# Food consumption of postmenopausal women in times of the SARS-CoV-2 pandemic: a longitudinal study

Priscilla Rayanne E. Silva Noll<sup>1,2</sup>; Monique G. Nascimento<sup>2</sup>; Luiza H. C. M. Bayer<sup>2</sup>; Edmund Baracat<sup>2</sup>; José Maria Soares Júnior<sup>2</sup>; Isabel Cristina Esposito Sorpreso<sup>2</sup>

<sup>1</sup>Department of Education, Instituto Federal Goiano, Goiás, Brazil; <sup>2</sup>Department of Obstetrics and Gynecology, Faculty of Medicine, Universidade de São Paulo, São Paulo, Brazil

Postmenopausal women had a higher consumption of sweet foods and sugar-sweetened beverages and a lower consumption of milk, dairy products, and processed foods during the pandemic than during the baseline period.

### BACKGROUND

 Studying the dietary habits and symptoms of postmenopausal women during situations such as the COVID-19 pandemic is important to mitigate long-term post-pandemic health problems.

Objective: To compare eating habits and menopausal symptoms of postmenopausal women before and during the SARS-CoV-2 pandemic.

# **METHODS**

- Longitudinal study (2018 2021) at one Climacteric Gynecology Outpatient Clinic in São Paulo;
- Sample: Women aged ≥ 40 years with postmenopausal diagnosis;
- Menopausal Kupperman-Blatt Index, Women's Health Questionnaire, 24-hour dietary recall, and Brazilian Food Insecurity Scale - short-form;
- Chi-square and Fisher's exact tests were used to assess differences between variables (before and during SARS-CoV-2 pandemic).

## RESULTS

 Of the 274 participants enrolled at the baseline, 78 (28.5%) continued to participate in the survey during SARS-CoV-2 pandemic.







## Table 1. Energy consumption by degree of food processing of postmenopausal women at the Climacteric Outpatient Clinic, University of São Paulo, before and during the COVID-19 pandemic, 2018–2021

Food Consumption	Before Pandemic (n = 78)		During Pandemic (n = 78)		
	Average ± SD	Median (Q1–Q3)	Average ± SD	Median (Q1–Q3)	р*
Total energy (kcal)	1726,04±577	1802,81(1371,08-2156,35)	1541,28±604,07	1466,86 (1035,15-1918,58)	0,003
Degree of food proce	essing (% of total	daily energy intake)			
Culinary preparations	61,22±14,45	60,78 (53,01–72,3)	63,14±16,70	63,27 (51,81–74,60)	0,697
Processed foods	8,97±6,44	8,75 (3,33–13,50)	5,88±6,16	4,24 (0-9,71)	0,003
Ultra-processed foods	29,81±14,42	29,38 (19,78–40,15)	31,18±17,21	29,73 (18,29–41,77)	0,216
Healthy markers (g)					
Milk and plain yogurt	134.70±124	116.10 (6.95–213.81)	106.67 ± 102.23	89 (2.99-168.9)	0,043
Sugar-sweetened beverages	63.21±81.68	29.93 (6.28–87.84)	66.99 ± 83.88	29.28 (0–89.8)	0,007
Sweet foods	184.15±138.65	157.32 (62.51-273.34)	190.72 ± 227.02	128.12 (13.67-286.44)	0,001

#### RESULTS CONTINUED



40% presented some degree of food insecurity

- Another healthy markers evaluated: fruits (p=0.658),vegetables (p=0.392), and legumes (p=0.0,63);
- Another unhealthy markers evaluated: sausages (p=0.082) and fast food and ready meals (p=0.385)

## CONCLUSIONS

- Higher consumption of sweet foods and beverages and lower consumption of milk and processed foods during the pandemic, compared to before the pandemic. A decrease in energy and macronutrient consumption is pointed out, which may be related to the participants' food insecurity.
- These findings can contribute to improved healthcare planning for postmenopausal women to prevent and treat menopausal symptoms.

# ADDITIONAL KEY INFORMATION

Conflicts of Interest: No Acknowledgements: Instituto Federal Goiano

Author contact:







