

Research

Conference on Sustainable Health and Nutrition During the Life Cycle: Poster Presentations

Amanda Rodrigues Amorim Adegboye^{1,*}¹ Centre for Agroecology, Water and Resilience, Coventry University, Coventry, UK. ² Centre for Healthcare and Communities, Coventry University, Coventry, UK.**Conference Proceeding:** The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024<https://doi.org/10.26596/wn.202415245-73>* Corresponding author: ad6287@coventry.ac.uk

World Nutrition 2024;15(2):45-73

Abstract DP001

Early pregnancy systemic inflammation and gestational weight gain

Lea Jalking^{1,*}, Karoline Winckler¹, Kathrine Bukkehave Hansen¹ and Berit Lilienthal Heitmann¹¹ The Parker Institute, Copenhagen Denmark* Corresponding author: leajalking@gmail.com

World Nutrition 2024;15(2):45

INTRODUCTION

Excess gestational weight gain and periodontitis are both pro-inflammatory conditions that may be associated with adverse pregnancy outcomes such as preeclampsia, gestational diabetes, preterm birth and abnormal birth weight. Research focusing on a potential synergic effect of general low-grade systemic inflammation and periodontitis in relation to subsequent gestational weight gain is, however, sparse. Using serum CRP-level as a measure of the degree of systemic inflammation we will assess how the relationship between CRP levels and subsequent gestational weight gain differs for those with severe and low degree of periodontitis respectively.

AIM

To investigate a possible association between CRP levels and gestational weight gain and how this relationship is modified by the severity of periodontitis.

METHODS

From a low SES area in Region Sealand in Denmark 200 pregnant women with diagnosed periodontitis were recruited in gestational weeks 11-19 and offered periodontal treatment during pregnancy. Blood was drawn at recruitment and women followed until week. 35 for gestational weight development.

RESULTS/CONCLUSION

Preliminary results will be presented from the analyses

KEYWORDS: Pregnancy; Periodontitis; CRP-level; Adverse Pregnancy Outcomes; Gestational weight gain**BIOGRAPHY OF THE PRESENTING AUTHOR**

Lea Jalking is doing her master's degree in Biomedicine at the University of Southern Denmark and is currently part of the data collection process of the PROBE study at the Parker Institute at Frederiksberg Hospital, Copenhagen Denmark.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.

Abstract DP002

Placental triacylglycerol species are sensitive to maternal diet rich in ultra-processed food and food additives

Ranquine, L.G.^{1,†}; Ferreira, C.¹; Dias, G.¹; Góes, V.^{1,2}; Bauer, D.^{1,2}; Belcastro, L.²; Mucci, D.²; Sardinha, F.²; Murgia, A.²; Lai, C.³; Griffin, J.³; Burton, G.B.⁴; Torres, A.²; El-Bacha, T.^{1,2}

¹ LeBIOME – Bioactives, Mitochondrial and Placental Metabolism Core, Institute of Nutrition Josué de Castro, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, 21941-902, Brazil; ² Institute of Chemistry, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, 21941-909, Brazil; ³ Department of Biochemistry, University of Cambridge, Cambridge CB2 1GA, Reino Unido; ⁴ Centre for Trophoblast Research, Physiology Building Downing Street, University of Cambridge, Cambridge CB2 3EG, Reino Unido.

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: Email: ranquinelayla@gmail.com

World Nutrition 2024;15(2):46

INTRODUCTION

Brazilians have a high consumption of ultra-processed foods, generally nutritionally unbalanced foods, which can stimulate biochemical pathways linked to inflammation and to the incidence of type 2 diabetes mellitus. Triacylglycerols, formed by products of these pathways, are exported to the circulation, from where they are available for absorption and placental transfer.

AIM

To investigate whether placental triacylglycerols are associated with the consumption of ultra-processed foods and food additives.

METHODS

Lean (n=9), with pregestational obesity (n=7), and with gestational diabetes *mellitus* (n=6) pregnant women were recruited at the Maternity School/UFRJ, Rio de Janeiro (Brazil). Placentas were collected at delivery and analyzed by high-resolution mass spectrometry to determine the triacylglycerol profile. The intake of ultra-processed food (% energy) and food additives (hits in 24-hour recall) was assessed by two 24-hour dietary recalls, collected in the third gestational trimester. Food additives were subdivided according to their functions.

RESULTS

There was no significant difference between the groups in terms of the consumption of ultra-processed foods and each class of additives. Dividing the volunteers into tertiles of consumption, there was a significant positive correlation between the consumption of ultra-processed foods and additives and TG(51:1) (respectively, $p=0.0081$; $p=0.0108$). In addition, the Flavour enhancers subclass of additives showed a significant positive correlation with TG(51:1) ($p=0.0028$) and a trend towards a negative correlation with TG(59:12) ($p=0.0536$); another subclass of additives whose correlation with TG(51:1) was confirmed was flavourings ($p=0.0074$). The triacylglycerol species that showed a positive correlation with the largest number of subclasses was 51:1, while the 59:12 and 66:10 species showed the most negative correlations.

CONCLUSION

The consumption of ultra-processed foods and additives was associated with specific species of triacylglycerols in the placenta, which may be linked to placental dysfunction or impaired supply of essential fatty acids to the fetus, possibly favouring negative outcomes.

KEYWORDS: Ultra-processed food; additives; placental triacylglycerols; placental efficiency.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.

**Abstract DP003**

Association between maternal pregestational BMI and neonatal adiposity: preliminary findings from a Brazilian cohort study

Ribas, MTN^{1,*}; Ranquine, LG¹; Barros, EG²; El-Bacha, T¹; Rebelo, F³

¹ LeBIOme – Bioactives, Mitochondrial and Placental Metabolism Core, Institute of Nutrition Josué de Castro, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, mariana.ribas@souusu.com.br, ranquinelayla@gmail.com, tatiana@nutricao.ufrj.br; ² Saint Ursula University, Rio de Janeiro, RJ, Brazil, erica.barros@usu.edu.br; ³ Clinical Research Unit, National Institute of Women, Children and Adolescents Health Fernandes Figueira/Oswaldo Cruz Foundation, Rio de Janeiro, RJ, Brazil, frebelos@gmail.com

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: Email: mariana.ribas@souusu.com.br

World Nutrition 2024;15(2):47

INTRODUCTION

The influence of maternal pregestational body mass index (BMI) on birth weight is recognized; however, its connection with neonatal body composition is less explored. Given the link between higher birth adiposity and long-term health risks, it is crucial to explore maternal factors that might be related to newborns' body composition.

AIM

To analyze the association between maternal pregestational BMI and neonatal adiposity.

METHODS

This study is a subset of a prospective cohort with four follow-up waves, conducted at Fernandes Figueira Institute/Oswaldo Cruz Foundation since September 2022 (CAAE: 26971319.1.0000.5269). It includes data from 68 mother-child pairs, specific to the first follow-up wave (until 15 days postpartum). Pregestational weight, recorded until 13 weeks of pregnancy, was used to calculate pregestational BMI and neonatal adiposity was estimated using air displacement plethysmography (PEA POD, Cosmed®). Analyses, including simple and multiple linear regression adjusted for confounding variables, were conducted using STATA® 13.0, with significance set at $p < 0.05$.

RESULTS

Mothers had, on average, 30.34 (± 6.75) years old and pregestational BMI ($n = 61$) of 26.30 kg/m² (± 4.24). All newborns were full-term and appropriate for gestational age. 55.88% of them were female and, on average, 9.97 (± 2.77) days old when body composition was assessed. Mean neonatal adiposity ($n = 54$) was 9.56% (± 4.76) with a mean fat mass of 336.16g (± 182.24). In this subset, no significant association was found between maternal pregestational BMI and neonatal fat mass percentage ($n = 48$) ($p = 0.414$) and grams ($n = 48$) ($p = 0.086$).

CONCLUSION

Considering the importance of analyzing maternal factors related to newborns' body composition, subsequent analyses with larger sample sizes are crucial to determine if pregestational BMI is associated with neonatal adiposity.

KEYWORDS: Adiposity. Body composition. Body Mass Index. Pregestational. Neonatal.

BIOGRAPHY OF THE PRESENTING AUTHOR

Mariana is an undergraduate researcher from Rio de Janeiro, Brazil. She is getting a bachelor's degree in Nutrition at Saint Ursula University, Rio de Janeiro, and is also a member of the team responsible for data acquisition for the APPLE project – a prospective cohort study being conducted at Fernandes Figueira Institute/Oswaldo Cruz Foundation since September 2022. She also integrates the core of LeBIOme, a laboratory from the Federal University of Rio de Janeiro, Brazil.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP004

Hypertensive syndromes of pregnancy and premature birth: data from study “Birth in Brazil”

Franco, EP¹; Marano, D¹; Gama, SGN²; Filha, MMT²; Martinelli, KG³; Costa, ACC¹

¹Fundação Oswaldo Cruz. Instituto Nacional da Saúde da Mulher, da Criança e do Adolescente Fernandes Figueira. Pós-Graduação em Saúde da Criança e da Mulher. Rio de Janeiro, RJ, Brasil. Email: pesquisa@iff.fiocruz.br, ²Fundação Oswaldo Cruz. Escola Nacional de Saúde Pública. Departamento de Epidemiologia e Métodos Quantitativos em Saúde. Rio de Janeiro, RJ, Brasil. Email: secaepidemiologia.ensp@fiocruz.br, ³Universidade Federal do Espírito Santo. Programa de Pós-Graduação em Saúde Coletiva. Vitória, ES, Brasil. Email: ppgsc.ufes@gmail.com

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: secaepidemiologia.ensp@fiocruz.br

World Nutrition 2024;15(2):48

INTRODUCTION

Hypertensive syndromes of pregnancy are the most common complications of pregnancy.

AIM

Verify the causal effect of these syndromes on early and late prematurity based on national and hospital-based data from the study entitled National Survey on Childbirth and Birth: “Nascer no Brasil”, conducted between February 2011 and October 2012, with interviews with 23.894 women.

METHODS

The sample consisted of 20.494 postpartum women, of which 2.369 women had hypertensive pregnancy syndrome, which comprised the synthesis of positive responses to any of the questions relating to increased blood pressure, presence of pre-eclampsia, HELLP Syndrome contained in the completed questionnaires with data from the hospital record and prenatal card. The outcome was categorized into early prematurity (<34 weeks of gestation) and late prematurity (34-36 weeks of gestation). To carry out the analyses, an acyclic graph was created to identify the necessary adjustment covariates to estimate the causal effect of hypertensive syndromes of pregnancy on prematurity. Then, the propensity score weighting method was applied to deal with the imbalance between exposed and unexposed groups.

RESULTS

Among premature babies (2.139), 2.6% were premature early and 7.8% were late. After weighting by the propensity score, women with hypertensive syndromes during pregnancy had a 2.74 times greater chance of having early premature babies (ORaj: 2.74; 95% CI: 2.12-3.54) and a 2.40 chance of having late premature babies (Oradj: 2.40; 95% CI: 1.86-3.08). Based on the use of the propensity score method, it was possible to evaluate the causal effect of this exposure on early and late prematurity.

CONCLUSION

Based on these results, it is important to highlight the importance of adequate prenatal care to diagnose and treat women with hypertensive syndromes early, aiming to reduce complications resulting from this clinical condition, especially prematurity.

KEYWORDS: Hypertension Pregnancy-Induced. Early prematurity. Late prematurity. Directed acyclic graph. Propensity score.

BIOGRAPHY OF THE PRESENTING AUTHOR

Elizabeth de Paula Franco is a nutritionist who graduated from the Universidade Federal Fluminense, she has completed her PhD at Instituto Fernandes Figueira. Fundação Oswaldo Cruz Foundation. Brazil.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP005

Diet quality at the beginning of pregnancy and child growth at six months

Santos I.S.^{1,*}, Carreira N.P.², Carvalho M.R.³, Lima M.C.⁴, Crivellenti, L.C.⁵, Sartorelli D.S.⁶¹Postgraduate Program in Nutrition and Metabolism, Faculty of Medicine of Ribeirão Preto (FMRP), University of São Paulo (USP), izabela.santos@usp.br,²Postgraduate Program in Public Health, Faculty of Medicine of Ribeirão Preto (FMRP), University of São Paulo (USP), nutrinaticarreira@gmail.com,³Postgraduate Program in Public Health, Faculty of Medicine of Ribeirão Preto (FMRP), University of São Paulo (USP), marianarinaldi@usp.br,⁴Postgraduate Program in Public Health, Faculty of Medicine of Ribeirão Preto (FMRP), University of São Paulo (USP), mariacarolina017@usp.br,⁵Postgraduate Program in Public Health, Faculty of Medicine of Ribeirão Preto (FMRP), University of São Paulo (USP), iacrivellenti@gmail.com, ⁶Department of Social Medicine, Faculty of Medicine of Ribeirão Preto (FMRP), University of São Paulo (USP), daniss@fmrp.usp.br**Conference Proceeding:** The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024<https://doi.org/10.26596/wn.202415245-73>* Corresponding author: izabela.santos@usp.br

World Nutrition 2024;15(2):49

INTRODUCTION

Maternal diet quality during pregnancy can influence children's health in their first year of life.

AIM

To investigate the relationship between the Adapted Diet Quality Index for Pregnant Women (IQDAG) at the beginning of pregnancy and child growth indicators at six months old.

METHODS

This is a secondary analysis of a randomized controlled trial conducted among pregnant women with overweight. In total, 195 binomials of mothers and their children at six months with complete data were included. Data on the anthropometric parameters of children were obtained from the medical records, and the anthropometric indicators (Z-score) were determined by the Anthro software. Maternal diet was estimated using two 24-hour recall surveys, and the usual intake was obtained using the multiple-source method. Linear regression models were used to investigate The relationship between IQDAG score and anthropometric indicators at six months was investigated in linear regression models.

RESULTS

The mean (SD) of the pregnant women's IQDAG score was 74.1 (10.1) with minimum and maximum scores of 41.5 and 94.2. Regarding the weight and height of children at six months, the mean (SD) was 7.9 (1.1) and 67.0 (2.9), respectively. In linear regression models, there was a positive association between the heigh-for-age Z-score and IQDAG score [β 0.234 (95% CI 0.011; 0.043), $p=0.001$]. There was no association between IQDAG score and other anthropometric indicators.

CONCLUSION

A better diet quality at the beginning of pregnancy favours child growth at six months. Funding: FAPESP 2017/15386-2; 2017/18980-2 e 2021/06486-9; CNPq 406000/2018-2 and 302487/2018-2; CAPES and FAEPA 1039/2018, 1114/2018, 61/2019, 62/2019 e 754/2021.

KEYWORDS: Diet quality; pregnant women; child growth; food consumption.

BIOGRAPHY OF THE PRESENTING AUTHOR

Izabela has completed her master's degree at the Faculty of Medicine of Ribeirão Preto (FMRP), University of São Paulo (USP), Brazil. Currently, she is a PhD student. She has published 5 papers in the field of maternal and child nutrition and food consumption.

This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP006

Pre-gestational overweight and polyunsaturated fatty acids in Human milk: theoretical causality model

Amaral, Yasmin Notarbartolo di Villarosa do^{1,2}; Marano, Daniele²; Theme Filha, Mariza Miranda³; Moreira, Maria Elisabeth Lopes⁴

¹Fundação Oswaldo Cruz, Instituto Nacional de Saúde da Mulher, da Criança e do Adolescente Fernandes Figueira – yasminamaral@hotmail.com – ORCID ID: <https://orcid.org/0000-0001-8159-0564>. ²Fundação Oswaldo Cruz, Instituto Nacional de Saúde da Mulher, da Criança e do Adolescente Fernandes Figueira – danielemarano@yahoo.com.br – ORCID ID: <https://orcid.org/0000-0001-6985-941X>. ³Fundação Oswaldo Cruz, Escola Nacional de Saúde Pública – marizatheme@hotmail.com – ORCID ID: <https://orcid.org/0000-0002-8080-9146>. ⁴Fundação Oswaldo Cruz, Instituto Nacional de Saúde da Mulher, da Criança e do Adolescente Fernandes Figueira – bebethiff@gmail.com – ORCID ID: <https://orcid.org/0000-0002-2034-0294>

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19–21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: yasminamaral@hotmail.com

World Nutrition 2024;15(2):50

INTRODUCTION

A number of studies have focused on the evaluation of the relationship between pre-pregnancy overweight and polyunsaturated fatty acids content in human milk. However, given the complexity of potentially confounding risk factors, the use of graphical tools is recommended to identify possible biases.

AIM

This article aims to propose a theoretical model of causality using the Directed Acyclic Graph between pre-pregnancy overweight and polyunsaturated fatty acids content in human milk.

METHODS

An extensive literature review was performed to identify variables with causal relationships with exposure and/or outcome. The choice of variables for adjustment followed the graphic algorithm that comprises six criteria for selecting a minimum set of potentially confounding variables.

RESULTS

Socioeconomic conditions, intrapartum interval, maternal age and food consumption pattern were the variables that would have to be adjusted to estimate the total effect of pre-pregnancy overweight on polyunsaturated fatty acids content in human milk.

CONCLUSION

The minimum set of variables found in the present study can be used in the analysis of other studies that evaluate this association.

KEYWORDS: Body Weight Changes, Fatty Acids, Omega-3, Fatty Acids, Omega-6, Directed Acyclic Graph.

BIOGRAPHY OF THE PRESENTING AUTHOR

Yasmin Notarbartolo di Villarosa do Amaral holds a PhD in Women's and Children's Health from the National Institute of Women's, Children's and Adolescent Health Fernandes Figueira (PGPASC/M/IFF/Fiocruz), a Master's degree in Public Health from the National Institute of Women's, Children's and Adolescent Health Fernandes Figueira (PGSCM/IFF/Fiocruz), and a specialization in Child and Adolescent Health from the National Institute of Women's, Children's and Adolescent Health Fernandes Figueira (IFF/Fiocruz). She is a lecturer in the Medicine and Nutrition courses at the Serra dos Órgãos University Center (UNIFESO) and a collaborating professor in the Postgraduate Program in Child and Women's Health at the Oswaldo Cruz Foundation. Her areas of expertise include Epidemiology, Public Health, and Maternal and Child Health.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP007

Neutralizing antibodies in milk and blood of lactating women vaccinated for sars-cov-2: a systematic review

Marano, D da Rocha^{1*}; Vieira, ISA²; Mazzoli, F²; Vilarim, MMC²; Rebelo, F¹

¹Clinical Research Unit. National Institute of Women's, Children's and Adolescents' Health Fernandes Figueira, Oswaldo Cruz Foundation, Rio de Janeiro, RJ, Brazil. E-mail: pgscm.iff@fiocruz.br / danielemarano@yahoo.com.br / frebelos@gmail.com ²Postgraduate Program in Women's and Children's Health. National Institute of Women's, Children's and Adolescents' Health Fernandes Figueira, Oswaldo Cruz Foundation, Rio de Janeiro, RJ, Brazil. E-mail: pgscm.iff@fiocruz.br / iannevieira.enf@gmail.com / femazzoli@gmail.com / marinavilarim@gmail.com

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: danielemarano@yahoo.com.br

World Nutrition 2024;15(2):51

INTRODUCTION

Some studies have found that vaccination against COVID-19 induces the production of antibodies in blood and breast milk.

AIM

Compare the presence of neutralizing antibodies against SARS-CoV-2 found in the breast milk and blood of vaccinated lactating women in relation to those women who were not vaccinated.

METHODS

The study was registered in PROSPERO under CRD42021287554 and the PRISMA guidelines were followed. Cohort, case-control and cross-sectional studies that evaluated antibodies against SARS-CoV-2 in the milk and blood of vaccinated mothers and unvaccinated mothers as a control group were eligible. DeCs, MeSH and Entree descriptors were used for the VHL, Medline/Pubmed and Embase databases, respectively. In the Web of Science and Scopus, the strategy search syntax was adapted.

RESULTS

The search identified 233 records. We excluded 128 duplicates and 101 papers that did not meet the inclusion criteria; hence 4 cohort studies were eligible. Nursing mothers vaccinated with Pfizer-BioNTech and Moderna vaccines showed antibodies against SARS-CoV-2 in their blood and breast milk.

CONCLUSION

It is likely that, in addition to maternal protection against COVID-19, immunization also provides neonatal immunity through breastfeeding.

KEYWORDS: COVID-19; Human milk; Vaccine; Antibodies; Systematic review.

BIOGRAPHY OF THE PRESENTING AUTHOR

Daniele Marano completed her doctorate at the Oswaldo Cruz Foundation National School of Public Health, Brazil. He currently works in the Clinical Research Department of the Fernandes Figueira Institute (IFF/FIOCRUZ). She is a permanent professor at the Postgraduate Course of the Academic Masters and Professional Masters at IFF. She has published more than 30 articles in the area of food and nutritional security.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP008

Difference in the percentage of antibodies with neutralizing potential for SARS-COV-2 in the milk and blood of vaccinated lactating women

Mazzoli, F^{1,5}; Vieira, ISA¹; Vasconcelos, Z²; Costa, ACC²; Zuma, MCC²; Alves, AMB³; Pinto, PBA³; Moreira, MEL²; Marano, M²

¹Postgraduate Program in Women's and Children's Health. National Institute of Women's, Children's and Adolescents' Health Fernandes Figueira, Oswaldo Cruz Foundation, Rio de Janeiro, RJ, Brazil. E-mail: pgscm.iff@fiocruz.br / femazzoli@gmail.com / iannevieira.enf@gmail.com, ²Clinical Research Unit. National Institute of Women's, Children's and Adolescents' Health Fernandes Figueira, Oswaldo Cruz Foundation, Rio de Janeiro, RJ, Brazil. E-mail: pgscm.iff@fiocruz.br / zilton.vasconcelos@fiocruz.br / zvasconcelos@gmail.com / carol.carioca@gmail.com / celiaczuma@gmail.com / bebethiff@gmail.com / danielemarano@yahoo.com.br, ³Biotechnology and Physiology of Viral Infections Laboratory. Oswaldo Cruz Institute, Oswaldo Cruz Foundation, Rio de Janeiro, RJ, Brazil. E-mail: ensino@ioc.fiocruz.br / adambalves@gmail.com / paollabap@gmail.com

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: femazzoli@gmail.com

World Nutrition 2024;15(2):52-53

INTRODUCTION

There is a lack of studies that have evaluated the percentage of neutralizing antibodies in maternal blood and milk after vaccination against COVID-19.

AIM

To compare the percentage of antibodies with neutralizing potential for the Wuhan and Ômicron variants in the milk and blood of lactating women immunized for SARS-CoV-2 based on the number of doses and vaccine technologies used.

METHODS

A cross-sectional study was conducted between April and October 2022 with 214 breastfeeding mothers aged 18 or over, who live in Rio de Janeiro and are vaccinated against COVID-19. A standardized questionnaire was applied, and samples of breast milk and blood were collected. To detect antibodies, the enzyme-linked immunosorbent assay method was used. For statistical analyses, the paired Wilcoxon test, the Mann-Whitney test, the Kaplan-Meier curve, and the Log-Rank test were used. A significance level of 5% ($p < 0.05$) was considered.

RESULTS

The percentage of antibodies with neutralizing potential was higher in blood than in milk for the Wuhan ($p < 0.001$) and Ômicron ($p < 0.001$) variants. In blood, this percentage was higher among women who received three or more doses: Wuhan ($p = 0.018$) / Ômicron ($p = 0.010$), however, the protection provided by antibodies present in milk is longer lasting. There was no significant difference in the probabilities of the presence of antibodies in relation to time when analyzing the different vaccine technologies in milk and blood for the Wuhan variant. Regarding Ômicron, a significant difference in this probability was observed in milk ($p < 0.001$), but not in blood.

CONCLUSION

The protection provided by antibodies present in milk is longer lasting. The need to comply with the vaccination schedule according to the existing recommendations is confirmed, as well as the importance of breastfeeding to guarantee health and protection for the maternal and child binomial.

KEYWORDS: COVID-19; Human milk; Vaccine; Antibodies; Neutralizing antibodies.

BIOGRAPHY OF THE PRESENTING AUTHOR

Fernanda Mazzoli da Rocha recently completed her master's degree in Public Health, in the Women's and Children's Health concentration area, at the National Institute of Women's, Children's and Adolescents' Health Fernandes Figueira, Oswaldo Cruz Foundation, Rio de Janeiro, RJ, Brazil. At the moment, she is part of a research group that aims to evaluate the causal effect of pre-gestational overweight on the composition of polyunsaturated fatty acids in human milk, coordinated by researchers from the National Institute of Women's, Children's and Adolescents' Health Fernandes Figueira, Oswaldo Cruz

Foundation, Rio de Janeiro, RJ, Brazil.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP009

Consumption of fruits, vegetables, and legumes by People with Disabilities: Results from the National Health Survey, 2019

Silva, MLBM^{1,*}; Cherol, CCS²; Ribeiro, ECS³; Suete, YAC⁴; Silva, MEG⁵; Ferreira, AA⁶

¹ Postgraduate Program in Nutrition, Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, mluizabm@hotmail.com. ² Postgraduate Program in Nutrition, Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, camillacherol@gmail.com. ³ Postgraduate Program in Nutrition, Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, eloahcsr@gmail.com. ⁴ Postgraduate Program in Nutrition, Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, yametista2004@gmail.com. ⁵ Postgraduate Program in Clinical and Experimental Pathophysiology, Medical Sciences College, State University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, mariaeduardags2@gmail.com. ⁶ Department of Social and Applied Nutrition, Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, alineaf@nutricao.ufrj.br

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: mluizabm@hotmail.com

World Nutrition 2024;15(2):54

INTRODUCTION

The access of people with disabilities (PWD) to goods, services and food is foreseen in the Brazilian Constitution. Although food access is a fundamental human right, PWD face limited access to it.

AIM

To describe fruit and vegetable (FV) consumption patterns among PWD and compare them with those without disabilities.

METHODS

A cross-sectional study utilized microdata from the 2019 National Health Survey (NHS). PWDs were identified based on physical, auditory, visual, and mental disabilities. Evaluation The evaluation included FV consumption frequency, days per week, and daily frequency. Percentages, 95% confidence intervals (CI95%), and chi-square tests assessed the association between FV consumption and PWD presence (p-value <0.05). Analyses were conducted using Stata 16.0.

RESULTS

Of 90,846 interviews, 7.8% (n=8,471) were PWD. Among them, 78.5% reported consuming at least one type of FV, with 45.2% eating them 6 to 7 days a week, and 59.6% once daily. Additionally, 66.1% consumed fruits, with 39.5% doing so 6 to 7 days a week, and 51.5% two or more times daily. Individuals without disabilities consumed more vegetables and legumes (82.7%; CI 95% 82.2-83.2) than PWD. No significant difference in fruit consumption was observed. In weekly analysis, those without disabilities consumed FV 3 to 5 days more often than PWD (31.9%; CI95% 26.3-31.5 vs. 26.3%; CI95% 24.7-28.0), and in daily consumption, PWD had a higher proportion (51.5%; CI95% 48.8-51.2) of consuming fruits two or more times daily than those without disabilities (42.7%; CI95% 46.2-48.3).

CONCLUSION

Differences in FV consumption patterns were observed, potentially influenced by socioeconomic, cultural, and food access factors. Emphasizing the importance of considering PWD's specific needs for promoting access to healthy food and developing health and nutrition promotion strategies.

KEYWORDS: Diet; Brazil; Population Surveys; Disabled Persons; Food Consumption.

BIOGRAPHY OF THE PRESENTING AUTHOR

Maria Luiza Barreto Medeiros da Silva has a bachelor's degree in Nutrition Nutrition (State University of Rio de Janeiro). Currently, she is a master's degree student in the postgraduate program in nutrition at the Federal University of Rio de Janeiro.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP010

Evaluation of added sugar intake by children and adolescents with Attention Deficit Hyperactivity Disorder (ADHD) in a pediatric hospital in Rio de Janeiro

Spinelli, RR ^{1,*}; Da Costa, JD ¹; Pastura, GMC ¹; De Sena, ASS ²; De Araujo, BB ²; Braga, JSN ²; Cisalpino, CV ²; Brandão, GH ²; Carvalho, IV ²; Pimentel, IF ²; Dos Santos, MG ²; Pinto, MVA ²; Sizisnande, PM ²; Tiberio, RM ²; Padilha, PC ²

¹Institute of Puericulture and Pediatrics Martagão Gesteira, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, ²Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: renataspiinelli@gmail.com

World Nutrition 2024;15(2):55

INTRODUCTION

Recent studies have been associating the high ingestion of certain foods such as sugar with the alteration in ADHD-related symptoms.

AIM

To evaluate the ingestion of added sugar by children and adolescents in a pediatric hospital in Rio de Janeiro.

METHODS

A cross-sectional study carried out with 40 patients, ages ranging from 6 to 18 years, diagnosed with ADHD was performed. Individuals diagnosed with non-progressive chronic encephalopathy, intellectual disability and autism spectrum disorder were excluded from the sample. Socio-demographic data and anthropometric measurements were collected. Food consumption was evaluated by 24-hour recall, based on the multiple-pass method. The cooking measurements were converted into units of measure for mass and volume according to the table for the evaluation of food consumption in household measures, also the centesimal and energy intake analysis was based on the Brazilian Food Composition Table, in which the added sugar ingestion was estimated for each individual of the sample. The software SPSS was used for statistical analysis of the results. Numeric variables were expressed as a median and interquartile range, otherwise categorical variables were expressed as a percentage. The Mann-Whitney test was used in independent samples in order to compare the variable consumption according to age, sex and time to diagnosis. A P-value less than 0.05 was considered as a significance level.

RESULTS

The age median was 13,1 (11,3 - 15,8) years and months and 70% of the sample was male (n=31). According to BMI-for-age, 42,5% of the sample were overweight. Regarding the added sugar consumption, males got a higher median of 17g (0 - 33,6) than females, P-value: of 0,021.

CONCLUSION

The results seem to emphasize the need for healthy food intake during childhood in order to develop greater dietary habits throughout life.

KEYWORDS: Children; Adolescent; ADHD; Added sugar.

BIOGRAPHY OF THE PRESENTING AUTHOR

Renata Ribeiro Spinelli has completed her bachelor's degree in nutrition at the Federal University of Rio de Janeiro (UFRJ), Brazil. Currently, she is part of the multiprofessional Residency Program in child and adolescent health care offered by the Institute of Puericulture and Pediatrics Martagão Gesteira (IPPMG/UFRJ) and is a postgraduate student in pediatric nutrition therapy at UFRJ.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP011

Consumption of sweetened beverages associated with prevalence of overweight and obesity in children aged 6-23 months

Cursino, GN^{1,*}; Farias, DR¹; Schincaglia, RM¹; De Castro, MBT¹¹Department of Social and Applied Nutrition, Institute of Nutrition Josué de Castro, Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil**Conference Proceeding:** The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024<https://doi.org/10.26596/wn.202415245-73>* Corresponding author: giovananigri@gmail.com

World Nutrition 2024;15(2):56-57

INTRODUCTION

Excess weight in childhood can cause various health problems, such as the development of chronic non-communicable diseases, and one of the most important factors is the high consumption of ultra-processed foods and sweetened beverages.

AIM

The aim of this study was to estimate the prevalence of overweight and obesity among Brazilian children receiving primary health care and to analyze its association with the consumption of sweetened beverages.

METHODS

This cross-sectional study used data from 119.848 children aged 6-23 months registered at the Brazilian Food and Nutrition Surveillance System (SISVAN) in 2019. The measures assessed were weight (kg) and the sweetened beverage indicator assessed the day before the interview. Overweight and obesity were classified based on the BMI-for-age z score, according to WHO recommendations. In addition, sociodemographic data on child age (in months), gender (female and male), geographic region (North, Northeast, Southeast, South and Center-West) and participation in the National cash transfer program – Bolsa Família (BFP) were evaluated. The analysis included the estimation of prevalence (%) and their 95% confidence interval (95%CI) and logistic regression model adjusted for geographic regions, sex, participation in the National cash transfer program – Bolsa Família (BFP), and child age.

RESULTS

The prevalence of overweight was 10.6% (95%CI: 10.4; 10.8) and obesity was 4.4% (95%CI: 4.3;4.5). The highest prevalence of overweight (12.4%) and obesity (5.8%) were observed in children who were BFP participants compared to children who had no PBF, as well as a higher prevalence of overweight (11.5%) and obesity (8.9%) in children aged 12-23 months compared to those aged 6-11 months, respectively (Figure 1). The consumption of sweetened beverages was associated with higher odds of being overweight (OR=1.08; 95%CI:1.03;1.12) (Table 1).

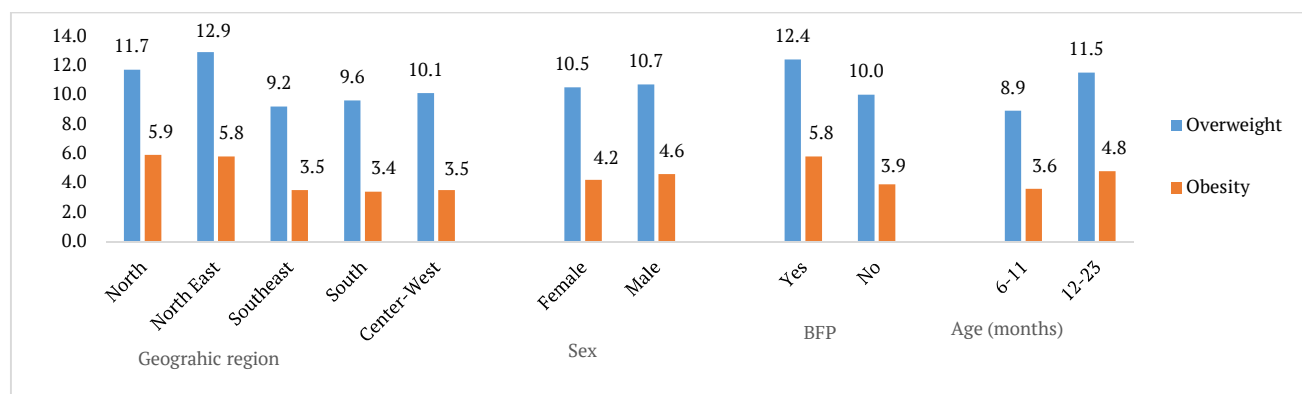


Figure 1. Prevalence of overweight and obesity according to geographic regions, sex, recipients of BFP and age group.

Table 1. Association between complementary feeding indicator and overweight and obesity in children aged 6-23 months for all SISVAN records included in the study. Brazil, 2019.

Complementary Feeding indicator	Overweight				Obesity			
	Unadjusted		Adjusted		Unadjusted		Adjusted	
	OR (95CI%)	p-value	OR (95CI%)	p-value	OR (95CI%)	p-value	OR (95CI%)	p-value
Sugar beverages	1,14 (1,09; 1,19)	0,000	1,08 (1,03; 1,12)	0,001	1,12 (1,05; 1,19)	0,001	1,05 (0,99; 1,12)	0,128

*Model adjusted for geographic regions, sex, participation in the National cash transfer program – Bolsa Familia (BFP), and child age.
Eutrophy as the reference.
95%CI: 95% confidence interval.

CONCLUSION

The study found a high prevalence of overweight and obesity in children aged 6-23 months and was associated with the consumption of sweetened beverages.

KEYWORDS: Malnutrition, Overweight, Food consumption.

BIOGRAPHY OF THE PRESENTING AUTHOR

Giovana Cursino has completed her master’s degree at the Federal University of Rio de Janeiro and is currently doing her PhD at the Federal University of Rio de Janeiro.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license’s legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP012

Multimorbidity and nutrition: A scoping review

Odaleia Barbosa de Aguiar¹; Kamily Vitória de Souza Kort Kamp^{2,*}

¹Department of Applied Nutrition, Nutrition Institute, Rio de Janeiro State University, Rio de Janeiro, Brazil. Email: odaleiab@hotmail.com

²Nutrition Institute, Rio de Janeiro State University, Rio de Janeiro, Brazil. Email: kamilyvitoriakortkamp@gmail.com

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: kamilyvitoriakortkamp@gmail.com

World Nutrition 2024;15(2):58

INTRODUCTION

The occurrence of multiple Chronic Non-Communicable Diseases in the same individual is conceptualized as multimorbidity, which has become relevant due to the quality of the ageing population, increased prevalence of NCDs and the importance of associated factors that can be modified, such as diet.

AIM

To carry out a scoping review in the electronic databases MEDLINE (Medical Literature Analysis and Retrieval System Online /PubMed), LILACS (Scientific and Technical Literature of Latin America and the Caribbean); BVS Portal (Virtual Health Library), Scopus; ScienceDirect; EMBASE and those listed in the references.

METHODS

The inclusion criteria consisted of studies with a quantitative design, title and abstract with the words multimorbidity and diet, a limited search period between 2000 and 2023. The exclusion criteria were studies that showed an association between multimorbidity and diet in specific groups, such as the mentally ill, tuberculosis and food insecurity.

RESULTS

17 studies were selected and analyzed in terms of quality using the PRISMA-ScR tool. Most of the studies used the food frequency questionnaire (FFQ) with a selection of food groups such as vegetables, fish and fruit, bread and sweets, fast foods, ultra-processed foods and so on. Multimorbidity was defined as two or more chronic non-communicable diseases, defined by laboratory diagnoses or self-reported previous diagnoses of medical information.

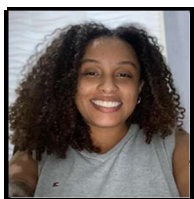
CONCLUSION

Most of the included studies (10 out of 17 articles) found a significant relationship between diet and multimorbidity, in which 5 studies found a relationship with the food group fruits, legumes, vegetables and grains, 1 study found a relationship with fruits, cereals along with dietary patterns selected by the authors. Two studies related multimorbidity to indices, AHEI-2010 (Alternative Healthy Eating Index-2010) and IQD-I (Elderly Diet Quality Index) and 3 studies used dietary patterns for the association.

KEYWORDS: Multimorbidity, Diet, Scoping Review.

BIOGRAPHY OF THE PRESENTING AUTHOR

Kamily Vitória de Souza Kort Kamp, an undergraduate student at the Nutrition Institute at the Rio de Janeiro State University and Fellow member of the project on systematic literature review: Multimorbidity and Eating Patterns since November 2021.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP013

Promoting health and well-being for adults and elderly in Primary Health Care

Cecilio, TS^{1,*}; Silva, ABS¹; Gonzaga, KCO²; Bem-Lignani, J³

¹Nutrition Institute, Rio de Janeiro State University (UERJ), Rio de Janeiro, RJ, Brazil, ²Primary Health Care Unit, Rio de Janeiro, RJ, Brazil, ³ Social Nutrition Department, Nutrition Institute, Rio de Janeiro State University (UERJ), Rio de Janeiro, RJ, Brazil

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: thalitacecilio16@gmail.com

World Nutrition 2024;15(2):59

INTRODUCTION

Primary health care plays a role in fighting against obesity and other non-communicable diseases that are ongoing in Brazil. Since these diseases are directly related to inadequate eating habits, food and nutrition education (FNE) becomes a valuable strategy to prevent and control them.

AIM

To present activities to promote healthy eating habits for adults and elderly people who attend a primary health care unit in Rio de Janeiro.

METHODS

The activities were developed by nutrition students in partnership with the nutritionist from the e-Multi team and other professionals from a primary health care unit located in the North zone of the city of Rio de Janeiro. FNE practices were carried out in three different spaces: The Smoking Cessation group, Food and Health group and Exercise group known as the Academia Carioca. FNE practices were designed based on the needs identified by the unit's professionals and observations made by the students of the eating habits of the users. The Brazilian Population Food Guide was used as a theoretical reference for the activities.

RESULTS

Considering all the activities carried out by the students, there was participation of 32 adults and elderly (between 20-77 years old) most of all were female. The topics covered in the practices were: the relationship between nutrition and smoking cessation, the nutritional composition of ultra-processed products and encouragement of water intake. The interaction between users and professionals offered mutual support and sought to strengthen collective understanding. The active participation of users, and their positive reports at the end of the dynamics, contributed to the success of the practices.

CONCLUSION

FNE, adapted to the specific needs of each life cycle, seems to be a great tool for promoting well-being, preventing diseases and encouraging healthy eating habits.

KEYWORDS: Knowledge, Attitudes, Practice; Food and Nutrition Education; Primary Health Care; Food and Nutritional Health Promotion.

BIOGRAPHY OF THE PRESENTING AUTHOR

I'm a woman, 25 years old, born in Nova Iguaçu/RJ. I started my academic journey in 2020 at UERJ. Applying educational practices at primary and secondary healthcare units, made me consolidate my theoretical knowledge and awakened a new passion for Public Health, reinforcing my commitment to contributing to the wellbeing of communities through nutrition.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP014

Use of sweeteners as an additional item according to race and income ranges in the Brazilian population

Mastrangelo, MEMT^{1,*}, Araujo MC², Castro, MBT¹

¹Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro. Department of Social and Applied Nutrition. Av. Carlos Chagas Filho 373, Bloco J – 2^o floor. Ilha do Governador. 21941-590, Rio de Janeiro, RJ, Brazil. Phone: (+55 21) 39386595. ²Sergio Arouca National School of Public Health, Oswaldo Cruz Foundation/Ministry of Health, Rio de Janeiro, Brazil. Rua Leopoldo Bulhões, 1480, Room 803. Bonsucesso. 21041210 - Rio de Janeiro, RJ – Brazil. Phone: (+55 21) 25982673. Extension: 2673. Fax: (+55 21) 22706772.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: mariaelizatm@gmail.com

World Nutrition 2024;15(2):60

INTRODUCTION

An increase in the consumption of sweeteners in the diet has been observed as an alternative to eliminating or reducing the intake of sugars. However, the information regarding the profile of the population that uses sweeteners is scarce, especially according to race and income ranges.

AIM

To describe the prevalence of sweeteners and the foods that were most added to sweeteners according to race and socio-demographic factors in the Brazilian population.

METHODS

Data analysis was conducted from a subsample of 44,744 individuals older than 10 years old from the second National Dietary Survey (NDS, 2017-2018) in Brazil. The information on added sweeteners was measured via 24-hour dietary recall of two non-consecutive days. Prevalence and confidence intervals of 95% of added sweeteners were estimated according to sex, age group, per capita family income, education, household area, macro-regions of the country and race skin colour. All estimates were calculated considering the expansion factors and the sample design's complexity.

RESULTS

The prevalence of added sweeteners was higher among white people than among black and brown, 10,6%, 8,1%, and 6,5%, respectively. The highest prevalence of sweetener addition was observed among white women and men, 13,3% and 7,7%, respectively. Residents of the urban areas and white race used more sweeteners than those of brown race (11,3% vs 7,3%). There is no difference between added sweeteners among income ranges and race. Black people add more sweeteners to natural juices than brown people (51% vs 33%). Brown people add more sweeteners to juices than black people (45% vs 23%). There is no difference in added sweeteners in coffee, vitamins and milk among race/skin colour. Only white people added sweeteners to alcoholic beverages (29%).

CONCLUSION

Regardless of gender, age, education, region and household area, White people use more sweeteners.

KEYWORDS: Food consumption; diet survey; sweeteners; race.

BIOGRAPHY OF THE PRESENTING AUTHOR

Maria Eliza de Mattos Tobler Mastrangelo is a PhD student at the Federal University of Rio de Janeiro. Currently, she is a nutritionist at Lagoa Federal Hospital.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP015

Formulation of healthy foods for early childhood

Binoti, M¹; Castro, LCV¹; Sant'Ana, RCO^{1,*}; Duarte, FLM¹

¹Department of Nutrition and Health, Federal University of Viçosa, Viçosa, Minas Gerais, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: rita.santana@ufv.br

World Nutrition 2024;15(2):61

INTRODUCTION

Childhood is a crucial period for the development of healthy eating habits that ensure the proper growth and development of individuals in this group. The National School Feeding Program (PNAE) exists to guarantee adequate nutrition for children.

AIM

The aim of this work was to report on an activity developed by students on the nutrition course, where they were challenged to develop a healthy meal for children.

METHODS

Students of the Nutrition Course, enrolled in the Dietetics Technique II, were divided into three groups (G1, G2 and G3) and given the challenge of developing a healthy meal (one solid and one liquid food) for children between 4 and 5 years old, in accordance with the nutritional recommendations of the PNAE, free of gluten, lactose and meat, with a maximum cost of R\$1.88, using local, fresh and minimally processed foods. The students had a few days to prepare the work plan and 4 hours to test the recipe in practice. The recipe was then executed over a period of 2 hours and then presented to an evaluation panel, which gave marks for sensory evaluation, suitability to the criteria required, presentation and organization of the work.

RESULTS

The groups presented, respectively: hulk's pastry and mango juice with yam; vegetable pie and lemon, kale and basil juice; and cornmeal pie with textured soy protein filling and lemon juice. All the meals had a maximum variation of $\pm 20\%$ to that recommended by the PNAE, met the maximum cost of R\$1.88 and received final marks from the panel of 99.1 (G1); 94.7 (G2) and 88.7 (G3).

CONCLUSION

It is possible to develop meals that are compatible with the promotion of healthy eating for the different life cycles, which meet specific nutritional demands, at a low cost and with pleasant sensory characteristics.

KEYWORDS: Childhood, school meals, eating habits.

BIOGRAPHY OF THE PRESENTING AUTHOR

Rita de Cássia Oliveira Sant'Ana has completed her PhD at the Federal University of Viçosa, Brazil. Currently, she is a nutritionist at the same university.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP016

Development of healthy meals for children

Binoti, M¹; Castro, LCV²; Sant'Ana, RCO³; Duarte, FLM⁴

¹Department of Nutrition and Health, Federal University of Viçosa, Viçosa, Minas Gerais, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: rita.santana@ufv.br

World Nutrition 2024;15(2):62

INTRODUCTION

Meals in schools and nurseries are considered a moment for learning and social interaction, which contributes to children's autonomy and the development of healthy habits. Therefore, the National School Feeding Program (PNAE) is responsible for assisting in the formation of healthy and appropriate eating practices in schools, by providing meals that meet students' nutritional needs.

AIM

The aim of this work was to report on an activity developed by students on the nutrition course, where they were challenged to develop a healthy meal for children.

METHODS

Students of the Nutrition Course, enrolled in the Dietetics Technique II, were divided into three groups (G1, G2 and G3) and given the challenge of developing a healthy meal (one solid and one liquid foods) for children between 4 and 5 years old, in accordance with the nutritional recommendations of the PNAE, free of gluten, lactose and meat, with a maximum cost of R\$1.88, using local, fresh and minimally processed foods. The students had a few days to prepare the work plan and 4 hours to test the recipe in practice. The recipe was then executed over a period of 2 hours and then presented to an evaluation panel, which gave marks for sensory evaluation, suitability to the criteria required, presentation and organization of the work.

RESULTS

The groups presented, respectively: banana cake and watermelon juice; pumpkin pastry and melon, lemon and mint juice; cassava kibbeh and pineapple with mint juice. All the meals had a maximum variation of $\pm 20\%$ to that recommended by the PNAE, met the maximum cost of R\$1.88 and received final marks from the panel of 96.7 (G1); 96.7 (G2) and 92.6 (G3).

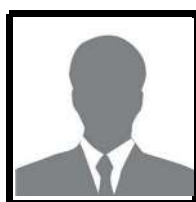
CONCLUSION

The students developed healthy meals, compatible with the promotion of healthy nutrition, which met the specific demands required, tasty and affordable.

KEYWORDS: Childhood, school meals, eating habits.

BIOGRAPHY OF THE PRESENTING AUTHOR

Rita de Cássia Oliveira Sant'Ana has completed her PhD at the Federal University of Viçosa, Brazil. Currently, she is a nutritionist at the same university.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP017

Process of developing gluten-free and lactose-free vegetarian culinary preparations for preschool children

Castro, LCV^{1,*}; Binoti, M¹; Sant'Ana, RCO¹; Duarte, FLM¹

¹Department of Nutrition and Health, Federal University of Viçosa, Viçosa, Minas Gerais, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: luiza.castro@ufv.br

World Nutrition 2024;15(2):63

INTRODUCTION

Promoting adequate, healthy and sustainable nutrition in early childhood education institutions involves planning a menu for all children, and prioritizing fresh and minimally processed regional foods.

AIM

This work aims to report on the process of developing vegetarian, gluten-free and lactose-free culinary preparations as part of the academic activities of an undergraduate course in nutrition at a Brazilian public university.

METHODS

The students were divided into three groups and given the challenge of developing preparations to make up a snack (one solid food and one liquid) for children aged 4 to 5, in line with the nutritional recommendations required by the National School Feeding Program (PNAE), with a maximum cost of R\$1.88 with local, fresh and minimally processed ingredients. The planning and tests were carried out during a dietetic technique course, under the supervision of the institution's teachers and nutritionists. The preparations were analyzed by a panel of six evaluators made up of a representative from an early childhood education institution, two teachers, a nutritionist and a mother of a child aged 4 to 5, who carried out sensory analysis, dietary techniques and suitability for the public.

RESULTS

The preparations developed were: Group 1 (G1): Open Sfiha and Kale Juice with Orange; Group 2 (G2): Hamburger and Beetroot Juice; Group 3 (G3): Chia and Beetroot Muffin and Orange Juice with Carrot. All the meals showed a maximum variation of $\pm 20\%$ from the PNAE recommendation, did not exceed a cost of R\$1.88 and obtained scores of 98 (G1), 97 (G2) and 93 (G3).

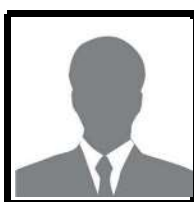
CONCLUSION

The work enabled the development of culinary skills and the planning of healthy, tasty and low-cost menus to meet the needs of vegetarian children who need to adhere to a gluten- and lactose-free diet.

KEYWORDS: Childhood, school meals, eating habits.

BIOGRAPHY OF THE PRESENTING AUTHOR

Luiza Carla Vidigal Castro has completed her PhD at the Federal University of Viçosa, Brazil. Currently, she is a teacher at the same university.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP018

Prevalence of food consumption markers according to school lunch frequency in adolescents from public schools in Rio de Janeiro city

Costa, SLB¹; Souza, SS^{1,*}; Harada, YBR¹; Andrade-Silva, A¹; Cursini, GN¹; Azeredo Santos, M¹; Mastrangelo, MEMT¹; Castro, MBT¹.

¹ Department of Social and Applied Nutrition, Josué de Castro Nutrition Institute, Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: suellenlealcosta@ufrj.br

World Nutrition 2024;15(2):64

INTRODUCTION

The National School Feeding Program (PNAE) is a public policy to promote food and nutrition security of students providing basic and healthy foods at public schools.

AIM

To describe the prevalence of food markers consumption among adolescents in public schools based on their frequency of school meals.

METHODS

A cross-sectional study was carried out with 244 adolescents from two public schools in Rio de Janeiro city. Information about gender, residence in vulnerable communities, guardian's education, guardian's occupation, skin colour, participation in the national cash transfer program – Bolsa Família (BPF), maternal parity and number of residents in the household were collected. Consumption of healthy (HFM) and unhealthy (UFM) food markers on the day before the interview was obtained by SISVAN Form. Body mass index for age (BMI/A) and height for age (H/I) were calculated. Chi-square (or Fisher's exact) and t t-test was performed to assess differences in sociodemographic characteristics, nutritional status and HFM and UFM consumption according to the school lunch frequency categories: never/rarely (0-2 times/week) and usual (3-5 times/week).

RESULTS

61% of the adolescents usually had school lunch and most of them were male (51.4% vs 34.4%, p=0.009) and the guardian's occupation was self-employed (42.4% vs 37.2%, p=0.005) and unemployed (37.4% vs 22.3%, p=0.005) compared with those who had never/rarely had school lunch. Higher The higher proportion of consumption of fruits (58.8% vs 47.9%, p=0.096) and significantly of beans (87.8% vs 78.1%, p=0.043) and vegetables/legumes (50.7% vs 35.4%, p=0.019) were observed among adolescents with a usual frequency of school meals compared with those who had never/rarely school lunch.

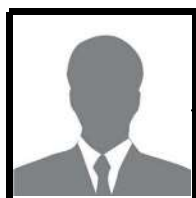
CONCLUSION

Adolescents with regular lunch at school reported consumption of HFM. This result indicates that school meals promote access and consumption of healthy food which highlights the importance of PNAE as a tool of food and nutrition security.

KEYWORDS: Food markers; Public policy; School feeding.

BIOGRAPHY OF THE PRESENTING AUTHOR

Suellen is a nutrition undergraduate and a research intern student at the Federal University of Rio de Janeiro, Brazil.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP019

Frequency of consumption of non-conventional food plants in Brazilian population

Santos, MACA^{1,*}, Mastrangelo, MEMT¹, Silva, AA¹, Cursino, GN¹, Oliveira, MIUO², Araujo, MC³, Castro, MBT¹.

¹ Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro. Department of Social and Applied Nutrition. Av. Carlos Chagas Filho 373, Bloco J – 2º floor. Ilha do Governador. 21941-590, Rio de Janeiro, RJ, Brazil. Phone: (+55 21) 39386595. ² Federal University of Sergipe. Center for Biological and Health Sciences, Department of Biology, Av. Marechal Rondon, s/n, Jd. Rosa Elze, 49100000 - São Cristóvão, SE - Brazil, Telephone: (79) 31946666. ³ Sergio Arouca National School of Public Health, Oswaldo Cruz Foundation/Ministry of Health, Rio de Janeiro, Brazil. Rua Leopoldo Bulhões, 1480, Room 803. Bonsucesso. 21041210 - Rio de Janeiro, RJ - Brazil. Phone: (+55 21) 25982673. Extension: 2673. Fax: (+55 21) 22706772.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: azeredomarianna@gmail.com

World Nutrition 2024;15(2):65

INTRODUCTION

Unconventional food plants (PANC) are little-known plant species with high nutritional value, are spontaneous, and, in most cases, are easy to cultivate, in addition to preserving local biodiversity. The name of the plant, PANC, is linked to culture, Brazilian regionality, and the diet of traditional populations. Given their characteristics, they constitute fresh food options that promote healthy, sustainable eating and minimise the risks of food and nutritional insecurity risks, such as low weight and nutritional deficiencies.

AIM

To analyse the frequency of PANC consumption according to sociodemographic characteristics and weight status in Brazil.

METHODS

Data analysis was conducted from a subsample of 46,164 individuals older than ten years or older from the second National Dietary Survey (NDS, 2017-2018) in Brazil. Double validation for the identification and classification of PANC was carried out in the Excel package based on plant parts [root, stem (rhizome, bulb, or tuber) or pseudostem; leaf or flower; fruit; or grain and seed]. Frequencies of PANC consumption and 95% confidence intervals were estimated according to Brazilian macro-regions, household area, age group, sex, income, education, and body mass index. All estimates were calculated considering expansion factors and sample complexity.

RESULTS

The average frequency of PANC consumption in the population was 9.3%, with the highest frequencies occurring in the Northeast region (21.6%) compared to other Brazilian regions and in rural areas (16.6% *vs* 8.1%) compared to the urban area. The highest frequencies of consumption were also found among individuals with less education (11.1%), per capita income <0.5 minimum wage (12.9%), and the elderly population (11.5%).

CONCLUSION

The results demonstrated the population's low frequency of PANC consumption. It was noted that it was more frequent in the Northeast region, among the rural population, older adults, and those with low purchasing power.

KEYWORDS: Food consumption, diet surveys, food plants.

BIOGRAPHY OF THE PRESENTING AUTHOR

Marianna Almeida Cunha de Azeredo Santos is a nutritionist. She was a research intern during her undergraduate studies at the Federal University of Rio de Janeiro.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP020

Food and nutritional education and non-conventional edible plants: Integration of Education, Work and Citizenship

Figueiredo, ACC^{1, 2*}; Oliveira, DA²; Moreira, NBS²

¹ Nutritional Epidemiology Observatory, Josué de Castro Nutrition Institute, Rio de Janeiro Federal University, Rio de Janeiro, RJ, Brazil. ² Health Science Center, Serra dos Órgãos University Center, Teresópolis, Rio de Janeiro, RJ Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: amandafigueiredo@unifeso.edu.br

World Nutrition 2024;15(2):66

INTRODUCTION

Non-conventional edible plants (NCEPs) are those that are typically not well-known or consumed but are safe for consumption and important sources of nutrients. Thus, NCEPs can be an important strategy for promoting adequate and healthy nutrition and can be carried out through food and nutritional education (FNE) practices.

AIM

The aim of this study was to develop FNE practices aimed at employees of a University in Teresópolis, Rio de Janeiro, Brazil.

METHODS

This descriptive study consists of an experiential report conducted as part of a course related to Education, Work, and Citizenship in the undergraduate Nutrition program. The diagnosis of NCEPs in the region was carried out through bibliographic research, interviews with residents of the region, agroecological fairs, and technical visits. A poster with contact information for local family farmers was prepared. In the food laboratory, technical sheets and recipe tests were conducted with NCEPs, aiming to develop an e-book.

RESULTS

The e-book comprised 12 recipes: (1) hibiscus mousse, (2) stuffed zucchini flower, (3) ora-pro-nóbis bread, (4) sorrel smoothie, (5) ora-pro-nóbis cake, (6) cheese terrine with basil and ora-pro-nóbis, (7) taioba cake, (8) bertalha bread, (9) ora-pro-nóbis pate, (10) taioba burger, (11) cheese bread with ora-pro-nóbis, and (12) mate tea pudding. Two workshops were held, in which the target audience was educated about the definition and importance of NCEPs for health. At the end of the workshop, the e-book and poster were shared with the participants.

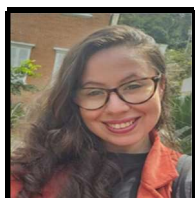
CONCLUSION

The FNE activity carried out stimulated the integration of practical and theoretical knowledge of the students. The e-book was shared with the target audience, as well as a poster with contact information for farmers in the region, aiming to valorize local family agriculture and cooking as an emancipatory practice.

KEYWORDS: Non-conventional edible plants; food and nutritional education; agroecology, food security.

BIOGRAPHY OF THE PRESENTING AUTHOR

Amanda Figueiredo is a nutritionist with a master's degree in Human Nutrition and a PhD in Nutritional Sciences from the Federal University of Rio de Janeiro. Currently, she is an assistant professor of Nutrition at Serra dos Órgãos University Center and a post-doctoral fellow in Nutritional Epidemiology at the Federal University of Rio de Janeiro. Dra Amanda has experience in Public Health Nutrition, particularly in maternal and child nutrition, and she has published 14 papers in this field.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP021

Farmers' considerations about the agroecological fair during the UFF academic week

Oliveira, LM^{1,*}; Dias, P.C.¹; Barbosa, R.¹; Bastos, D. da S.¹; Bertu, K.¹; Guimarães, B.¹; Motta, I.A.¹; Oliveira, L.¹

¹Nutrition Institute, Federal Fluminense University, Niterói, Rio de Janeiro, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: larissamo@id.uff.br

World Nutrition 2024;15(2):67

INTRODUCTION

The sector of small-scale agriculture constitutes a significant social category that requires support for the marketing of its produce; however, access to institutional or popular markets remains a challenge. Markets and fairs are integral components of short food supply chains, defined by (1) direct sales, (2) spatial proximity, and (3) spatial extension (Renting et al., 2003; Darolt et al., 2016). From an economic perspective, the distinction between short and long food distribution channels is, for some experts, a matter of the number of intermediaries operating between production and consumption. Thus, the greater the number of intermediaries, the longer the distribution channel, and vice versa (Darolt et al., 2016).

AIM

To identify farmers' perceptions of the agroecological fair held at the UFF - Niterói.

METHODS

A questionnaire comprising 14 inquiries about various facets of farmers' engagement in agroecological fairs was administered. This instrument was printed and distributed among participants during the agroecological fair held as part of the academic agenda of the Federal Fluminense University on October 17, 2023.

RESULTS

The majority of participants were already accustomed to engaging in transactions at agroecological fairs, with just over half having attended the course offered by UFF. Nearly the entirety did not perceive transportation as a hindrance, given that they either owned an automobile or had ease in securing ridesharing. The loss due to surplus is not a significant factor, indicating a sustainable characteristic among the farmers. Online platforms and social media are not utilized by the farmers, with fairs, WhatsApp groups, and direct contact being their predominantly employed means of commercialization and promotion.

CONCLUSION

The agroecological fair at the UFF campus provided a valuable opportunity to bring together farmers, the academic community, and society, ensuring that the needs of all stakeholders were addressed.

KEYWORDS: Short agri-food chains; family farming; Food and nutrition security.

BIOGRAPHY OF THE PRESENTING AUTHOR

Larissa Martins de Oliveira is a nutrition student at the Fluminense Federal University (UFF). Member of the integrated Extension, Teaching and Research Program in Health and School Food - GEPASE - UFF.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP022

Overview of agroecology and food and nutritional security in Brazil from the *Plano Nacional de Agroecologia e Produção Orgânica*

Oliveira, J.G.M^{1,*}; Ribeiro, E.C.S.A¹; Teles, K.N.S¹; Cherol, C.C.S¹; Ferreira, A.A¹; Salles-Costa, R¹.

¹ Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: jayane.martiniano88@gmail.com

World Nutrition 2024;15(2):68

INTRODUCTION

In Brazil, the Política Nacional de Agroecologia de Produção Orgânica (National Agroecology Policy for Organic Production) serves as a set of guidelines aimed at promoting food sovereignty and nutritional security (FNS), as well as upholding the human right to adequate and healthy food. This is achieved through the promotion of organic and agroecologically-based products. Consequently, discussions on public policies concerning this matter, which contribute to the advancement of scientific knowledge and address potential impacts on human health, are highly relevant.

AIM

To analyze the agroecological systems and the guarantee of FNS through the implementations carried out by the *Plano Nacional de Agroecologia e Produção Orgânica* (PLANAPO).

METHODS

This is a study based on a literature review, of the documentary type. The 2013 and 2016 PLANAPO, conducted by the Ministry of Agriculture, Livestock and Supply, was analyzed. The events that followed the launch of the plans related to FNS were analyzed.

RESULTS

Organic cultivation areas have been growing in the country, although their distribution across Brazil is still uneven. Policies and programs aimed at FNS have been instituted, such as Decree No. 8,293/2014, which added the Seed Acquisition modality to the Food Acquisition Program (PAA), and SAF Ordinance No. 234/2017, which encouraged production and income generation for family farmers. Organic production in the PAA grew from 1.2% in 2013 to 2.5% in 2017. In 2017, agroecology was included in the National Guidelines for Health Surveillance of Populations Exposed to Pesticides, contributing to health promotion, quality of life and FNS, since the sustainable production of healthy food allows this, while the conventional production model encourages the use of pesticides.

CONCLUSION

The plans and programs are fundamental to reducing the marketing of pesticides and promoting organic production and agroecology, intending to reduce the impact of the conventional production model and guarantee intending to reduce the impact of the conventional production model and guaranteeing a more sustainable and healthy agriculture.

KEYWORDS: Agroecology; Food Systems; Brazil; Food and Nutrition Security.

BIOGRAPHY OF THE PRESENTING AUTHOR

Jayne Gomes Martiniano de Oliveira is an undergraduate student in Nutrition from Josué de Castro Institute of Nutrition of the Federal University of Rio de Janeiro. She is a member of the Interdisciplinary Study Group on Food and Nutrition Security - GISAN/UFRRJ. She has a technical degree in Agroecology from the Technical College of the Federal Rural University of Rio de Janeiro-CTUR/UFRRJ, in Brazil.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP023

The relationship between water insecurity and food insecurity in Brazil

Cherol, CCS¹; Silva, ACM¹; Lima, TF¹; Silva, MLBM¹; Ribeiro, ECS¹; Ferreira, AA²; Salles-Costa, R².

¹ Postgraduate Program in Nutrition, Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil. ² Department of Social and Applied Nutrition, Josué de Castro Nutrition Institute, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: camillacherol@gmail.com

World Nutrition 2024;15(2):69

INTRODUCTION

Water insecurity (WI) is considered the difficulty in accessing drinking water. This is a crisis exacerbated by climate change and is aggravated when linked to food insecurity (FI), putting the health, nutrition, well-being and economy of the population at risk. FI is identified when there is a violation of regular and permanent access to quality food in quantities appropriate to nutritional needs. However, the literature still lacks a comprehensive understanding of the relationship between WI and FI.

AIM

To identify the relationship between WI and FI in Brazil.

METHODS

A bibliographic search was carried out in electronic databases with the aim of understanding the complex relationship between the themes of WI and FI. Between November and December 2023, studies in Portuguese and English were identified and no cut-off point for year of publication was established.

RESULTS

WI was assessed using the Brazilian Household Water Insecurity Scale (BHWIS), a Portuguese version of "The Household Water Insecurity Experiences" scale. FI was measured with the Brazilian Household Food Insecurity Measurement Scale, validated in 2004. A 2022 national survey employing BHWIS found that around 12% of the population faced restricted water access. Among households with WI, 42.0% also experienced severe FI, indicating simultaneous struggles with thirst and hunger. The North (48.3%), Southeast (43.0%), Midwest (41.8%), and Northeast (41.2%) regions showed a higher prevalence of combined WI and severe FI. The relationship is explained by water's crucial role in food production, impacting agriculture, and prices, and hindering access to a healthy diet, thus worsening FI.

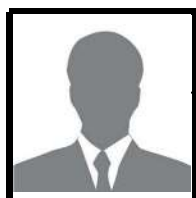
CONCLUSION

The presence of FI and WI is strongly associated, as is the presence of social inequalities. The importance of a validated WI scale to measure access, use and stability of water is highlighted in order to promote more effective public policies in the country.

KEYWORDS: Water insecurity; food insecurity; water vulnerable; household water insecurity; Brazil.

BIOGRAPHY OF THE PRESENTING AUTHOR

Camilla Christine de Souza Cherol has completed her PhD at the Federal University of Rio de Janeiro, Brazil. Currently, she has a Ph.D. in nutritional sciences and she is doing a post-doctoral in Nutrition. She has published 5 papers in the field of Nutritional Epidemiology and Food insecurity.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP024

Strategies to encourage the development and strengthening of culinary autonomy offered by the Food, Nutrition and the Elderly course

Kamp, K.V.S.K.^{1,*}; Mendonca, C.S¹; Brito, F.S.B.²; Lyra, F.¹; Tavares, E.L.²; Belfort, L.S.¹; Bahia, E.S¹; Santos, D.M.²

¹Institute of Nutrition, Rio de Janeiro State University, Rio de Janeiro, Brazil. ²Department of Social Nutrition, Institute of Nutrition, Rio de Janeiro State University, Rio de Janeiro, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: kamilyvitoriakortkamp@gmail.com

World Nutrition 2024;15(2):70

INTRODUCTION

Culinary autonomy is understood as a person's ability to create, adapt and innovate in cooking, based on an understanding of gastronomic bases. Therefore, actions centred on food and cooking have been pointed out by national and international organizations as health promotion tools. With this in mind, PROANE (Food, Nutrition and Ageing Extension Project) was set up to develop strategies for the quality of ageing and longevity of elderly people in nutrition.

AIM

To describe and discuss the strategies used by the Food, Nutrition and the Elderly course to encourage its students to develop culinary autonomy.

METHODS

This is a documentary analysis based on the scientific model, according to Cellard (2008) with methodological support from the COREQ (SOUZA, et al., 2021) and SRQR (O'BRIEN, et al., 2014) carried out through an active search of the documentary collection of 30 years of the Food, Nutrition and Ageing Project, looking at materials aimed at strategies to encourage culinary autonomy, including photos, plans and feedback from educational practices and culinary workshops carried out over the years. After the active search process in the collection, the chronological organization of the selected materials, contextual analysis, categorization, reflection and discussion of the material about the proposed objective will be carried out.

RESULTS

The initial phase of the documentary analysis reveals that cookery has been worked on in different ways. Experimentation, demonstrations of food items, technical visits to places where food is produced and consumed, culinary workshops and sensory analyses exemplify the versatility with which PROANE has worked on the subject throughout its existence. During the pandemic, the domestic environment gained prominence, and in this context the spaces where food is eaten, prepared and stored could be visited via virtual tours. The return to face-to-face activities has allowed actions involving food and cooking to be explored with weekly visits, games, workshops and educational practices.

CONCLUSION

The actions of the Food, Nutrition and Ageing Project are renewed every year and adjusted to the contextual perspective of the moment. Creativity and innovation are the driving forces behind the discussion of food, cooking and commensality, the central axes of the promotion of adequate and healthy nutrition adopted by PROANE.

KEYWORDS: Culinary Autonomy, Incentive Strategy, Food and Nutrition Education.

BIOGRAPHY OF THE PRESENTING AUTHOR

Kamily Vitória de Souza Kort Kamp, undergraduate student at the Institute of Nutrition from Rio de Janeiro State University and volunteer member in a project that manages public health nutrition topics with older adults since August 2023.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP025

Nutrition actions in public health with the elderly: Experience from a University Community Action project

Mendonça, C. S.^{1,*}; Brito, F. S. B.²; Lyra, F. 1; Tavares, E. L.²; Belfort, L. S.¹; Santana, G. S³; Leal, H. C ¹; Bahia, E.S¹; Santos, D. M. ².

¹ Biomedical Center, Institute of Nutrition, Universidade do Estado do Rio de Janeiro (UERJ), Rio de Janeiro, RJ, Brazil. ² Biomedical Center, Institute of Nutrition, Department of Social Nutrition, Universidade do Estado do Rio de Janeiro (UERJ), Rio de Janeiro, RJ, Brazil. ³ Universidade do Estado do Rio de Janeiro (UERJ), Rio de Janeiro, RJ, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: carolsouzam05@gmail.com

World Nutrition 2024;15(2):71

INTRODUCTION

The increase in life expectancy and the growth of the elderly population (60 years and older) emerge as significant transformations in population dynamics. Dealing with food, nutrition, and public health demands for older adults requires specialized care. Therefore, since 1993, the "Projeto de Extensão Alimentação, Nutrição e Envelhecimento – PROANE," of the Instituto de Nutrição da Universidade do Estado (UERJ), has been carrying out community actions addressing health and healthy eating topics based on health promotion and popular health education the principles with the elderly audience. Thus, the project integrates extension, research, and teaching, serving as a space for the training and improvement of nutritionists.

AIM

To report PROANE's contribution to the nutritionist's training on food and public health nutrition community actions for the older adult population.

METHODS

The report analyses PROANE's records from 2014 to 2023. The data sources included the annual reports from the UERJ's community action management sector - DEPEXT, the PROANE's action plans, and the records based on nutrition students and professionals involved in the project as team members.

RESULTS

The interdisciplinary working model promotes a welcoming place, encouraging protagonism, respect, and cooperation. The food and nutrition topics include different areas based on the older adult's daily life and context. The methodologies promote content articulation in other disciplines, whereas listening and language adaptation are core care strategies. It strengthens the dialogue between practice/theory and daily life/scientific evidence, enabling the development of critical thinking and training opportunities that embody public health actions focused on older adults' needs.

CONCLUSION

The dialogue between extension, teaching, and research allows trainees to develop a broad view of older adults' public health food and nutrition care. The team (students/professionals) and other participants (older adults/users) are protagonists of the actions, and the training opportunities incorporate academic, personal, and social topics.

KEYWORDS: Nutrition. Food. Older adults. Public Health Nutrition.

BIOGRAPHY OF THE PRESENTING AUTHOR

Nutrition undergraduate student from Instituto de Nutrição da Universidade do Estado do Rio de Janeiro, Undergraduate Research Scholarship member on a project that deals with public health nutrition issues for older adults since 2022.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP026

Nutrition and Climate Change: What possible interventions can be made during adulthood

Júnior, R.da.CR.¹

¹ Nutrition Course, Centro Universitário do Distrito Federal - UDF, Brasília, DF, Brazil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: robsonnutri2@gmail.com

World Nutrition 2024;15(2):72

INTRODUCTION

The interaction between nutrition and climate change highlights the complex relationship that the food system has with the environment. Climate change and scarcity of resources bring the need to understand how our eating patterns influence and impact the well-being of the planet. Adulthood involves issues of responsibility when it comes to dealing with the health and well-being of the planet for future generations, and it is important to seek innovative approaches to promoting the health of the planet in harmony with nutrition and its aspects.

AIM

To present the possible approaches related to nutrition that an adult person can adopt to intervene in the planet's climate change.

METHODS

The search was carried out on PubMed using the descriptors "climate change and nutrition" in the title, selecting articles in Portuguese and English with a direct relationship with the themes.

RESULTS

The results demonstrate that climate change tends to worsen due to the consequences of negative human intervention. Among the main ways to reduce the impacts of such changes are reducing the consumption of animal protein, such as red meat, thus reducing the negative effects of land use and exacerbated carbon dioxide emissions, adopting practices such as efficient use of fertilizers, precise nutrient management, planting, crop diversification and rotational grazing, strengthening the ability to adapt to climate change.

CONCLUSION

Adults have immense responsibility for nutrition and their intervention in improving climate change. The relevance of the topic raises the urgency for greater investment in public policies, studies and research on the topic in the world.

KEYWORDS: Climate change; Nutrition; Intervention; Adulthood.

BIOGRAPHY OF THE PRESENTING AUTHOR

Born in Brasília - DF, Nutrition and Dietetics Technician from the Escola Técnica de Saúde de Planaltina - CEPISAÚDE, Graduating from the 8th semester of the Nutrition course at the Centro Universitário do Distrito Federal - UDF, interested in the areas of outpatient Nutrition and social in the context of primary health care.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.



Abstract DP027

Public food security facilities and their relationship with the promotion of food and nutritional security in the city of Rio de Janeiro

Câmara, J. H. R.¹; Rúbio, L. B. N.¹; Ghiggino, L. T.¹; Ribeiro, E. C. S.¹; Brito, F. S.¹; Ferreira, A. A.¹

¹GISAN, Instituto de Nutrição Josué de Castro/Universidade Federal do Rio de Janeiro, RJ, Brasil.

Conference Proceeding: The 1st International Conference on Sustainable Health and Nutrition During the Life Cycle, 19-21 March 2024

<https://doi.org/10.26596/wn.202415245-73>

* Corresponding author: joanutri10@gmail.com

World Nutrition 2024;15(2):73

INTRODUCTION

The Public Food Security Facilities in Brazil have been presented in a fragmented manner throughout history, with discontinuities and significant changes. In the context of increasing hunger, the municipality of Rio de Janeiro (RJ) is responsible for ensuring regular and constant access to quality food for the population of RJ, in accordance with Municipal Law No. 6,412/2018, which establishes the Organic Law of Food and Nutrition Security, especially for those in situations of greater vulnerability.

AIM

To map the Public Infrastructure for Food and Nutrition Security (*Equipamentos Públicos para Segurança Alimentar e Nutricional*—EPSAN) aimed at promoting food and nutritional security (FS) in the city of Rio de Janeiro.

METHODS

Documental analysis of publications from the Rio de Janeiro City Hall, the *Secretaria Municipal de Trabalho e Renda*, and news disseminated on the internet, on reliable websites, during December 2023. This study did not require submission to an ethics committee (resolution CNS No 510/2016).

RESULTS

Among the EPSAN initiatives, notable programs include Prato Feito Carioca (PFC), Community Gardens, Circuit of Markets and Organic Markets, Popular Restaurants (PR), and Carioca Community Kitchen (CC). PRs were identified in three locations: Bonsucesso, Bangu, and Campo Grande. 56 community gardens were found, distributed in the south, central, north, and west zones. The Circuit of Markets has 23 markets, with a higher concentration in the south zone, followed by the north and west central zone. At a city level, Rio de Janeiro was a pioneer in this initiative, however, economic and administrative crises have led to the precariousness of the programs in recent years.

CONCLUSION

Financial and political-administrative issues have a negative impact on the FS Facilities. This setback affects the vulnerable population, depriving them of access to adequate and quality food at affordable prices. It is crucial to restore and strengthen public policies and programs in Rio de Janeiro, combating hunger and inequality to promote food and nutritional security.

KEYWORDS: Food Security, Nutrition Programs and Policies, Effective Access to Health Services.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons-mons.org/licenses/by/4.0/legalcode> for more information.

Submitted: April 29, 2024; Accepted: May 21, 2024;
Published: June 30, 2024.