NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

## Submission Id: 6911

### Title

Understanding components of Maternal Diet among those diagnosed with Gestational Diabetes and/or Hypertension in Flint, MI

# Priority 1 (Research Category)

Community based participatory research

### Presenters

Rita El Jbeily, Gayle Shipp, PhD, RD, Lanah Almatroud, Nidhi Patel, Zoee Harris, BS, Raneem Sabbaq, Jenny LaChance, Amy Saxe-Custack

### Abstract

Context: Gestational Diabetes Mellitus (GDM) and Gestational Hypertension (GHTN), each linked to poor maternal and infant health outcomes, affect an average of 5-10% of US pregnancies. Despite an important role in disease development, few have described maternal diet of those diagnosed with GDM/GHTN. The current study explored differences in maternal diet based on diagnoses of GDM and/or GHTN. Participants were recruited from two clinics in Flint, Michigan, a low-income urban community facing numerous health disparities.

Objective: The objective was to understand differences in maternal diet by diagnoses of GDM and/or GHTN.

Study Design and Analysis: This cross-sectional study utilized self-reported baseline data from a longitudinal study. Two sampled T-test statistic was used to report the measures by diagnoses of GDM and/or GHTN versus those without a GDM and/or GHTN diagnoses.

Setting or Dataset: Pregnant women with complete data on variables of interest (n=232).

Population Studied: 40.5% of participants lived in Flint (n=94), with 10% diagnosed with GDM and/or GHTN (n=23). Of those diagnosed, majority self-identified as African American and White (n =28 and 22).

Intervention/Instrument: The automated self-administered 24-hour (ASA24) dietary assessment (National Cancer Institute).

Outcome Measures: Measures include body mass index (BMI), total energy (kcal/day), added (tsp eq./day) and total sugar intake (grams/day).

Results: 16.5% of the sample was diagnosed with either GDM or GHTN (n=47), with 2.8% diagnosed with both conditions (n=8). Diagnosis for GDM and GHTN were at 31- and 26-weeks' gestation, respectively. At baseline those diagnosed with GDM and/or GHTN reported higher BMI (M ±SD; p value) (37.8 ± 9.98 vs. 29.7 ± 9.32; 0.001), lower total energy (1789.2 ± 821.9 vs 1942.1 ± 941.6; 0.3), more fruits and vegetables (2.6 ± 3.4 vs 2.4 ± 1.9; 0.3), less total sugar (73.9 ± 42.8 vs 95.1 ± 57.6; 0.04), and less added sugar (9.9 ± 8.9 vs. 13.7 ± 11.7; 0.03) compared to pregnant women without GDM/GHTN.

Conclusions: Although pregnant women diagnosed with GDM and/or GHTN consumed less added and total sugar, notably high intakes of added sugar were reported in both pregnancy groups. Those with GDM and/or GHTN diagnoses reported higher BMI than those without such diagnoses. Future research should explore relationships between maternal dietary patterns, GDM and/or GHTN and better tailor education/resources during this critical period of development.

Downloaded from the Annals of Family Medicine website at www.AnnFamMed.org.Copyright © 2024 Annals of Family Medicine, Inc. For the private, noncommercial use of one individual user of the Web site. All other rights reserved. Contact copyrights@aafp.org for copyright questions and/or permission requests.