Capter 182

Food attitudes of nutrition students at the university of Pernambuco





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ABSTRACT

Eating attitudes are defined as beliefs, thoughts, feelings, behaviors, and relationships to food. Nutrition students have particular eating attitudes towards food, being also influenced by their academic background and the environment in which they live, reflecting on their professional practices. This study aimed to analyze the eating attitudes of Nutrition students at the University of Pernambuco Campus Petrolina. This is a cross-sectional study with nutrition students, over 18 years of age, of both genders, who were invited to optionally answer a structured electronic questionnaire. The mean score for eating

attitudes was 57.98 (8.43) points. When comparing the eating attitudes and subscales scores between independent variables, women had higher scores compared to men in the total scale 58,7 (DP=8,5) and in relationship with food 18,4 (DP=2,5) and concerns about food and weight gain 6,9 (DP=2,62) subscales. Overweight individuals scored higher on the total scale 62,9 (DP=9,2) and in concerns about food and weight, 7,8 (DP=2,9) and in the restrictive and compensatory practices, 5,4 (DP=2,1), subscales. Participants showed little dysfunctional eating attitudes. Overweight women and individuals, in general, had worse eating attitudes.

It is important and necessary to have academic training in nutrition with a greater appreciation of the humanities disciplines so that students have a broader view of health care with a biopsychosocial approach and a critical view.

Keywords: Eating behavior, Students, Nutrition, Dysfunctional.

1 INTRODUCTION

Food and nutrition are fundamental for health promotion and prevention, in this sense, there is a concern in the formulation of public policies that encourage and encourage healthy eating (BRASIL, 2013). Eating is a biological necessity, and essential for our survival, but it is not limited to that. Food is pleasure, memories, and feelings, it is full of symbolism and affective meanings, and intrinsically linked to our culture and identity. Not considering all these aspects is going against what is considered health (POLLAN, 2008; ALVARENGA, KORITAR, and MORAES, 2019; KRAEMER et al, 2014).

Eating as a nutritional act, in which food is a source of nutrients, differs from eating, which is a social act, in which food becomes food, which in addition to providing nutrients, also has cultural and symbolic functions (ALVARENGA, KORITAR and MORAES, 2019). The Food Guide for the Brazilian Population brings an integrative vision, defining food as more than the intake of nutrients, referring to foods that contain and provide nutrients, the way they are combined and prepared, the characteristics of the way

of eating, and the cultural dimensions and social aspects of eating practices (BRASIL, 2014). Before nourishing himself, man feeds himself.

However, nutrition often becomes "nutritionism", an ideology that sees food from a reductionist perspective, just as the sum of its nutrients, reinforcing the dichotomous idea that there are "good" foods, supposedly miraculous, and "bad" foods. , which if ingested can be harmful to health (POLLAN, 2008; DERAM, 2018).

Eating became the stage of moral and aesthetic struggle, in search of an idealized body. Judgments are made based on the moral values of what it is to eat "healthy" or "unhealthy". The rules imposed by the diet mentality dictate what, how much, and when we should eat, so a large part of society is unaware of their food preferences and does not know what hunger and satiety are and cannot even recognize these basic signs of food (MENNUCCI, TIMERMAN, ALVARENGA, 2019).

To designate the reasons for food choices, situations in which we eat, and thoughts and feelings about food, the term eating attitude is used (ALVARENGA, KORITAR, MORAES, 2019). Individuals who have a better relationship with food tend to make good food choices, while those with dysfunctional eating attitudes have a poor relationship with food, feel guilt, obsessively think about food and calories, and use food as an escape from problems. emotions, among others (ALVARENGA et al., 2013).

The practice of nutritionists can be based on their personal experiences, beliefs, and eating attitudes, which can be reflected in their conduct, compromising the treatment of their patients, and perpetuating or aggravating dysfunctional eating attitudes (RODRIGUES, CORREIA, 2016). Therefore, the objective of the study was to analyze the eating attitudes of Nutrition students at the University of Pernambuco Campus Petrolina, since these attitudes can be learned during graduation and can reflect on their academic training and professional practice.

2 METHODOLOGY

This is a cross-sectional study, whose sampling process was carried out for convenience, composed of adult individuals, of both sexes, between 18 and 50 years old, enrolled in the Nutrition course at the University of Pernambuco Campus Petrolina.

In all, 112 students participated in the survey, but those who had a previously diagnosed eating disorder were excluded. Data collection took place through an online questionnaire containing sociodemographic questions (gender, age, skin color, education of the head of the family, and individual income), anthropometric questions (body weight and height), about the school period, and the Attitudes Scale Food Disorders (EAAT), validated in Portuguese (ALVARENGA, SCGLIUSI, PHILIPPI, 2010).

The EAAT aims to assess dysfunctional eating attitudes, based on beliefs, thoughts, feelings, behaviors, and the individual's relationship with food.

The scale comprises 25 questions and can also be divided into five subscales. Subscale 1, "relationship with food", has a minimum sum of 12 and a maximum of 60 points, subscale 2, "concerns

with food and body weight gain", and subscale 3, "restrictive and compensatory practices", have a sum a minimum of 4 and a maximum of 20 points, subscale 4, "feelings regarding food", has a minimum score of 3 and a maximum of 15, subscale 5, "normal eating concept", has a minimum score of 14 and a maximum of 70 points. The total score ranges from 37 to 185 points, the higher the score on the scale, the more dysfunctional the attitude (ALVARENGA, SCGLIUSI, PHILIPPI, 2010).

Initially, to characterize the sample, data were analyzed using descriptive statistics, calculating absolute and relative frequencies for qualitative variables and means and standard deviations (SD) for quantitative variables. The total scores in each subscale of the EAAT were considered dependent variables and evaluated the academic period in the graduation in Nutrition, the age group (in years), skin color (white, brown, or black) of the participant, the education of the head family (\leq completed high school or \geq incomplete higher education), the nutritional status of the participant according to body mass index (underweight, eutrophic or overweight) and income (\leq 1 minimum wage, 1 to 3 minimum wages, \geq 3 minimum wages). Differences in the score achieved in the EAAT and the subscales by categories of variables were verified using the Mann-Whitney and Kruskal-Wallis tests. P values <0.05 were considered statistically significant. All analyzes were conducted using SPSS software, version 25.

This study was submitted for analysis and approved by the Human Research Ethics Committee of the Amaury de Medeiros Integrated Health Center (CEP-CISAM) of the University of Pernambuco (UPE), under opinion no 3.794.458.

3 RESULTS

A total of 112 students participated in the research, however, 5 were excluded because they had a medical diagnosis of an eating disorder, totaling 107 students. The participants were between 18 and 43 years old, mostly female, representing 86.9% of the sample. Most students had normal weight (73.8%). Regarding the participants' skin color, white and brown individuals presented similar percentages, while black individuals represented only 11.2% of the total sample.

As for education, it was found that, in all, 57% of the heads of families of the students had education above complete secondary education. The monthly income of the majority (40.2%) was 1 to 3 minimum wages. The mean total score for eating attitudes was 57.98 (SD=8.43) points (Table 2).

Table 1 – General characteristics of Nutrition students at the University of Pernambuco 2021.

n (%)
14 (12,5)
93 (86,9)
23 (21,5)
14 (13,1)
35 (32,7)
35 (32,7)
76 (71,0)
31 (29,0)
11 (10,3)
79 (73,8)
17 (15,9)
47 (43,9)
12 (11,2)
48 (44,9)
46 (43,0)
61 (57,0)
35 (32,7)
43 (40,2)
29 (27,1)

Caption: n: absolute frequency; %: relative frequency. Source: Author himself, 2021

Table 2 – Total score on the Eating Attitudes Scale (EAAT) and its subscales. 2021.

Variables	$\chi(\mathbf{DP})$
Eating attitudes	57,98 (8,43)
Relationship with food	18,13 (4,53)
Preoccupation with food and weight gain	6,75 (2,61)
Restrictive and compensatory practices	4,69 (1,62)
Feelings about food	3,14 (0,76)
Concept of normal eating	21,83 (4,88)

Subtitle: □: mean; SD: standard deviation. Source: Author himself, 2021

In Table 3, it was possible to visualize the comparison of the average values of the total score of eating attitudes and their subscales with the independent variables, with significant differences being found for gender, school period, and BMI.

Regarding the gender variable, women scored higher than men in the total score of 57.98 (SD=8.43) and in subscale 1, which concerns the relationship with food (p= 0.026), and in subscale 2, related to concern with food and weight gain (p=0.011), suggesting a more dysfunctional relationship with food and a greater concern with food and weight gain when compared to males (Table 3).

Table 3 – Comparison of eating attitudes and subscales with independent variables. 2021.

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Variables	Total	Subescala 1	Subescala 2	Subescala 3	Subescala 4	Subescala 5			
	χ (DP)	χ (DP)							
Gender			,			,			
Male	53,3 (6,8)	16,1 (3,3)	5,9 (3,25)	4,3 (0,7)	3,0 (0,0)	24,0 (3,5)			
Female	58,7 (8,5)	18,4 (2,5)	6,9 (2,62)	4,9 (1,7)	3,2 (0,8)	25,4 (5,6)			
p-value	0,026	0,047	0,011	0,463	0,431	0,485			
School year									
Second period	60,0 (9,2)	19,2 (5,1)	7,3 (2,6)	4,4 (1,0)	3,2 (0,8)	26,0 (5,3)			
Fourth period	57,5 (8,3)	18,2 (4,3)	5,7 (1,1)	4,7 (1,9)	3,0 (0,0)	25,9 (5,5)			
Sixth period	59,0 (8,0)	18,8 (4,3)	7,1 (2,4)	5,2 (1,9)	3,2 (0,9)	24,7 (6,5)			
Eighth period	55,8 (8,2)	16,74 (4,3)	6,5 (3,1)	4,3 (1,5)	3,1 (0,7)	25,0 (4,2)			
p-value	0,080	0,105	0,114	0,009	0,798	0,529			
Age group									
≤ 23	58,0 (8,7)	18,3 (4,6)	6,9 (2,8)	4,6 (1,5)	3,1 (0,6)	25,2 (4,8)			
≥ 24	58,0 (7,8)	17,8 (4,4)	6,5 (2,0)	5,0 (1,9)	3,3 (1,0)	25,5 (6,7)			
p-value	0,850	0,718	0,964	0,168	0,347	0,572			
BMI									
Low weight	54,3 (8,6)	16,9 (4,5)	5,3 (1,6)	4,0 (0,0)	3,4 (1,2)	24,7 (6,2)			
Eutrophic	57,4 (7,9)	18,2 (4,2)	6,7 (2,6)	4,6 (1,6)	3,1 (0,5)	24,8 (4,6)			
Overweight	62,9 (9,2)	18,6 (5,9)	7,8 (2,9)	5,4 (2,1)	3,5 (1,3)	27,5 (7,6)			
p-value	0,031	0,578	0,015	0,009	0,074	0,465			
Skin color									
White	56,1 (7,3)	18,1 (4,9)	6,5 (2,4)	4,6 (1,3)	3,1 (0,6)	23,9 (3,8)			
Black	57,8 (8,4)	18,0 (5,5)	7,3 (2,7)	4,0 (0,0)	3,3 (1,2)	25,2 (4,3)			
Brown	59,9 (9,2)	18,2 (4,0)	6,9 (2,8)	5,0 (2,0)	3,2 (0,8)	26,6 (6,6)			
p-value	0,068	0,815	0,560	0,153	0,589	0,103			
Education of the head of the family									
≤ Up to high school	57,0 (7,7)	18,3 (4,5)	6,7 (2,8)	4,9 (1,9)	3,0 (0,0)	24,2 (4,5)			
≥ Incomplete higher education	58,7 (8,9)	18,0 (4,6)	6,8 (2,5)	4,6 (1,4)	3,3 (1,0)	26,1 (5,9)			
p-value	0,163	0,631	0,614	0,419	0,078	0,102			
Monthly income	,	,	•	,	•	,			
≤ 1 minimum wage	56,8 (9,0)	17,7 (4,9)	6,4 (2,8)	4,7 (1,7)	3,1 (0,7)	24,9 (5,2)			
		C	A .1 1' 1C	2021					

Source: Author himself, 2021

As for BMI, those individuals with excess weight had a higher score on the total score 62.9 (SD=9.2), p= 0.031, on subscale 2, related to concerns about food and weight gain, and on subscale 3, related to restrictive and compensatory practices (p=0.009). Regarding the school term, students in the sixth period had a higher score on subscale 3.

4 DISCUSSION

The average total score of eating attitudes found among undergraduate students in nutrition in the present study was 57.98 (SD=8.43) points, a low score, not indicating a profile of markedly dysfunctional eating attitudes.

In the article on the psychometric evaluation of the English version of the EAAT with university students, Alvarenga et al., (2010), compared scores acquired in the EAAT, in the Eating Attitudes Test-26 (EAT-26) and in the Restrain Scale (RS). Results \geq 21 points on the EAT-26 correspond to risk behaviors for eating disorders (Nunes et al., 2005). In the article, the mean score was 75.3 (SD=16.83) points on the EAAT and 8.6 (SD=8.8) points on the EAT-26.

In the psychometric evaluation study of the EAAT with male university students, Alvarenga et al., (2013), make comparisons between scores acquired in the EAAT itself and the Eating Attitudes Test-26 (EAT-26). Individuals who were not at risk for an eating disorder, according to the EAT-26, had a final average of 55.76 (SD=10.23) points on the EAAT, while those who scored \geq 21 points on the EAT-26 and were at risk for TA presented 78.73 (SD=14.63) points.

In the comparison of eating attitudes between the independent variables, in the present study, it was possible to verify that gender, school year, and BMI were statistically significant in the score. As for the gender variable, female individuals showed a significant difference in the total score, indicating that women had more dysfunctional eating attitudes than men. They also had higher scores on subscales 1 and 2, demonstrating that they have a bad relationship with food and a great concern with food and weight gain.

Other studies on the same topic also indicate that women have more dysfunctional eating attitudes than men, regardless of the instruments used to assess eating attitudes or behaviors (CARVALHO et al., 2013; CLAUMANN et al., 2018).

In a study with resistance training practitioners, also using the EAAT, women had a significantly higher score than men, which indicates that women have more dysfunctional eating attitudes than men (CLAUMANN et al., 2018). Another study that sought to evaluate the eating attitudes of university students using the EAT-26, also identified that women have more inappropriate eating attitudes, as did the present study. (CARVALHO et al., 2013)

Although, in the present study, such inferences regarding gender cannot be made directly, since the sample was mostly composed of female students, which is a factor of weight for the results found, it is still It is important to highlight that body dissatisfaction, often reported by women, is one of the main risk factors for the development of disordered eating (CARVALHO et al., 2013).

The standard of beauty generates a feeling of inadequacy, especially in women, regarding body image, influencing inappropriate behaviors in the pursuit of the thin ideal ((MENNUCCI, TIMERMAN, ALVARENGA, 2019); SOIHET, SILVA, 2019). The obsession with thinness, as well as fatphobia and its consequences, are reinforced not only by society but also by the beauty industry, which specializes in awakening feelings of inadequacy in people (REZENDE, PENAFORTE, 2020).

Regarding the BMI classification, there was an influence on the total score averages and subscale 3, related to restrictive and compensatory practices, indicating more disturbed eating attitudes in individuals with higher BMI values.

In a study, Dietrich et al., (2014), found a non-linear relationship between restriction and BMI. Eutrophic individuals showed low levels of restriction, while individuals with high BMI showed higher levels of restriction. Another study that sought to analyze the relationship between restrictive eating behaviors and the BMI of Portuguese young people and adults, found a positive and significant correlation (p=0.001), pointing to higher values of food restriction in overweight individuals (ANTUNES et al., 2015).

The search for the ideal of thinness causes individuals to have dysfunctional attitudes and behaviors that facilitate the achievement of the desired body. Among these behaviors are dietary restrictions, the excessive practice of physical activity, the use of medication, and even plastic surgery (CLAUMANN et al., 2018).

Lluch et al., (2000) evaluated the relationship between dietary intake, food profile, and overweight in French families, and found an association between food restriction and excess weight, in addition to lower energy intake in both sexes.

However, weight loss strategies such as restricting calories, food groups, or fasting for several hours can cause negative psychological effects, such as disturbances in effect, self-esteem, cognition, and eating behavior (CHAVES, NAVARRO, 2011).

It is extremely important to reflect on the appreciation of the beauty standard exposed by the media and its influence on eating practices, which can lead to restrictive and compensatory eating practices for weight loss and, even, can lead to eating disorders (SOUTO, BUCHER, 2006).

Regarding the school period, a variable that was also investigated in this study, students in the 6th period had high scores on subscale 3, related to restrictive and compensatory practices. However, this high score may have occurred due to the students' BMI, since 52.9% of overweight individuals are in the 6th period.

In a comparative study of eating attitudes between first and last-year students of the Nutrition course, first-year students scored 63.8 (SD=13) while final-year students scored 51.1 (SD=6.4), an average difference of almost 13 points, p<0.001. Indicating that first-year students have more dysfunctional eating attitudes. In addition, it is an indication that the study of Nutrition may have positively influenced students during graduation (RODRIGUES, CORREIA, 2016).

When comparing the eating attitudes of nutrition students in the present study, it was found that students in the 8th period had lower scores, however, the difference in scores between periods was not statistically significant.

It cannot be ignored that despite the students having a low average score on the EAAT when analyzed individually, some students had higher scores, a fact that reinforces the need for a good academic education, without propagating reductionist thoughts regarding food and villainization of food, and that

encourages the development of critical thinking among students during graduation, so that they can observe, in themselves, dysfunctional eating attitudes and work on them and that when welcoming their patients, they know how to differentiate their theoretical-practical knowledge from their empirical beliefs (RODRIGUES, CORREIA, 2016).

The results of the present study should be interpreted with caution, taking into account some limitations, such as the relatively small sample and selection for convenience. In addition, few studies use the Eating Disorders Scale (EAAT), limiting specific comparisons with the evaluated context.

5 CONCLUSION

Nutrition students at the University of Pernambuco Campus Petrolina who participated in the study had low scores on the Disordered Eating Attitudes Scale, suggesting that they have healthy eating attitudes and a low risk of developing eating disorders. However, considering the high scores at the individual level, one can see the importance and need for an academic education in Nutrition with a greater appreciation of human science disciplines, such as sociology, anthropology, and psychology, so that students have a broader view of care in health, with a biopsychosocial approach and a critical view.

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Development and its applications in scientific knowledge