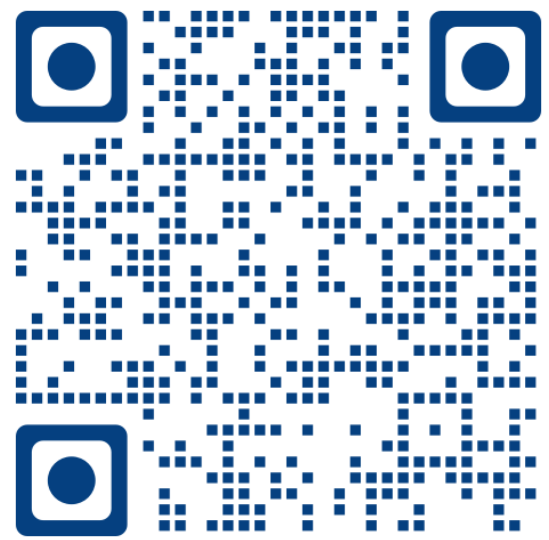


# Nourishing Beginnings: An Innovative Cross-Organization Collaboration to Improve Maternal and Infant Health

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## INTRODUCTION

- Cleveland has one of the highest rates of infant mortality nationwide (7.58 mortality rate compared to the nationwide figure of 5.6)
- Specifically, infant mortality is highest for Black babies (15.5 mortality rate compared to white babies at 3.8)
- Food insecure pregnant women are more likely to have health challenges that are:
  - Present at the beginning of pregnancy
  - Often caused by stress, depression and anxiety
  - Related to their food status
  - Contributing to poor birth outcomes (i.e., low birthweight and preterm birth).
- Socioemotional support, like that provided by a Community Health Worker (CHW) may help to buffer pregnant women against stressors related to food insecurity during pregnancy.
- Specifically, CHWs can provide education and support regarding nutrition to improve maternal health and birth outcomes through increased food security, maternal nutrition and health status, and stress reduction.
- This study will capitalize on a dual effectiveness of care coordination and access to mobilize resources through a community partnership
- Nourishing Beginnings is currently in the IRB approval phase

## MATERIALS & METHODS

- Partnership of care coordination between CWRU, Cleveland Foodbank, and the BetterHealth HUB
- We aim to recruit 80 pregnant (<24 weeks), food insecure women in Cleveland
- Beyond the care coordination that participants receive in the BetterHealth Hub, they will:
  - All receive a kitchen assessment and be provided basic cooking tools and utensils and personalized, quick and easy recipes to supplement pre- and post-natal health
  - Either receive boxed food items every other week from the Cleveland Food Bank containing fresh, quality ingredients to make healthy meals at home:
    - Foods are unprocessed, highly nutritive, and customized to the participant's food preferences
    - Boxes are sized to feed all members of the household
    - Participants provide monthly feedback on the food boxes (which can be adjusted)
  - Or receive a cash card for groceries that gets reloaded every week, along with:
    - Access to a web-based food resources tool
    - Training from the CHW about how to find healthy and affordable foods near home

## LEARNING OBJECTIVES


- After completing this practicum, the student will have an in-depth understanding of the myriad factors leading to food insecurity for individuals in Cleveland neighborhoods.
- Throughout the practicum, the student will work with members from varied organizations and nonprofits to develop an appreciation of team science and working across disciplines and organizations to provide health interventions to the Greater Cleveland Community.
- After completing this practicum, the student will successfully identify the role psychosocial and environmental variables impacting health in Cuyahoga County.

## A PRACTICUM STUDENT'S ROLE

- Creation of materials to supplement recruitment efforts and effectively explain the project
- Provide input on project design and methodology
- Apply and implement theoretical underpinnings learned in class curriculum to real world problems and learn about the Cleveland community organizations and partnerships

## EXPECTED RESULTS

- Dietary behavior, psychosocial health, health care utilization, and health outcomes for the mother and baby will be tracked. Critical implementation points (referral, food delivery, communications) will also be assessed. Intervention arms will be compared to a matched comparison group derived from local MCO claims data for the same time period.
- We hypothesize the interventions will improve long-term health outcomes (i.e., maternal and baby) both directly and mediated through a set of proximal outcomes, including prenatal care, food security, diet and nutrition, and psychosocial factors such as depression, stress, anxiety and social support. We are interested both in the change that occurs across four time points (baseline, mid-pregnancy, delivery, 6 months post-delivery) and how the potential change is associated with maternal and baby outcomes.



**INFORMED CONSENT DOCUMENT**

Nourishing Beginnings:  
Addressing Food Insecurity During Pregnancy in High Risk Populations

You are being asked to participate in a research study about healthy food access and nutrition among pregnant people receiving Community Health Worker support as part of Better Health Partnership's Pathways HUB. Researchers at Case Western Reserve University are conducting this study. Participants will be approached for enrollment based on study eligibility requirements. Your participation is completely voluntary and if you choose not to participate, it will not affect the care you receive with the Better Health Partnership HUB Pathways, the benefits you receive, or your eligibility to receive other services.

**KEY INFORMATION**

**Purpose**  
We are doing this research in partnership with Better Health Partnership and the Greater Cleveland Food Bank to see if an intervention that helps address food access and nutritional needs of pregnant people (either by providing food delivery or by providing additional financial support to purchase healthy foods) can help to improve both mom and baby health outcomes, by reducing stress and anxiety that are sometimes associated with trying to eat healthy during pregnancy.

**Procedures and Duration**  
If you choose to participate, you will be enrolled in the study that will last 12-18 months and you will be randomly assigned to one of two intervention groups aimed to help you access healthy foods during your pregnancy.

Neither your community health worker nor the project team can control which group you are assigned. The project involves two different groups because we want to understand if one approach works better than the other, although we believe both will be beneficial. The two groups are of equal value in what we are providing to you as part of your involvement in the study. Individuals in both groups will receive access to and support from a community health worker provided by the Better Health Partnership HUB Pathways program. All participants will also receive a kitchen needs assessment. If the assessment shows that you need tools to help prepare food at home, the study may provide basic supplies to you.

The groups will be different in the following ways:

Group 1: Participants in this group will receive a tailor-made box of nutritious groceries from the Greater Cleveland Food Bank, delivered to your home every two weeks. The food included in each box will be tailored to your individual food preferences with help from the community health worker in choosing healthy food options. Food is also selected so that multiple meals can be made from each food box, enough to feed a family of 4.

Group 2: Participants in this group will receive a modest amount of financial support twice a month to assist with healthy food purchases as well as support from a study team member in identifying healthy food retail

Script for FFM Study Recruitment

*\*Likely a telephone conversation between intake coordinator and Better Health patient eligible for participation\**

The Food for Healthy Pregnancies program is a project designed to support new parents in accessing food during and after pregnancy. This is something we are offering in addition to the HUB pregnancy pathway you are being enrolled in right now with Better Health Partnership. I would like to tell you a little bit more about it right now to see if you are interested. Just remember if you are not interested, it will not affect being a part of the HUB. Is that OK?"

**Is it ok if I tell you a little bit more about the project?"**

**If no...** "Thank you for your time! Have a great day. Goodbye." \*Remove their name from any 'eligible patient' lists and destroy any documentation containing information about this patient\*.

**If yes...** "Great! The project is called Food for Healthy Pregnancies and it's designed to help new parents access food both during pregnancy and afterward. We hope that the information learned from this project can be used to provide long lasting services to new parents in the future.

You are already enrolled in the HUB pregnancy pathway with Better Health, but this project would be in addition to the services you receive with that program.

The researchers would like to see whether one method of the project is more helpful to new parents than the other. To do this, they have 2 groups that participants will be assigned to. The researchers do not control who gets assigned to which group, participants are assigned at random. Neither group is better than the other, they have the same monetary and importance value. One group receives a reloadable debit card with \$25 every two weeks to be used for food purchases; the other group receives boxes of fresh food every two weeks with healthy ingredients and produce to make nutritious meals for themselves and their families. You will be able to give preferences about the types of food you would and would not like to receive. Participants in both groups will receive a kitchen assessment to see if they need any standard cooking utensils or hardware to support healthy meal preparation and easy to follow recipe cards."

**Is anything I've discussed unclear?**

[Answer any questions participant may have]

**HELP WHEN YOU NEED IT**

Better Health Partnership is working with the Greater Cleveland Food Bank, Case Western Reserve University, and First Year Cleveland to bring the Nourishing Beginnings program to Pathways HUB participants.

Nourishing Beginnings is a collaborative study project that investigates the impact of nutritional resources and their effects on expecting parents and their babies during pregnancy and postpartum.



**QUESTIONS**

Better Health Partnership Pathways HUB Referral Coordinator  
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Case Western Reserve University  
Meredith Goodwin  
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Greater Cleveland Food Bank  
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440.785.0379

For Participant's Rights Questions  
216.368.0838

This project has been approved by the Case Western Reserve University Institutional Review Board under protocol number 2000049





**Nourishing Beginnings**

Offering parents extra support during and after pregnancy



## CONCLUSIONS

- This project aims to demonstrate the successful coordination between Cleveland's community-based organizations to provide a critically-needed resource to its pregnant residents.
- The result of that collaboration is the proposed study which tests two different models of food access (food delivery and financial incentive with personalized navigation).
- Successful reduction in poor birth outcomes or health care utilization as a result of a CHW-led nutrition intervention coupled with favorable return on investment analyses and scalable workforce development represent an opportunity to create a financially sustainable coordinated approach to reducing the high and disparate levels of high infant mortality in our community.

## REFERENCES

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