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EMOTIONAL EATING AMONG TEENAGERS FROM BUCHAREST

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A series of negative emotions (anxiety, stress, various fears) is associated with emotional eating which increases the risk of overeating and can lead to obesity or other eating disorders. This eating pattern is gender imprinted, involving preferential consumption of sweet foods full of fat and high caloric density, considered unhealthy.
The study group was formed of 495 adolescents (270 girls and 225 boys) aged 14–19. Anthropological measurements were performed to determine weight status. A questionnaire was applied which targeted nutrition adolescents.
Our data showed a clear influence of gender on eating behavior in nervousness / stress / boredom conditions.
Girls reported in a significantly higher proportion an increased consumption of food (43.70% *vs*. 28.44%). There were no statistically significant differences by age not for female - χ^2 (4) = 4.55, p = 0.34, nor for male lot - χ^2 (4) = 5.14, p = 0.27.
We find significant differences between the sexes in terms of the type of food consumed preferentially. Consumption of sweet foods is significantly higher among girls, and the salty foods among boys. Food consumption of adolescents is influenced also by the feeling of loneliness and differs significantly by gender.

Key words: emotional eating, eating disorders, eating pattern, teenagers.

INTRODUCTION

Extent of eating disorders (anorexia, bulimia, compulsive eating, emotional eating) came to the attention of researchers who try to understand the motivations of these behaviors.

A series of negative emotions (anxiety, stress, various fears) is associated with emotional eating which increases the risk of overeating and can lead to obesity or other eating disorders[1–6]. Another custom associated with the risk of emotional eating or overeating is eating watching TV. This eating pattern is gender imprinted, involving preferential consumption of sweet foods full of fat and high caloric density, considered unhealthy[7–9].

How many times we happened to be angry or stressed and first gesture was to open the refrigerator? Emotional eating is a habit in which are consumed large quantities of food, favorite foods or unhealthy – usually, most often as a result of moods and not hunger.

With food consumption sensitive and subtle changes occur in dynamics of physiological processes, in other words, in body chemistry. Everyone knows that by eating install a certain degree of comfort (increases the secretion of endorphins – the hormones of happiness), at least in the short term. As a result, people often turn to food to heal emotional problems[8]. Such practices are transformed into habits that prevent the adoption of effective measures to solve emotional problems. This strategy, which we are so handy, it has a price, namely weight gain, which can lead to self-marginalization or diseases in which overweight is a risk factor[4,8]. It is estimated that 75% of obese people over-feeding on emotional background.

Situations that cause emotional eating can be classified into five main categories depending on their underlying cause:

1. *emotional causes* – excessive consumption of food occurs in response to boredom, stress, fatigue, tension, depression, anger, anxiety or loneliness.

2. *circumstantial reasons* – eating large amounts of food because the opportunity is available. For example, at the sight of commercials to a product that is served at a restaurant that has a very low price. Situational excessive eating is associated with certain activities, such as watching television, going to the movies, etc.

3. *social causes* – some people consume large quantities of food when they are around other people. For example, excessive eating can be a result of the encouragement of others or the desire of not being left out of the group.

4. *psychological causes* – excessive eating could be the consequence of negative self esteem or as an excuse to eat.

5. *physiological causes* – eating in response to some problems of the body, such as the stilling hunger due to increased sensation of hunger due to skip meals or eating to treat headaches or other discomfort.

MATERIALS AND METHODS

The study was conducted with the informed consent of participants, ensuring confidentiality of data collected. Anthropometry is a non-invasive method of investigation body parameters and evaluation processes of growth and development.

One important limitation of this study is the measure of dietary choices.

Another potential limitation of this study is that all data are self-reported. Therefore, it is possible that dietary intake and/or emotional eating may have been over or underreported.

Our study group was formed of 495 adolescents (270 girls and 225 boys) aged 14–19. Anthropological measurements were performed to determine weight status[10] and a questionnaire was applied which targeted nutrition adolescents.

RESULTS AND DISCUSSIONS

In the group of teenagers we investigated, only a third of girls and 40% of boys eat at regular hours.

A negative emotional impact, anxiety and inner tension externalize certain people by impulsivity, instinctive activities, including uncontrolled food intake, especially carbohydrates.

Our data showed a clear influence of gender on eating behavior in nervousness / stress / boredom and feeling of loneliness conditions.

In total study group, girls reported a significantly higher proportion an increased consumption of food (Table 1).

There were no significant differences by age in statistical analysis not for female lot - χ^2 (4) = 4.55, p = 0.34, nor for male lot - χ^2 (4) = 5.14, p = 0.27 (Tables 2 and 3).

Analysis by age group showed no significant differences by gender for 14–15 year group -χ^2 (2) = 0.89, p = 0.64, instead we found significant differences in the group 16–17 years -χ^2 (2) = 9.04, p = 0.011 and the group of 18–19 years -χ^2 (2) = 6.39, p = 0.041, suggesting a differential vulnerability of girls and boys with age.

Using weight status as a criterion of analysis, we obtained no significant differences, not in the female lot -χ^2 (4) = 5.51, p = 0.24, nor in the male group -χ^2 (4) = 2, 13, p = 0 71 (Tables 4 and 5).

The same context has significantly changed the consumption of sweet foods among girls. In total study group we find significant differences between the two sexes (Table 6).

Table 1

Level of Consumption in conditions of nervousness / stress / boredom in the total study group

	Girls		Boys		χ^2	p-value
	N	%	N	%		
Increased	118	43,70	64	28,44	13,749	0,001
Decreased	58	21,48	51	22,67		
Habitual	94	34,81	110	48,89		
Total	270	100,00	225	100		

Table 2

Level of Consumption in conditions of nervousness / stress / boredom in the female group

	14–15 years		16–17 years		18–19 years		χ^2	p-value
	N	%	N	%	N	%		
Increased	17	32.69	66	47.48	35	44.30	4.55	0.337
Decreased	15	28.85	30	21.58	13	16.46		
Habitual	20	38.46	43	30.94	31	39.24		
Total	52	100.00	139	100.00	79	100.00		

Table 3

Level of Consumption in conditions of nervousness / stress / boredom in the male group

	14–15 years		16–17 years		18–19 years		χ^2	p-value
	N	%	N	%	N	%		
Increased	7	23.33	45	30.82	12	24.49	5.136	0.274
Decreased	9	30.00	35	23.97	7	14.29		
Habitual	14	46.67	66	45.21	30	61.22		
Total	30	100.00	146	100.00	49	100.00		

Table 4

Level of Consumption in conditions of nervousness / stress / boredom in the female group by weight status

	Underweight		Normal weight		Overweight		χ^2	p-value
	N	%	N	%	N	%		
Increased	20	33.90	96	47.06	2	28.57	5.51	0.24
Decreased	16	27.12	39	19.12	3	42.86		
Habitual	23	38.98	69	33.82	2	28.57		
Total	59	100	204	100	7	100		

Table 5

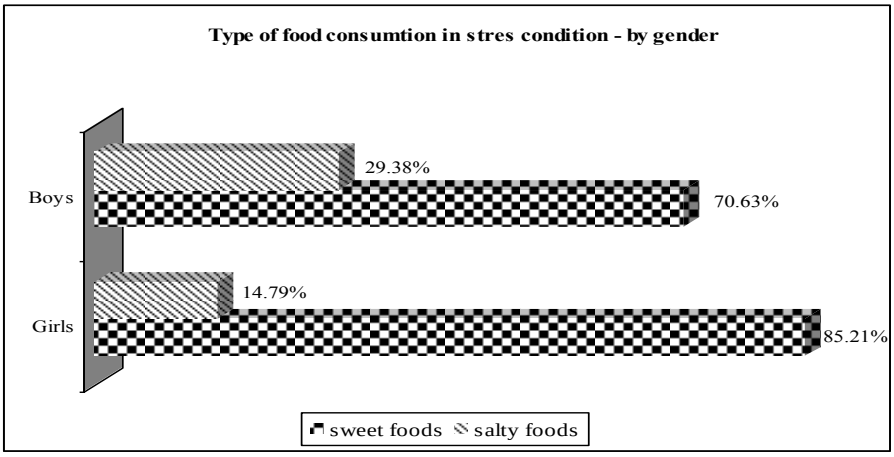
Level of Consumption in conditions of nervousness / stress / boredom in the male group by weight status

	Underweight		Normal weight		Overweight		χ^2	p-value
	N	%	N	%	N	%		
Increased	8	28.57	41	26.45	15	35.71	2.13	0.71
Decreased	5	17.86	36	23.23	10	23.81		
Habitual	15	53.57	78	50.32	17	40.48		
Total	28	100	155	100	42	100		

Table 6

Type of Consumption in conditions of nervousness / stress / boredom in the total study group

	Girls		Boys		χ^2	p-value
	N	%	N	%		
Sweet foods	144	85.21	113	70.63	10.22	0.001
Salty foods	25	14.79	47	29.38		
Total	169	100	160	100		



Again, tests have shown no statistically significant differences between age groups not in the female sample - χ^2 (2) = 0.96, p = 0.62, nor in the male sample, - χ^2 (2) = 1.64, p = 0.44.

Differentiation by gender is maintained on analysis only for group 16–17 years - χ^2 (1) = 8.076, p = 0.004. Not for age group of 14–15 years - χ^2 (1) = 2.94, p = 0.08, nor for the age group of 18–19 years - χ^2 (1) = 0.82, p = 0.36, there were no significant differences between the sexes.

We have not obtained statistical differences using the criterion weight status not for girls lot - χ^2 (2) = 0.03, p = 0.98, nor for boys - χ^2 (2) = 4.16, p = 0.12.

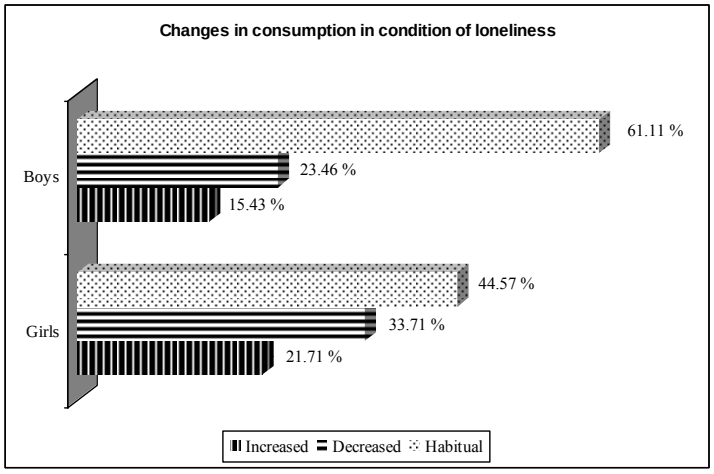
Loneliness also changed consumption among adolescents, and these changes are influenced significantly by sex. In the total study group we find significant differences between girls and boys (Table 7). To be mentioned that these differences are not unidirectional: the girls report higher percentages to boys, both an increase and decrease in consumption.

Again, tests have shown no statistically significant differences between age groups not in the female sample - χ^2 (4) = 4.15, p = 0.38, nor in the male sample - χ^2 (4) = 4.55, p = 0.33.

Table 7

Changes in consumption in conditions of loneliness – by gender

Consumtion	Girls		Boys		χ^2	p-value
	N	%	N	%		
Increased	38	21.71	25	15.43	9.233	0.010
Decreased	59	33.71	38	23.46		
Habitual	78	44.57	99	61.11		
Total	175	100.00	162	100.00		



Analysis by age group showed not significant differences by gender not for 14–15 years group -χ^2 (2) = 0.07, p = 0.97 nor for 18–19 years - χ^2 (2) = 4 06, p = 0.13, instead we found significant differences for group 16–17 years - χ^2 (2) = 8.53, p = 0.01, best represented numerically. Future research on larger samples are necessary to confirm this result.

We have not obtained significant differences in level of consumption depending on the weight status not for the girls - χ^2 (4) = 1.76, p = 0.78, nor for boys - χ^2 (4) = 5.36, p = 0.25 (Tables 8 and 9).

Another custom associated with the risk of emotional eating / overeating is eating watching TV. The results show a differentiation of the frequency by gender, girls associated in a high proportion eating with activities distraction. One third of adolescents of both sexes eat in front of the TV / computer "very often" or "always", and more than a third "occasionally" (Table 10).

Table 8

Level of consumption in conditions of loneliness in the female group – by weight status

	Underweight		**Normal weight**		**Overweight**		χ^2	**p-value**
	N	**%**	**N**	**%**	**N**	**%**		
Increased	4	14.81	32	22.54	2	33.33	1.76	0.78
Decreased	10	37.04	48	33.80	1	16.67		
Habitual	13	48.15	62	43.66	3	50.00		
Total	27	100	142	100	6	100		

Table 9

Level of consumption in conditions of loneliness in the male group – by weight status

	Underweight		**Normal weight**		**Overweight**		χ^2	**p-value**
	N	**%**	**N**	**%**	**N**	**%**		
Increased	0	0.00	20	17.86	5	16.13	5.36	0.25
Decreased	7	36.84	23	20.54	8	25.81		
Habitual	12	63.16	69	61.61	18	58.06		
Total	19	100	112	100	31	100		

Table 10

The frequency of eating watching TV/PC

Frequency	**Girls**		**Boys**		χ^2	**p-value**
	N	**%**	**N**	**%**		
Never	14	5.19	19	8.44	9.923	0.042
Rarely	56	20.74	56	24.89		
Occasionally	111	41.11	83	36.89		
Very often	62	22.96	58	25.78		
Always	27	10.00	9	4.00		
Total	270	100.00	225	100.00		

CONCLUSIONS

This eating pattern is imprinted gender involve preferential consumption of sweet foods full of fat and high caloric density, considered unhealthy.

Vulnerability of girls is evident in the appeal of "comfort food": girls reporting in a higher percentage an increased consumption, consisting of sweet foods, under anxiety / stress / boredom, and also in loneliness conditions.

In both sexes we found a destructuration of the schedule of meals and disordered eating behaviors. Meal regularity is a key element in maintaining metabolic stability and avoiding compulsive consumption. Preventing too much variation in levels of blood sugars, a ground plane structures and rules do not allow the body or to slow metabolic rate to conserve energy or face starvation extreme that leads most often to overeating. Therefore, the establishment of such a plan is a part

of the prophylaxis and the treatment of obesity and other nutritional disorders.

Firstly, must be identified the triggers – but that alone is not enough to alter behavior. Usually, once you identified a pattern of behavior, eating in response to some emotions or situations has already become a habit.

The 2nd step is to find possible alternatives to excessive eating. When looking for food in response to a particular trigger is better to try a replacement activity: reading a book, out for a walk, work around the house, etc.

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