

Original Research**Assessment of Eating Habits and Preconception and Gestational Nutritional Status of Women Who Attended the Prenatal Service of a Brazilian University Hospital****Rafael M. Macedo, MBBS¹; Arthur A. N. Aboud, MBBS¹; Arthur F. Matos, MBBS¹; Eduardo M. de Lima Filho, MBBS¹; Gabriel C. Diniz, MBBS¹; Renata M. Pinto, PhD^{2,3*}**¹Federal University of Goiás, Goiânia, GO, Brazil²Department of Pediatrics, Federal University of Goiás, Goiânia, GO, Brazil³Children's Hospital of Goiás, Goiânia, GO, Brazil***Corresponding author****Renata M. Pinto, PhD**

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E-mail: drrenatamachado@gmail.com**Article information****Received:** November 28th, 2022; **Revised:** December 12th, 2022; **Accepted:** December 14th, 2022; **Published:** December 16th, 2022**Cite this article**Macedo RM, Aboud AAN, Matos AF, de Lima Filho EM, Diniz GC, Pinto RM. Assessment of eating habits and preconception and gestational nutritional status of women who attended the prenatal service of a Brazilian University Hospital. *Obes Res Open J.* 2022; 9(1): 1-6. doi: [10.17140/OROJ-9-149](https://doi.org/10.17140/OROJ-9-149)**ABSTRACT****Introduction**

Adequate nutritional status should be seen as a fundamental point of prenatal care to avoid obstetric complications and promote the baby's health. This study aimed to compare prenatal body mass index (BMI) and BMI for gestational age (GA) and lifestyle habits of high-risk and low-risk pregnant women at a Brazilian University Hospital.

Methodology

This is a descriptive cross-sectional study with a quantitative approach using a questionnaire. Statistical analyzes were performed using Statistical Package for Social Sciences (SPSS) version 26.0. The significance level adopted was 5% ($p < 0.05$).

Results

The present research involved 78 pregnant women, 51.3% of whom were low-risk. Most pregnant women (73.1%) did not practice physical activity and, among those who did, most reported practicing between 2 and 3-hours per week of light activity. In addition, most (57.7%) interviewees reported sleeping more than 7-hours a night. The pre-pregnancy BMI was adequate in only 34.6% of the patients, while 59% were overweight (overweight or obese); at the time of the interview, BMI for gestational age was normal in only 28.2%, and 66.7% had a BMI reflecting overweight. Consumption of sweets during the week showed significant variation: the high-risk group had a higher percentage of patients who did not consume sweets during the week (44.7%) compared to the low-risk group (20%). Furthermore, while in the high-risk group, only 7.9% consumed sweets 5 to 7 times a week, 30% of the low-risk group consumed sweets 5 to 7 times a week.

Conclusion

The evaluated pregnant women have a prevalence of excess weight of 66.6%, higher than that of Brazilian women (53.9%). Comparison between preconception BMI and BMI for GA showed a tendency to persist in the pre-pregnancy classification; when there was a change in the distribution of the BMI classification, this occurred with a reduction in the number of underweight, eutrophic, and overweight women and an increase in the percentage of pregnant women with obesity. The diet, in general, was sufficient in terms of micronutrients and fiber, but with high consumption of sweets by low-risk pregnant women. In addition, the proportion of sedentary pregnant women is extremely high. Our study shows the importance of promoting healthy habits during prenatal care to improve pregnant women's nutritional diagnosis.

Keywords

Pregnancy; Obesity; BMI; Overweight; Metabolic programming.

INTRODUCTION

Pregnancy is a period of significant physiological, psychological and behavioral changes for women, leading to changes in their routines and lifestyle.¹ The physiological alterations observed during pregnancy are mainly due to hormonal factors, such as the increase in progesterone and estrogen produced by the placenta, and changes in maternal metabolism that are necessary to meet the demands raised by the rapid growth and development of the conceptus during pregnancy.²

Adequate nutritional status in the preconception phase and during pregnancy impacts the health of the mother and the fetus. Both malnutrition and excess adiposity interfere in a harmful way in the process known as “Developmental Programming (DP)” of the baby, predisposing the conceptus to a greater risk of metabolic diseases. DP refers to the long-term health effect determined by a set of environmental exposures during the infant’s first 1000-days (270-days during prenatal development and 730-days during the infant’s first two-years of life).³

In this way, promoting healthy habits during pregnancy that guarantee adequate weight gain should be seen as a fundamental point of prenatal care, both to avoid obstetric complications and promote the baby’s health.³

Objectives

- To determine the nutritional diagnosis of high- and low-risk pregnant women monitored at a Brazilian University Hospital.
- To compare body mass index (BMI) for Gestational Age (GA) with preconception BMI.
- To know the eating habits and degree of physical activity of pregnant women.
- To compare the nutritional diagnosis and life habits of high- and low-risk pregnant women.

METHODOLOGY

Study Typology

This research is a cross-sectional, descriptive study with a quantitative approach, which consisted of applying a questionnaire to pregnant patients, at high- and low-risk, in the prenatal and obstetrics clinics of the Hospital de Clínicas of the Federal University of Goiás (HC-UFG).

Population and Samples

The survey was carried out with 78 Universal Health System (SUS) patients undergoing prenatal care at the HC-UFG. Among the patients, 40 were low-risk pregnant women, while 38 were high-risk. The duration of the interviews was, on average, 15-minutes.

Inclusion and Exclusion Criteria

All pregnant women over 18-years of age who were waiting for a

prenatal consultation at the Obstetrics outpatient clinics at HC-UFG were invited to participate in the study. After explaining the methodology and objectives of the research, the pregnant women who signed the TCLE (Free and Informed Knowledge Term) answered the questionnaire. At the end of the application of the questionnaire, the researchers guided the pregnant women about Developmental Programming in the 1000-days and the importance of the life habits of the mother-baby binomial in this period.

Research Procedures

Pregnant patients at the obstetric clinic were invited to answer a questionnaire in a private environment, taking an average of 15-minutes. The questionnaire consisted of about 20 questions, with closed multiple-choice questions and discursive answers. It was possible to assess preconception BMI and BMI for GA, eating habits, and physical activity. The interpretation of BMI for GA was based on the Atalah classification.⁴

Ethical Aspects

The project was submitted and approved by the Ethics and Research Committee of the Federal University of Goiás (4,861,766). Before starting the research, all participants signed an informed consent form.

Data Analysis

Statistical analyzes were performed using Statistical Package for Social Sciences (SPSS) version 26.0. Data parametricity was verified using the Kolmogorov-Smirnov test. The distribution of the sample’s profile concerning high- or low-risk was tested by applying Student’s *t* tests; Pearson chi-square, followed by standardized residuals analysis, termed as Posthoc chi-square. The significance level adopted was 5% ($p < 0.05$).

RESULTS

The present research involved 78 pregnant women who performed prenatal care at HC-UFG. Of these, 51.3% were low-risk pregnant women ($n=40$), and 48.7% were high-risk pregnant women ($n=38$). Table 1 shows the demographic profile of high- and low-risk pregnant women, as well as characterizes the lifestyle habits of these women. The mean age of pregnant women was 28.83-years, menarche occurred at a mean age of 12.72-years, and the mean gynecological age was calculated at 15.96-years. Most women (71.8%) were married or in stable relationships. The most prevalent family income was up to 2 minimum wages, and high school education was the most reported (61.5%). More than 90% of women reported not smoking or drinking alcohol during pregnancy. Most pregnant women (73.1%) did not practice physical activity, and, among those who did, most reported practicing between 2 and 3-hours per week of light activity. Most (57.7%) interviewees reported sleeping more than 7-hours a night. If given the choice, just over half (56.4%) of pregnant women would opt for natural childbirth, and 6.4% did not intend to breastfeed. No data analyzed showed a significant difference between the high and low-risk groups.

Table 1. Characterization of the Demographic Profile and Habits in the High-risk and Low-risk Pregnant Women Groups

	Groups		Total	p
	High-risk 38 (48.7)	Low-risk 40 (51.3)		
Age	29.87±7.23	27.85±6.73	28.83±7.01	0.20*
Menarche	12.76±1.73	12.68±1.35	12.72±1.54	0.80*
Gynecological Age	16.79±7.26	15.18±6.86	15.96±7.06	0.31*
Marital Status				
Married/ Stable Union	29 (76.3)	27 (67.5)	56 (71.8)	0.38**
Single	9 (23.7)	13 (32.5)	22 (28.2)	
Income (Minimum wage)				
< 2	19 (50.0)	26 (65.0)	45 (57.7)	0.39**
2 a 5	18 (47.4)	13 (32.5)	31 (39.7)	
5 a 10	1 (2.6)	1 (2.5)	2 (2.6)	
Schooling Level				
Elementary school	8 (21.1)	6 (15.0)	14 (17.9)	0.75**
High school	23 (60.5)	25 (62.5)	48 (61.5)	
University education	7 (18.4)	9 (22.5)	16 (20.5)	
Smoking				
No	37 (97.4)	39 (97.5)	76 (97.4)	0.97**
Yes	1 (2.6)	1 (2.5)	2 (2.6)	
Alcohol consumption				
No	37 (97.4)	37 (92.5)	74 (94.9)	0.33**
Yes	1 (2.6)	3 (7.5)	4 (5.1)	
Physical activity (FA)				
No	28 (73.7)	29 (72.5)	57 (73.1)	0.90**
Yes	10 (26.3)	11 (27.5)	21 (26.9)	
Week hours of FA				
1	2 (20.0)	2 (18.2)	4 (19.0)	0.96**
2-3	4 (40.0)	5 (45.5)	9 (42.9)	
4 or more	4 (40.0)	4 (36.4)	8 (38.1)	
FA Intensity				
Light	8 (80.0)	8 (72.7)	16 (76.2)	0.69**
Moderate	2 (20.0)	3 (27.3)	5 (23.8)	
Sleeping Hours				
Until 7h	17 (44.7)	16 (40.0)	33 (42.3)	0.67**
More than 7h	21 (55.3)	24 (60.0)	45 (57.7)	

*t Student test; **Qui-square; ‡Posthoc; n=absolute frequency; %=relative frequency

Table 2. Characterization of the Clinical History in the High and Low-risk Groups

	Groups		Total	p
	High-risk 38 (48.7)	Low-risk 40 (51.3)		
Prenatal start week	9.50±5.97	10.15±6.15	9.83±6.03	0.63*
Pregnancies				
1	11 (28.9)	10 (25.0)	21 (26.9)	0.34*
2	10 (26.3)	13 (32.5)	23 (29.5)	
3	6 (15.8)	11 (27.5)	17 (21.8)	
4-7	11 (28.9)	6 (15.0)	17 (21.8)	
Parity				
Multiparous	11 (28.9)	16 (40.0)	27 (34.6)	0.28**
Nulliparous	10 (26.3)	13 (32.5)	23 (29.5)	
Primiparous	17 (44.7)	11 (27.5)	28 (35.9)	
Abortion				
0	27 (71.1)	31 (77.5)	58 (74.4)	0.51**
1	5 (13.2)	6 (15.0)	11 (14.1)	
2	6 (15.8)	3 (7.5)	9 (11.5)	
Gestational trimester				
1 st	4 (10.5)	5 (12.5)	9 (11.5)	0.88**
2 nd	11 (28.9)	13 (32.5)	24 (30.8)	
3 rd	23 (60.5)	22 (55.0)	45 (57.7)	
BMI for GA classification				
Low weight	2 (5.3)	2 (5.0)	4 (5.1)	0.65**
Adequate	12 (31.6)	10 (25.0)	22 (28.2)	
Overweight	6 (15.8)	11 (27.5)	17 (21.8)	
Obesity	18 (47.4)	17 (42.5)	35 (44.9)	
Pre conceptional BMI classification				
Low weight	3 (7.9)	2 (5.0)	5 (6.4)	0.87**
Adequate	13 (34.2)	14 (35.0)	27 (34.6)	
Overweight	8 (21.1)	11 (27.5)	19 (24.4)	
Obesity	14 (36.8)	13 (32.5)	27 (34.6)	
Was the pregnancy planned?				
No	28 (73.7)	25 (62.5)	53 (67.9)	0.29**
Yes	10 (26.3)	15 (37.5)	25 (32.1)	
Was the pregnancy well accepted?				
No	2 (5.3)	3 (7.5)	5 (6.4)	0.68**
Yes	36 (94.7)	37 (92.5)	73 (93.6)	
Number of medications				
0	6 (15.8)	28 (70.0)‡	34 (43.6)	<0.01**
1	13 (34.2)	10 (25.0)	23 (29.5)	
2	13 (34.2)‡	2 (5.0)	15 (19.2)	
3	6 (15.8)‡	0 (0.0)	6 (7.7)	
Diseases				
No	8 (21.1)	23 (57.5)	31 (39.7)	<0.01**
Yes	30 (78.9)	17 (42.5)	47 (60.3)	

*t Student Test; **Qui-square; ‡Posthoc; n=absolute frequency; %=relative frequency

As for Table 2, just over a quarter of the patients were primigravidae (26.9%), and a similar number (25.6%) reported a previous miscarriage. At the time of the interview, 57.7% were in the third trimester of pregnancy. Although only 67.9% of pregnancies were planned, 93.6% reported having a good acceptance of it. The pre-pregnancy BMI was adequate in only 34.6% of the

patients, while 59% were overweight (overweight or obese); at the time of the interview, BMI for gestational age was normal in only 28.2%, and 66.7% had a BMI reflecting overweight. Regarding the amount of medication used during pregnancy, 56.4% regularly used at least one drug, consistent with the prevalence of 60.3% who claimed to have some disease during pregnancy. As expected,

we observed a statistically significant difference in the number of routinely used medications and the presence of diseases, which was more significant in pregnant women treated at the high-risk outpatient clinic.

A comparison was made between the preconception BMI and the BMI for Gestational Age of the pregnant women, data shown in Table 3. In preconception, 6.4% of women had low weight, 34.6% adequate weight, 24.4% overweight, and 34.6% obesity. During pregnancy, there was a change in the distribution of the BMI classification, with the reduction in the number of underweight, eutrophic and overweight women and an increase in the percentage of pregnant women with obesity.

Table 3. Evolution of Preconception BMI and BMI for GA

	BMI Classification		p*
	Pre conceptual BMI n (%)	BMI for GA n (%)	
Low weight	5 (6.4)	4 (5.1)	0.73
Adequate	27 (34.6)	22 (28.2)	0.38
Overweight	19 (24.4)	17 (21.8)	0.70
Obesity	27 (34.6)	35 (44.9)	0.19

*Qui-square Pos hoc; n=absolute frequency; %=relative frequency
Legend: BMI: Body Mass Index; GA: Gestational age

Table 4 shows the absolute number and percentage of weekly consumption of some foods. We can highlight that the consumption of milk at least once a week was reported by 85.9% of the interviewees. Fruit consumption at least once a week was prevalent in 96.2% of the interviews, and 69.2% reported daily consumption. Regarding alcohol consumption, 93.6% did not consume any day of the week. Meat consumption on all days of the week was prevalent in 92.3% of pregnant women. The consumption of salads and vegetables three or more times a week was reported by 85.9% and 66.6%, respectively. Most interviewees reported consuming sweets (38.4%) and soft drinks (43.8%) at least three times a week. Consumption of sweets during the week showed significant variation. The high-risk group had a higher percentage of patients who did not consume delicacies during the week (44.7%) than the low-risk group (20%). Furthermore, while in the high-risk group, only 7.9% consumed sweets 5 to 7 times a week, 30% of the low-risk group consumed sweets 5 to 7 times a week. The other analyzed habits did not present statistically significant differences between the groups.

Table 5 shows the absolute number and percentage of daily consumption of some foods. We can highlight that 66.7% of pregnant women consume beans twice a day, 80.8% of pregnant women consume salad twice daily and 85.9% of pregnant women consume meat twice daily. There was no statistically significant difference between the groups in any analyzed habits.

DISCUSSION

Our study showed that BMI during pregnancy tends to remain in the same preconception BMI classification, regardless of whether or

not the pregnant woman was at the right weight. This is explained by pregnant women's tendency to proportionally increase caloric intake due to the greater need for nutrients and the greater desire to eat due to changes in satiety.⁵ Knowing that both being overweight and underweight are harmful to the pregnant woman and the baby's DP, our data corroborate the need to make the pregnant woman's BMI adequate before pregnancy, considering that few women manage to change their BMI to adequate during pregnancy.³

In our series, when there was a change in the classification from preconception BMI to BMI for GA. This modification occurred to reduce eutrophy, with an increase in the proportion of overweight/obesity concerning the amount of adequate weight. Before pregnancy, 46 women were overweight or obese, and during pregnancy, this number increased to 52-66.6% of the pregnant women surveyed). Although this change did not show statistical significance, probably due to the small number of patients evaluated, the increase in excess weight during pregnancy is clinically relevant data. Furthermore, the prevalence of overweight in 66.6% of the pregnant women in our sample is higher than that of the Brazilian female population (53.9% of Brazilian women have a BMI greater than 25).⁶

The pregnant women in the research had a very similar demographic profile, which did not differ statistically between the high and low-risk groups. The two groups comprised a majority of women who were young (around 28-years-old), married, and had average education and similar lifestyle habits. This similarity can be explained by the profile of the patient who is usually referred to HC-UFG in the Brazilian Public System (SUS) in Goiânia: patients already receive information about the importance of healthy lifestyle habits by the local professional team, which has repercussions on mostly healthy habits (regardless of being high or low-risk) such as low or zero use of tobacco/drugs and good sleep quality. The report of a 73% sedentary lifestyle among pregnant women is alarming since the lack of physical activity is associated with a higher incidence of chronic diseases, such as diabetes, hypertension, and cancer.⁷ A sedentary lifestyle becomes even more worrying during pregnancy, putting the pregnant woman in a diabetogenic state and favoring hypertension in the second trimester of pregnancy.⁵ On the other hand, it is known that when pregnant women practice physical activity, specific diseases of pregnancy can be avoided and better managed, such as gestational diabetes.⁸

Still, regarding habits, it is necessary that during pregnancy, the patient consumes a diet rich in proteins, complex carbohydrates, iron, calcium, iodine, folate, and vitamin B12.⁹ These nutrients are present in meat, eggs, milk, fruits, rice, beans, salad, and vegetables. When comparing the characterization tables of habits in the week and daily habits, we can see that these foods had high consumption in the diet of the interviewed patients. The diet should also be low in fried foods, ultra-processed foods, and alcohol and when compared with the tables characterizing habits in the week and daily habits, we can see that these foods had a low prevalence of consumption by the patients interviewed.⁹ Thus, we can infer that, in general, the nutrition during pregnancy of our patients was satisfactory.

Table 4. Characterization of Weekly Eating Habits in Groups of High- and Low-risk Pregnant Women

	Groups		Total	p*
	High-risk n (%) 38 (48.7)	Low-risk n (%) 40 (51.3)		
Milk				
0	5 (13.2)	6 (15.0)	11 (14.1)	0.91
1-4	16 (42.1)	15 (37.5)	31 (39.7)	
5-7	17 (44.7)	19 (47.5)	36 (46.2)	
Goodies				
0	17 (44.7) [‡]	8 (20.0)	25 (32.1)	0.01
1 - 4	18 (47.4)	20 (50.0)	38 (48.7)	
5 - 7	3 (7.9)	12 (30.0) [‡]	15 (19.2)	
Tea/coffee				
0	11 (28.9)	16 (40.0)	27 (34.6)	0.39
1-4	6 (15.8)	3 (7.5)	9 (11.5)	
5-7	21 (55.3)	21 (52.5)	42 (53.8)	
Fruit				
0	2 (5.3)	1 (2.5)	3 (3.8)	0.80
1-4	8 (21.1)	8 (20.0)	16 (20.5)	
5-7	28 (73.7)	31 (77.5)	59 (75.6)	
Soft Drink				
0	16 (42.1)	10 (25.0)	26 (33.3)	0.27
1-4	13 (34.2)	18 (45.0)	31 (39.7)	
5-7	9 (23.7)	12 (30.0)	21 (26.9)	
Alcohol				
0	37 (97.4)	36 (90.0)	73 (93.6)	0.37
1-4	1 (2.6)	3 (7.5)	4 (5.1)	
5-7	0 (0.0)	1 (2.5)	1 (1.3)	
Rice				
0	1 (2.6)	0 (0.0)	1 (1.3)	0.57
1-4	4 (10.5)	5 (12.5)	9 (11.5)	
5-7	33 (86.8)	35 (87.5)	68 (87.2)	
Bean				
0	2 (5.3)	2 (5.0)	4 (5.1)	0.91
1-4	8 (21.1)	7 (17.5)	15 (19.2)	
5-7	28 (73.7)	31 (77.5)	59 (75.6)	
Salad				
0	1 (2.6)	1 (2.5)	2 (2.6)	0.88
1-4	6 (15.8)	8 (20.0)	14 (17.9)	
5-7	31 (81.6)	31 (77.5)	62 (79.5)	
Vegetables				
0	8 (21.1)	10 (25.0)	18 (23.1)	0.78
1-4	8 (21.1)	10 (25.0)	18 (23.1)	
5-7	22 (57.9)	20 (50.0)	42 (53.8)	
Meat or Egg				
1-4	2 (5.3)	2 (5.0)	4 (5.1)	0.96
5-7	36 (94.7)	38 (95.0)	74 (94.9)	
Fried Food				
0	18 (47.4)	16 (40.0)	34 (43.6)	0.43
1-4	17 (44.7)	17 (42.5)	34 (43.6)	
5-7	3 (7.9)	7 (17.5)	10 (12.8)	

[‡]Posthoc; n=absolute frequency; %=relative frequency

Table 5. Characterization of Daily Eating Habits in Groups of High- and Low-risk Pregnant Women

	Groups		Total	p*
	High-risk n (%) 38 (48.7)	Low-risk n (%) 40 (51.3)		
Milk				
0	5 (13.2)	6 (15.0)	11 (14.1)	0.51
1	18 (47.4)	21 (52.5)	39 (50.0)	
2-3	13 (34.2)	13 (32.5)	26 (33.3)	
4-5	2 (5.3)	0 (0.0)	2 (2.6)	
Goodies				
0	17 (44.7)	8 (20.0)	25 (32.1)	0.10
1	15 (39.5)	21 (52.5)	36 (46.2)	
2-3	4 (10.5)	9 (22.5)	13 (16.7)	
4-5	2 (5.3)	2 (5.0)	4 (5.1)	
Tea/coffee				
0	11 (28.9)	16 (40.0)	27 (34.6)	0.74
1	18 (47.4)	17 (42.5)	35 (44.9)	
2-3	7 (18.4)	5 (12.5)	12 (15.4)	
4-5	2 (5.3)	2 (5.0)	4 (5.1)	
Fruit				
0	2 (5.3)	1 (2.5)	3 (3.8)	0.76
1	5 (13.2)	7 (17.5)	12 (15.4)	
2 - 3	28 (73.7)	27 (67.5)	55 (70.5)	
4 - 5	3 (7.9)	5 (12.5)	8 (10.3)	
Soft Drink				
0	16 (42.1)	10 (25.0)	26 (33.3)	0.19
1	10 (26.3)	20 (50.0)	30 (38.5)	
2-3	11 (28.9)	9 (22.5)	20 (25.6)	
4-5	1 (2.6)	1 (2.5)	2 (2.6)	
Alcohol				
0	37 (97.4)	36 (94.7)	73 (96.1)	0.55
1	1 (2.6)	2 (5.3)	3 (3.9)	
Rice				
0	1 (2.6)	0 (0.0)	1 (1.3)	0.17
1	11 (28.9)	6 (15.0)	17 (21.8)	
2-3	26 (68.4)	34 (85.0)	60 (76.9)	
Bean				
0	2 (5.3)	2 (5.0)	4 (5.1)	0.80
1	11 (28.9)	9 (22.5)	20 (25.6)	
2-3	25 (65.8)	29 (72.5)	54 (69.2)	
Salad				
0	1 (2.6)	1 (2.5)	2 (2.6)	0.77
1	6 (15.8)	6 (15.0)	12 (15.4)	
2-3	30 (78.9)	33 (82.5)	63 (80.8)	
4-5	1 (2.6)	0 (0.0)	1 (1.3)	
Vegetables				
0	8 (21.1)	10 (25.0)	18 (23.1)	0.87
1	8 (21.1)	7 (17.5)	15 (19.2)	
2-3	22 (57.9)	23 (57.5)	45 (57.7)	
4-5	1 (2.6)	0 (0.0)	1 (1.3)	
Meat or Egg				
1	3 (7.9)	5 (12.5)	8 (10.3)	0.48
2-3	34 (89.5)	35 (87.5)	69 (88.5)	
4-5	1 (2.6)	0 (0.0)	1 (1.3)	

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When comparing weekly eating habits between the high- and low-risk groups, it was possible to notice that the high-risk group had a higher frequency of members who did not consume sweets than the low-risk group. Furthermore, among individuals in the high-risk group who consumed sweets, the percentage of patients who had a weekly frequency of 5 to 7-days a week was substantially lower than the percentage in the low-risk group. This

choice of abstaining from or reducing sweets during pregnancy can be justified because, compared to low-risk pregnancies, high-risk pregnancies have an increased risk of morbidity and mortality, so attention to nutrition during pregnancy is even more critical in this group. Thus, high-risk patients sought to reduce high-calorie foods to avoid complications related to weight gain, insulin resistance, and metabolic syndrome.¹⁰

Furthermore, highlighting the limitations of the work, it can be noted that the quantity and quality of the data collected, which were selected only at the HC-UFG in Goiânia, are small, thus not generating a generalized analysis. We can also point out that the study was developed only with pregnant women from the public health network, and differences in the knowledge of pregnant women from the private network may or may not be observed.

CONCLUSION

The evaluated pregnant women had a prevalence of excess weight of 66.6%, higher than that of Brazilian women (53.9%). Comparison between preconception BMI and BMI for GA showed a tendency to persist in the pre-pregnancy classification; when there was a change in the distribution of the BMI classification, this occurred with a reduction in the number of underweight, eutrophic, and overweight women and an increase in the percentage of pregnant women with obesity. The diet, in general, was sufficient in terms of micronutrients and fiber, but with high consumption of sweets by low-risk pregnant women. In addition, the proportion of sedentary pregnant women is extremely high. Our study shows the importance of promoting healthy habits during prenatal care to improve pregnant women's nutritional diagnosis.

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CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

...Continued				
Fried Food				
0	18 (47.4)	16 (40.0)	34 (43.6)	0.28
1	15 (39.5)	13 (32.5)	28 (35.9)	
2 a 3	5 (13.2)	11 (27.5)	16 (20.5)	
*Chi-square; n=absolute frequency; %=relative frequency				

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