nor the graduate student, nor those who formulated this normative discourse necessarily fulfill what they have to do. Studies [31,32] demonstrate this disparity, pointing out that not all the actors in the discourse follow it to the letter. A brief analysis of the body profile already denounces that lifestyles are not so closely aligned with biomedical recommendations.

The stumble in the tightrope is therefore an obstacle from the biomedical field’s point of view, where there is a pattern to be followed. This mode of walking on the tightrope, to maintain the balance between the factors that propitiate health maintenance, mostly does not match the model idealized in the field. There is something that is expected of the students who are graduating in the health area, which includes harmony between balanced nutrition and regular practice of physical exercises. Thus, stumbling is considered from the perspective of the biomedical standardization paradigm, which, according to a student’s speech, can influence the credibility of a professional:

[...] *From the moment you have a student who goes there, who will look professional and everything he is preaching and does that... It is different from the one who does not and is telling you to do it. Because the student gives credit to you, get it? I’ll do it for what? There is that issue, too, right, of body image. If you are skinny, you think you should not eat almost anything. Then, suddenly, you see that you eat a lot of things, but that you have no tendency for that, to put on weight, or any other type of tendency. But a student who has a tendency, will find what? Oh! If I do that, will I be like that too? And there are people who think so! It does not look like it, but there are people who think so, right?*

On this same subject, another student spoke:

*In the school environment maybe not so much, because they are children, you almost do not see the parents of the students, okay, but if you go to the gym, so, it is typical. We see a teacher who smokes. So the student, eventually, will catch you smoking. Then the student will say: “Hold on! He smokes and tells me not to smoke. The guy does it and says I cannot do it.”[...] The trainees, we see a lot, take BCAA, you start taking that because you’re in that environment, you want to get together, right? You want to be together... We see that other*

side too, right? The fact that we have our life outside, but that we are ourselves, understood? No matter where we are. So if I smoke, I'll smoke there, I'll smoke in my house, I'll smoke where I have it. Then a student will end up watching. And that's not cool. It makes a difference in a professional [...].

Another student continued:

[...] on this food issue and on what she talked about smoking, my teacher said to a second period student, which was the first time we heard that: "We are teachers everywhere. Sometimes I'm in a bar with my friends and girlfriend, so the student sees me and smiles. Then, says: "There you are, professor! Just drinking, right? Just drinking!"

A few laughter came out of the room with this case report. She went on:

So we're like: the teacher [drinks] too? And the teacher continued: ah, no, but he thinks I'm a teacher, so he thinks I have to always be the teacher in everything place, I have to [...] pass this image of ethics, that I do not do anything wrong anywhere [...].

In this way, health professionals set a daily battle to reconcile activities of daily life and leisure time with the management of eating practices compatible with biomedical norms. However, some students of the mentioned courses have their contact with health restricted to the prescription of physical exercises or diet to students/clients/patients. That is, not all content transmitted in those courses is converted into the adoption of habits that could optimize the quality of life of students and future health professionals. We can perceive, then, that information on what is to be done is not a real guarantee of action, opposing theoretical reason and practical reason – which, according to the biomedical discourse, should complement each other harmonically [6].

Knowledge about what to eat is a first step in the influence of healthy (probably overvalued) eating behavior. The relation between what people know and what people do has been considered highly tenuous. In this sense, knowledge does not necessarily instigate change, but it can function as an instrument when people wish to change [33].

However, for some students, this distance between what they reproduce from biomedical discourse and what they actually do does not seem to be a tumble. After all, their attitudes commonly do not fit in with what is preached. That is, it is a stumble in the tightrope only if we look at the bias of norms in these fields. For some agents in this field, it is a stumble, but not that much.

## **VII. APOLOGY TO FRUITS AND VEGETABLES VERSUS "HEALTH VILLAINS"**

In the title of this topic, we allude to a duo well known to those linked to the field of Nutrition Sciences: fruits and vegetables. Then we include another expression: "health villains", which normally refer to fried food, alcohol and sweets. Healthy eating policies commonly condemn these foods.

In the Nutrition course of the university researched, it is common to have posters made out of cardboard by the students themselves. These posters are posted on a mural in the hallway. Among the collagens on transgenic, breastfeeding, food and nutritional security, pesticides and other topics, two of them caught our attention, considering the explicit relation with the scope of this article.

One of them received the title "Unbeatable couple: influence of physical activity and proper nutrition on physical and mental well-being". Thus, they claim that this union is strong, referring to physical activity allied to adequate food. The other poster exposed has the following title: "The food villains", where they hierarchize the top 10 in this issue. From first to last, we have: diet soda, soda, donuts, hot dogs, bacon, potato chips, French fries, pizza, corn chips and ice cream.

Most of the foods presented compose the known fast food, which suffer from a bias in the expression junk food, whose association with fast food is recurrent [34]. In the junk food category, besides fast food, there are the delicacies, the ice cream, the industrialized snacks and the street food, explicitly portrayed in the poster. The consumption of such foods is a food practice known in Brazil as "eating crap" [35].

It is considered that fast food sacrifices gustatory pleasure and minimally satisfies the demands of the palate [36], being a type of food that is characterized by quantity rather than quality. The disapproval of the frequent consumption of fast food by the nutritionist is a common place in the literature [34].

In one of the interviews, a speech on this subject stood out. When I asked a nutrition student about the places she used to go to eat, she said she was – as well as her boyfriend – more homely, making them go to friends' houses or go out for dinner. When asked where they liked to go, she said: "We go to Outback or we go to other places... But never in fast food. We always went, but we stopped going too, because he's in super healthyvibe, too, so we never go any more".

Although the restaurant mentioned by the student contains a few options with nutritional values similar to the fried foods of fast food, the sophisticated and thematic versions of the typical fast food dishes will make up a gourmet hamburger fashion, with a certain elitism of the dishes and the practices recognized as identifiers of fast food [34].

Thereby, we raise the following question: what would be the stumble in the tightrope for the Nutrition student? Would it be the teacher catch you eating chocolate or cheese bread? This is relative, because, in the

participant observation, accompanying the Nutrition classes, we noticed that one of the girls sold chocolate and her classmates bought this candy. At the same time, they make apology to fruits and vegetables.

We noticed that this student chose the sale of chocolate because this product proved to be quite salable and marketable because it appealed to people, including classmates. In this case, chocolate was not chosen to contradict the rule, but because chocolate is very accepted. Even during the lessons, the nutrition students themselves bought it. One of them, after already having delighted one of the chocolates, got up to throw the wrapping paper in the trash and took the opportunity to buy one more. With no one to say anything, she stood up and muttered that she was hungry and that she would have to run to another class.

In relation to the student marketer, we can attribute as a sense to the sale the fact that she needs to make money, to know that chocolate sells, leading her to take chocolate to sell. This differs from what the biomedical standards says. Normally, in this area, chocolate is a food whose consumption is not stimulated. With regard to its nutritional composition, it is frequent, in the biomedical-nutritional discourse, that its energy density is considered more “against” than “pro” healthy eating. However, in practice, this order is reversed, the pros are considered larger than setbacks. Among the bonuses of practice, we can talk about the cost, setting it up as a profitable activity for the student, plus the fact that the student likes to eat chocolate.

That is, there are several ways of being human. One with what is done and another with what is said, but it is all in the same human being. It is a person who will settle here and there. We look at these places and it seems natural that there is a speech and another attitude towards what people does. This is proper to the human being, from this context, in this universe.

Who helps to understand this question is Howard Becker [12]. This sociologist expresses that the deviant is always the one who does something different from what is agreed upon as the correct one. Thus, the convention is arbitrary. For example, if a group agrees that everyone should come in a sports suit, the one wearing a suit and tie will be considered a “stranger in the nest”, an alien. Therefore, the deviation, the stumbling and the rope has to do with the group with which we are dealing.

Regarding nutrition, Salve [37] points out that young people, accustomed to the guidance of parental authority, when they enter university, without this traditional direction, often have difficulties in taking care of their own food. In addition, intellectual activities tend to reduce time for physical activity. The sum of these elements makes this population particularly susceptible to sedentary lifestyle and poor nutrient intake.

This may be aggravated if a study is taken into account [38], in which there are notes that many habits acquired by students during university years continue to be incorporated into their daily life, even after leaving this environment. This implies in the fundamental importance of the correct characterization of the diet, in the promotion of the health of the university community and in the intervention of the nutritional education, even more when it is related to the charges linked to the speaking and doing of the corporal and alimentary practices of these courses [32].

In this way, the students of these courses are expected to keep the corporal and alimentary practices in constant vigil. This alliance between balanced nutrition and regular physical exercises is seen as fundamental for the discourse to be aligned with these practices, allowing the professional to be an example of what he prescribes, which tends to reverberate in credibility with the client and his peers.

In this sense, it is necessary that they be willing to maintain a previous and specific planning to perform physical exercises (controlling variables such as time, planning and orientation at the time of the activity) and controlling the feeding (something daily, repeated throughout the day – around three to six times), dodging unforeseen situations. We live in times of transformation of eating, where there are discussions about health and disease, eating out and eating at home, natural and artificial, countryside and city, global and local, among others [39].

Chapman *et al.* [33] reinforce that knowledge about what to eat is a first step in the influence of healthy, probably overvalued, eating behavior. The relationship between what people know and what people do has been considered highly tenuous.

We will not specifically address the issue of pharmaceuticals, artificial synthetic substances, androgenic anabolic steroids, and the like, but it is worth mentioning them due to the use of scientific discourse by the fitness market and dietary supplements. They are models of when health and esthetics antagonize each other. We have, then, that not every “healed” body is a “healthy” body. We say this because of the techniques that are used to conquer the image of this body. Sabino[40] states that there is a symbolic dimension to the use of steroids, use related to the process of medicamentation of a significant portion of the current culture, which tends to elaborate a health utopia [41].

In agreement with this question, the current senses attributed to the body, health and beauty are confused. In order to understand the conception of health and the care imposed by it in the contemporary urban society of the West, it is necessary to consider questions such as fashion, seduction, spectacle and consumption. The expansion of the beauty industry, body care and body metamorphosis through plastic surgeries or other means are part of a broader medicalization process. Medical techno-rationality has been brought to new spheres of everyday life [42].



There is a conflict between the need for physical appearance according to the aesthetic standards and the way of acquiring this body. The difficulty of organizing time is a chronic symptom of modern society, and it is common to opt for what makes "gain" time, but "lose" health. The dimension of time in the new capitalism affects the emotional life of people outside the workplace, with higher priority for capitalist productivity (43).

The nutritionist and the professional of Physical Education train, having in their speech the objective of framing the other. They are subjects that normalize, but sometimes they do not realize that they are also being normalized. It does not mean that one does not need to feed and exercise, but there is an institutional context behind that legitimizes this discourse.

In the current rhythm of life, there is no longer time to get lost, but everything can be lost at any moment. Uncertainty about the future is permanent, and the world of work is very unstable. Corporal practices and caring for food can be considered a waste of time, getting production at work priority. Thus, the need to produce imposed by capitalism has made the long run somewhat dysfunctional [43].

The globalized world is dependent on the short term. Urgency and lack of time are rooted in the contemporary standard of living, they have become natural. Although "being in a rush" and its derivations should be only an exception, some students say they do not have the time to feed themselves:

*We cannot eat right, because sometimes you do not have time... Not even here [at the university]! We sometimes go from one class to another and we cannot have lunch, we cannot have lunch! [She repeated] But it's different, because, so, we're in a complicated moment, have to focus on something and go. Now, and when we have already there, formed... How do you do? Will it continue? Will we take these habits?*

In this context, it is common for health to be overlooked and only receive a certain degree of priority when the body manifests ill-treatment in the form of signs, symptoms and/or illness. Some individuals, contrary to what we have previously described, of the evidence that the body has taken today, regard the body as a nuisance and useless thing to care for, nourish and maintain.

Once more, other data demonstrate the difficulties that undergraduate students usually have to follow the health tripod. In this way, following the ingestion routine of fruits and vegetables– divinized in the biomedical discourse – goes against the day to day, where the chocolate supply seems much more seductive and practical. The fruits and vegetables can also be left out, being considered an attack on one's own health, as one nutrition student said when asked about the content of her dish in self-service restaurants: *"I always get rice, beans, so a protein... But I do not really like to get salad on the street because I'm afraid of how they clean the salad, understand? It's not that I do not like it. At home I always eat, but it's because on the street I'm afraid to eat salad and have something"*.

Still on the issue of time, some students say that often they cannot go to the tray because of the rush between classes, mainly due to the long wait in line. Nevertheless, if they had time at home, would they devote themselves to a full meal? As one Physical Education student put it: *"Only my father and I live in our house. I have to do something myself to eat. So it is easier for me to finish eating crap. My problem is this: I do it myself. Then I end up eating a bit wrong"*.

Among the set of changes in eating habits, we have the reduction of the time spent on meals in the daily household, both in preparation and in consumption. The values of modernity, such as haste, convenience and practicality, help shape the environment of new eating behaviors, especially in the cosmopolitan urban environment, where fast food marketing establishments are expanding more and more [34].

Because of the example above and others, we may think that probably being at home would not necessarily imply eating a balanced meal. However, what interests us is to see that this speech is a discourse that welcomes the subject who wants to be better, who needs to be well-being. However, we note that the choice for what fits with a healthy life is not always selected. It does not mean that they aim to harm themselves. They may want to potentiate, gain time because they do not like to queue or consider that they "do not have time" to cook. With this, "eating well" is in the background, making other issues a priority.

Regarding the practice of eating, we note that this demotivation of culinary cooking, which is often called "laziness", is common in the society in which we live. There is still a great deal of demand for fast-paced and practical products such as fast food and processed foods [34]– considered to be harmful to health because of its nutritional content[45].

We thus face the difference that can exist between what is said and what is done. The nutritionist, as a professional, will do one thing and, as a student, will do another. The same applies to the physical educator. In addition to "biological fact", human food is also a social and cultural act. It implies representations and imaginaries. It involves choices, symbols and classifications, which organize the various worldviews, in time and space. They are the sociocultural dimensions of food [39].

## **VIII. CONCLUSION AND FINAL CONSIDERATIONS**

The human food act embraces a subjective dimension. The eating practices, as shown by the Human and Social Sciences, are not the sum of individual choices more or less enlightened and rational, dependent solely on the will of the subject. Food is part of a social logic that goes beyond mere individuality. Although

palate is essentially individual, taste is collective; it is expressed at the social level. The symbolic dimension of human existence influences conduct and behavior. However individualized that food may be in the postmodern world, there is still a reciprocity in eating practices.

The undergraduate students in Physical Education and Nutrition researched live in a vehemently regulatory society, filled with rules and standards for the most varied sectors of life, in a kind of regulation of living. Both undergraduate courses are normative, loaded with imperatives, mainly in what concerns to the alimentary and corporal practices, reinforcing the social stereotype.

The cultural context provides incentives for eating practices sometimes arduous and ascetic, and other times divergent from the norms present in the health field. This discourse of the biomedical health model involves anguishes, oppression, joys, victories, defeats, obligations, oppressions, bitterness, rights, duties, stereotypes, charges, pros, cons, luck and setbacks, dislikes and pleasures. In other words, there are many bonuses and burdens attached to exposure to this model of "perfect health" and nutritionally balanced nutrition. Thus, the precariousness and anxieties provoked by this panorama affect the students surveyed at varying levels.

In the impetus to understand eating practices, we perceive the senses and meanings tied to eating. We have also observed that, often, the speech of the student of health area displaces of what is done, diverging from what is preached as correct by the biomedical norms. When we saw them eating foods considered unhealthy, some students came to justify themselves with varied arguments without even being questioned to what they are eating, as if the feeling of guilt and that they should serve as a model of what they say would accompany them through the hallways and classrooms of the university.

In this way, we observe that reproducing the biomedical discourse capitalizes them, both in talking about what should be ingested as well as what they actually eat. Following the norms of the health field can represent an element of social distinction, just as diverging from these norms can also mean a distinction, an adequacy to the ethos of the group. Therefore, these groups reiterate the discourse on one side and react on the other, sometimes in a movement of approach, or of deviation. It is a question of human nature, since the human being is multifaceted. It is not about "hypocrisy", "false demagoguery", or similar judgments. Thus, with this research we have seen that food receives different senses and meanings, depending on the social group to which the student is inserted and the social position of which he speaks.

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## **REFERENCES**

- [1] J. Contreras and M.G. Arnáiz. *Alimentación y cultura: perspectivas antropológicas* [Barcelona: Ariel, 2005].
- [2] M. Montanari. *A fome e a abundância: história da alimentação na Europa* [São Paulo: EDUSC, 2003].
- [3] M. Foucault. *Naissance de la biopolitique* [Paris: Gallimard, 2004].
- [4] R.S. Mattos. The placebo effect of dietary supplements in the gym: a socioanthropological essay. *Arquivos em Movimento*, 9(2), 2013, 67-84.
- [5] M. Foucault. *Il faut défendre la société. Cours au Collège de France 1975-1976* [Paris: Seuil, 1997].
- [6] J.B.P. Castro. *Do as I say, but not as I do: a discourse analysis about food and body practices in undergraduates of Physical Education and Nutrition*, doctoral diss., Universidade do Estado do Rio de Janeiro, Brazil, 2014.
- [7] M.S. Ferreira, L.D. Castiel and M.H.C.D.A. Cardoso. The pathologization of sedentariness. *Saúde e Sociedade*, 21(4), 2012, 836-847.
- [8] M. Weber. *Conceitos básicos de sociologia*, 4th edition [São Paulo: Centauro, 2005].
- [9] M. Weber. *L'éthique protestante et l'esprit du capitalisme* [Paris: Gallimard, 2004].
- [10] M. Weber. *Economia e sociedade: fundamentos da sociologia compreensiva*, 3rd edition [Brasília, DF: UnB, 1994].
- [11] P. Bourdieu. Le champs científico. *Actes de la Recherche en Sciences Sociales*, 2(2-3), 1976, 88-104.
- [12] H.S. Becker. *Outsiders: studies in the sociology of deviance* [New York: Free Press, 1963].
- [13] B. Malinowsky. Antropologia, in E.R. Durham (Org.), *Coleção Grandes Cientistas Sociais* [São Paulo: Ática, 1986].
- [14] E.P. Orlandi. *Análise de discurso: princípios e procedimentos* [Campinas, SP: Pontes, 2001].
- [15] M. Goldenberg. *A arte de pesquisar: como fazer pesquisa qualitativa em Ciências Sociais*, 11th edition [Rio de Janeiro: Record, 2009].
- [16] D. Innerarity. *La sociedad invisible* [Madrid: Espasa Calpe, 2004].
- [17] M.E. Maciel and H.C. Castro. Food for thought: on practices, tastes and food systems from a social anthropological approach. *Demetra*, 8(1), 2013, 321-328.
- [18] C. Lévi-Strauss. *O cru e o cozido* [São Paulo: Cosac Naify, 2004].
- [19] R.S. Mattos and M.T. Luz. Surviving to the stigma of fat: a socio-anthropological study on obesity. *Physis*, 19(2), 2009, 489-507.
- [20] A.N. Leontiev. *Actividad, conciencia y personalidad* [Buenos Aires: Ciencias Del Hombre, 1978].
- [21] M.C.V.S. Carvalho. *Bricolagem alimentar nos estilos naturais* [Rio de Janeiro: EdUERJ, 2013].
- [22] P. Bourdieu. *La Distinction* [Paris: Editions de Minui, 1979].
- [23] C. Fischler and E. Masson. *Manger: Français, Européens et américains face à l'alimentation* [Paris: Odile Jacob, 2008].
- [24] E. Norbert. *O processo civilizador: uma história dos costumes* [Rio de Janeiro: Jorge Zahar, 1994].
- [25] L. Boltanski. *Los usos sociales del cuerpo* [Buenos Aires: Periferis, 1975].
- [26] M.A. Baas, L. Wakefield and K. Kolosa. *Community nutrition and individual food behavior* [Minnesota: Burgess Publishing, 1979].

- [27] C. Geertz. *The interpretation of cultures: selected essays* [New York: Basic, 1973].
- [28] J.-P. Poulain. *Sociologies de l'alimentation: les mangeurs et l'espace social alimentaire* [Paris: PUF, 2002].
- [29] J.B.P. Castro, M.C.V.S. Carvalho, F.R. Ferreira and S.D. Prado. "Do as I say but do not do as I do!": Décalage as a tool for understanding body and food practices. *Brazilian Journal of Nutrition*, 28(1), 2015, 99-108.
- [30] L.A. Santos. *O corpo, o comer e a comida: um estudo sobre as práticas corporais e alimentares no mundo contemporâneo* [Salvador: Edufba, 2008].
- [31] P. Marcondelli, T.H.M. Costa and B.A.S. Schmitz. Physical activity level and food intake habits of university students from 3 to 5 semester in the health area. *Brazilian Journal of Nutrition*, 21(1), 2008, 39-47.
- [32] M.L.L. Andrade, J.S.J. Borges, M.M.O. Maia and F.G. Silva. Level of physical activity and energy ingestion in Physical Education students. *Revista Brasileira de Fisiologia do Exercício*, 12(2), 2013, 114-118.
- [33] K.M. Chapman, J.O. Ham, P. Liesenand L. Winter. Applying behavioral models to dietary education of elderly diabetic patients. *Journal of Nutrition Education*, 27(2), 1995, 75-79.
- [34] N. Oliveira and M.C.S. Freitas. Fast-food: um aspecto da modernidade alimentar, in M.C.S. Freitas, G.A.V. Fontes and N. Oliveira (Orgs.), *Escritas e narrativas sobre alimentação e cultura* [Salvador: Edufba, 2008] 239-260.
- [35] K. Woortman. *Hábitos e tabus alimentares em populações de baixa renda* [Brasília: UNB (Série Antropologia), 1978].
- [36] S.N. Bleil. The western food standard: considerations about the changes in food habits in Brazil. *Cadernos de Debate*, 6(1), 1998, 1-25.
- [37] M.G.C. Salve. The practice of physical activity: a comparative study among UNICAMP (State University of Campinas, Brazil) graduating students. *Motricidade*, 4(3), 2007, 41-47.
- [38] S. Haberman and D. Luffey. Weighing in college students diet and exercise behaviors. *Journal of American College Health*, 46(4), 1998, 189-191.
- [39] R. Menasche, M. Alvarez and J. Collaço (Orgs.), *Dimensões socioculturais da alimentação: diálogos latino-americanos* [Porto Alegre: UFRGS, 2012].
- [40] C. Sabino. Anabolizantes: drogas de Apolo, in M. Goldenberg (Org.), *Nu e vestido: dez antropólogos revelam a cultura do corpo carioca*, 2nd edition [Rio de Janeiro: Record, 2007] 139-188.
- [41] L. Sfez. *La santé parfaite* [Paris: Le Seuil, 1995].
- [42] F.R. Ferreira. *Ciência, arte e cultura no corpo: a construção de sentidos sobre o corpo a partir das cirurgias plásticas* [Curitiba, PR: CRV, 2011].
- [43] R. Sennet. *A corrosão do caráter: as consequências pessoais do trabalho no novo capitalismo*. 8th edition [Rio de Janeiro: Record, 2004].
- [44] D. Le Breton. *L'adieu au corps* [Paris: Éditions Métailié, 2013].
- [45] A.O. Odegaard, W.P. Koh, J.M. Yuan, M.D. Gross and M.A. Pereira. Western-style fast food intake and cardiometabolic risk in an Eastern country. *Journal of the American Heart Association*, 126(2), 2012, 182-188.