



Food is Medicine Intervention for Low-Income Pregnant Women at Risk for Diet-Related Health Conditions in Sonoma County

Cathryn Couch, MBA
CEO

ccouch@ceresproject.org



I have no conflicts of interest.

Cathryn Couch, MBA
CEO

ccouch@ceresproject.org



CERES COMMUNITY PROJECT



*Our mission is to create health for people,
communities and the planet through love, healing food
and empowering the next generation.*

226,000
MEALS
DELIVERED

1,490
CLIENTS
SERVED

289
TEEN CHEFS
& GARDENERS

708
ADULT
VOLUNTEERS

42,000
VOLUNTEER
HOURS



Who We Serve: Client Demographics

In 2024, the percentage of our clients with these characteristics increased: Female; 60+

The share of food-insecure clients rose by 7.1% compared to 2023.

63.1%
FEMALE

65.2%
60+

34.9%
NON-CAUCASIAN

13.7%
SPANISH
SPEAKING

44.4%
LIVING ALONE

81.6%
LIVING ON <200% OF
FEDERAL POVERTY LEVEL

30.5%
CANCER
DIAGNOSIS

65.6%
CHRONIC
DIAGNOSIS

22
WEEKS
(average length of service)

908
FAMILY MEMBERS
WHO RECEIVED
MEALS

69.1%
SCREENED POSITIVE FOR
FOOD INSECURITY



Why a Perinatal Pilot?



1. Medi-Cal Opportunity in California for Sustainable Funding
2. Upstream—baby, mom, family
3. Moment for improved eating habits



Program Overview

Partners

- West County Health Centers- largely rural
- Santa Rosa Community Health- more urban/suburban

Participants

- Low-income pregnant moms in Sonoma County, CA
- 66% Latinx
- SNAP eligible
- Integrated into Comprehensive Perinatal Services Program
- Mom's enrolled whenever they first engage around prenatal care



Intervention Design



- Medically tailored meals for 4 weeks delivered to home—for all family members
- Weekly produce bag delivered to home
- Post-partum, 5 additional weeks of medically tailored meals—for all family members



Who We Served

Participants enrolled: 227

Race/Ethnicity:

- Hispanic/Latinx 63.6%
- Caucasian 27.2%
- Other Race 9.2%

Age:

- 18-24 15.4%
- 25-29 24.7%
- 30-34 25.6%
- 35-39 20.3%
- 40+ 14.0%



Results: Health Improvement, Fruit & Vegetable Consumption & Food Security



- 38% reported an improvement in their health status
 - Share responding Fair or Poor declined 41%
- Fruit & Vegetable Consumption
 - 41% reported increased vegetable consumption
 - 52% reported increased consumption of 100% fruit juice
- All measures of food security improved:
 - No worry about food running out improved 16.5%
 - Food always lasted improved 12.1%
 - Could always afford balanced meals improved 33%



Pre/Post Data Collection

Pre-survey: At Intake

Post-survey: Post-partum but before the final weeks of meal delivery

Statistically Significant Improvements:

Fruit juice consumption ($p = 0.044$)

General health status ($p < 0.05$)

All three food security measures ($p < 0.01$ each)

Not Statistically Significant:

Fruit consumption (mixed results)

Vegetable consumption (positive trend, $p < 0.10$)



Results: Birth Outcomes



- Birth Outcome Results
 - Participants were 19% less likely have babies with a low-birth weight compared to 2024 data for Medi-Cal members in California (6% vs. 7.4%)
 - Participants were 35% less likely to have pre-term births compared to 2023 data for Medi-Cal members in California (6% vs. 9.2%)
- Birth outcome data was collected and reported by Health Center partners.



Reasons for Non-Completion

Dropped out early: 40

- 28%: Delivery day/time did not work out
- 25%: Did not like the food
- 15%: Lost contact with client
- 10%: Pregnancy loss/complication



Lessons Learned



- Partnering with FQHCs works
- Choice is important – pregnant mom's differ widely in their life situations and what intervention will be most helpful
- Written information is preferable to classes
- Home delivery was not ideal for some clients



Client Story

40-year-old Leticia lives with her husband and their 7-year-old son. She also has three children in Mexico. While she once worked part-time, Leticia is not working due to an "at-risk" pregnancy. Because of her diabetes, she needed to make significant changes to her diet.

She was incredibly grateful to be enrolled in our Perinatal Support Program. With her husband as the sole provider for their family, the access to high quality food support, especially tailored to address her diabetes, helped ensure her health and that of her family.

