Doi: 10.32481/djph.2025.11.09

Integrating Food and Care:

Evaluating Impacts of Delaware Food Farmacy, a Food is Medicine Pilot for Maternal Health

Allison Karpyn, PhD;[1] Vandeka Eze;[2] Michelle Axe, MS, CHES[3]

1. Professor, Human Development and Family Sciences; Co-Director, Center for Research in Education & Social Policy, University of Delaware

2. Doctoral Student, Education and Social Policy, University of Delaware

3. Program Manager, Community Health, ChristianaCare

Abstract

Objective: The study examined participant experiences in a community-based Food is Medicine (FIM) program for pregnant women in Delaware, focusing on program structure, support services, health impacts, and perceived dignity and respect. **Methods**: Using a qualitative design, 7 postpartum participants who completed the FIM pilot during pregnancy participated in semi-structured interviews that were transcribed and analyzed using thematic analysis, generating five conceptual categories and 25 themes. **Results**: Participants described substantial benefits, including improved food security, healthier eating behaviors, and emotional well-being supported through Community Health Workers and Case Management. They valued the program's respectful delivery, high food quality, convenient home delivery, and personalized dietary guidance. Reported challenges included limited program duration, restricted snack variety, and communication gaps related to goal-setting and resource navigation. **Conclusions**: Findings suggest that FIM programs tailored to pregnant women can have multidimensional effects that extend beyond nutrition to encompass economic stability, mental health, and access to social supports. The integration of Community Health Workers and participant-centered service delivery emerged as key strengths, underscoring the potential of FIM models to enhance perinatal health outcomes and equity.

Funding

This research was supported by the Administration for Children and Families, Office of Planning, Research, and Evaluation, as part of the ACF Congressionally Directed Community Projects initiative. We thank the participants who generously shared their experiences and the program staff who facilitated recruitment. We acknowledge the contributions of the interview team and transcription services. The authors declare no conflicts of interest.

Introduction

Poor nutrition and food insecurity during pregnancy poses significant risks to maternal and infant health outcomes. Approximately 10-15% of pregnant women in the United States experience food insecurity, defined as limited or uncertain access to adequate, nutritious food.[1] Food-insecure pregnant women face elevated risks for gestational diabetes, preeclampsia, preterm birth, low birthweight infants, and postpartum depression.[2,3] The physiological demands of pregnancy increase nutritional requirements precisely when economic constraints may limit dietary quality, creating a critical vulnerability period.[4]

Traditional food assistance programs, including the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), provide essential support but may not fully address the complex needs of food-insecure pregnant women.[5] These programs often require recipients to shop independently, which may present barriers related to transportation, time, knowledge of healthy food preparation, and physical limitations during pregnancy. Additionally, benefit levels may be insufficient to ensure consistent access to nutrient-dense foods throughout the month.[6]

Food is Medicine (FIM) programs have emerged as innovative interventions designed to address food insecurity among vulnerable populations through medically tailored food provision.[7] These programs typically integrate food delivery or distribution with healthcare settings, often including nutrition education, culinary instruction, and wraparound support services.[8] The medically tailored approach recognizes that nutrition plays a therapeutic role in preventing and managing chronic conditions, positioning food access as a health intervention rather than solely a social service.[9]

Recent evidence suggests FIM programs can improve dietary quality, reduce food insecurity, and potentially decrease healthcare utilization and costs.[8,10] A randomized controlled trial of medically tailored meals for patients with chronic conditions demonstrated reduced healthcare costs and improved clinical outcomes.[11] Similarly, produce prescription programs have shown improvements in fruit and vegetable consumption, body mass index, and blood glucose control.[12,13] However, most FIM research has focused on individuals with diagnosed chronic diseases such as diabetes, cardiovascular disease, or cancer.[7]

Limited research has specifically examined FIM programs targeting pregnant women, despite pregnancy representing a critical window for nutritional intervention.[14] Pregnancy offers unique opportunities for health behavior change, as women are often highly motivated to optimize outcomes for their infants.[15] Moreover, nutritional interventions during pregnancy can have intergenerational effects, influencing offspring metabolic programming and long-term health trajectories.[16]

Beyond direct nutritional benefits, FIM programs may address multiple social determinants of health by connecting participants with CHWs who can provide resource navigation, and community support.[17] For pregnant women facing economic instability, the perinatal period often coincides with compounded challenges including housing insecurity, transportation barriers, employment disruptions, and social isolation.[18] Comprehensive FIM programs incorporating CHWs may be particularly well-suited to addressing these intersecting needs.

Qualitative research is essential for understanding participant experiences with FIM programs, including perceived benefits, barriers, program strengths, and areas for improvement.[19] Participant perspectives can illuminate how program design elements, such as delivery mechanisms, food selection processes, case management support, and interpersonal interactions, influence engagement, satisfaction, and outcomes.[20] Furthermore, qualitative inquiry can reveal whether FIM programs respect participant dignity and autonomy, critical considerations for programs serving economically vulnerable populations who may have experienced stigma in other assistance contexts.[21]

The present study aimed to conduct an in-depth qualitative examination of participant experiences in a FIM pilot program targeting pregnant women in Delaware. Through individual interviews with program graduates, we sought to: (1) understand participant perceptions of

program structure and operations; (2) explore the role of Community Health Workers and Community Health Workers and Case Management and support services; (3) examine perceived health and behavioral impacts; (4) assess economic and material benefits; and (5) investigate participant experiences related to dignity, respect, and stigma. This research addresses a critical gap in the FIM literature by centering the voices of pregnant women and providing actionable insights for program refinement and expansion.

Methods

Design

This qualitative study employed individual semi-structured interviews to explore participant experiences with a FIM pilot program for pregnant women. The study design was approved by the Institutional Review Board at the University of Delaware. A qualitative approach was selected to enable rich, detailed exploration of participant perspectives and to generate insights that could inform program improvement and scalability.[22]

Setting and Program Description

The study was conducted in Delaware in partnership with ChristianaCare, a hospital-based Food is Medicine (FIM) program serving pregnant women. The Women's Health Delaware Food Farmacy (DFF) operated as a pilot initiative testing the feasibility and acceptability of providing medically tailored groceries to pregnant women experiencing high risk pregnancies. The over-arching study was implemented as a randomized controlled trial, with eligible participants assigned to either an intervention group receiving the full program or a control group receiving standard care. Data presented here is from a purposeful sample of participants.

Eligible participants were ChristianaCare Women's Health patients who were 18 years or older and between 4 to 14 weeks pregnant at enrollment with a singleton pregnancy. Additional requirements included having Medicaid insurance, a Body Mass Index (BMI) of 30 or higher, and residence in New Castle County, Delaware. Exclusion criteria included Type I or II diabetes, multiple pregnancy, already being enrolled in a CHW program, inability to store and prepare meals, severe medical comorbidities that might interfere with program participation, and inability to communicate effectively in English or Spanish.

The intervention included three main components: 1) weekly food delivery of medically tailored food boxes containing fresh produce, proteins including poultry, fish, and meat options, whole grains, dairy products, cooking staples such as oils and seasonings, and shelf-stable items (enough food for approximately 10 meals per person in the household, and participants could select food preferences from a menu distributed in advance by their Community Health Worker); 2) Community Health Worker support via a dedicated CHW who provided resource navigation and connections to community services such as SNAP, WIC, and financial assistance programs as well as special support pertaining to family-specific situations, was assigned to each participant. The CHW conducted weekly check-ins and monthly in-person visits and assisted participants with goal setting; 3) Nutrition education included recipes tailored to the foods available on their weekly menu, cooking demonstrations including some in-home meal preparation sessions, and educational nutrition videos. Participants also received welcome kits with cooking equipment including measuring cups, spoons, and other supplies to support meal preparation at home; when needed, participants could also access clinical services with

pharmacists, registered dieticians, and behavioral health consultants to address additional health needs that arose during their pregnancy.

The program incorporated culturally responsive elements including culturally relevant foods, recipes, and cooking equipment. All materials and support were available in English and Spanish, with certified interpreters serving Spanish-speaking participants. A community advisory board provided ongoing input on food selections and educational materials to ensure cultural appropriateness and community acceptability.

Participants

The program enrolled participants during early pregnancy, specifically between 4- and 14-weeks gestation, and continued through delivery and one month postpartum. This meant participants received approximately 22 to 42 weeks of support depending on their gestational age at enrollment and the length of their pregnancy. The program was implemented in partnership with Lutheran Community Services (LCS), a nonprofit organization with 61 years of experience providing food assistance. LCS managed food sourcing, box preparation, and delivery logistics.

Seven postpartum women who had completed the FIM program were recruited for interviews. All participants had received program services during pregnancy and had delivered healthy infants 1-14 months prior to interviews. Recruitment occurred through program staff outreach to former participants via phone and email. Purposive sampling was employed to ensure representation of diverse experiences within the program.

Participants responded to a survey, post interview, providing self-identifying demographic characteristics. Response data reflected socioeconomic diversity. The age range of mothers were late 20's to late 30's (27 to 38 years old). Roughly four lived with a partner or spouse, while three identified as single, reflecting a mix of family compositions. The sample was racially diverse, with a majority identifying as Black (n=4), alongside White, Hispanic/Latina, and a North African respondent. Educational attainment skewed with six of seven having a high school degree or some college, and one individual who did not complete high school. Correspondingly, household incomes were concentrated below $30,000 while there was one reported family income earning less than $60,000. Employment was unstable, with no participants working full-time but were either self-employed (n=1), part-time (n=2), stay-at-home (n=2), or unemployed (n=2).

While experiences of homelessness were discussed during program participation, housing stability varied slightly at the time of the interview. Six women rented homes or apartments, while only one reported living with family or friends without paying rent. Typical household sizes ranged from two to five people, and all respondents were caregivers for one to three children under 18. There was one participant who reported living with a senior household member.

Food insecurity was a shared concern. Five participants said it was "sometimes true" that they worried food would run out, and four participants noted that it was "sometimes true" that the food they bought just didn't last with no money to get more. Nearly all participants received public assistance during their pregnancy, including SNAP (5 of 7) and WIC (6 of 7), with one also on Medicaid.

Doi: 10.32481/djph.2025.11.09

Data Collection

Individual interviews were conducted between July and September 2025 via video conference platform for participant convenience. Interviews lasted approximately 30-60 minutes and were conducted by a trained graduate research assistant or faculty investigator with expertise in qualitative methods. An interview guide was developed based on program evaluation goals and focused on: Program structure and operations (delivery, food selection, quantity, quality); Food preparation and utilization; Community Health Workers and Community Health Workers and Case Management experiences and support services; Health and behavioral impacts; Economic impacts and food security; Experiences with dignity, respect, and stigma; and Recommendations for program improvement.

The interview guide employed open-ended questions with probing follow-up questions to elicit detailed narratives. For example, participants were asked: "Can you describe how the program worked from your perspective?" and "Did you feel supported or respected while receiving food through the program?" All interviews were audio-recorded with participant consent and transcribed verbatim by a professional transcription service. Transcripts were de-identified to protect participant confidentiality, with all personal names and identifying information removed or replaced with generic placeholders.

Data Analysis

Transcripts were analyzed using thematic analysis following the approach outlined by Braun and Clarke.[23] The analysis proceeded through six phases: familiarization, initial coding; theme development; theme review; theme definition and conceptual organization where ultimately, themes were organized into five overarching conceptual categories representing distinct domains of program experience: (1) Program Structure & Operations, (2) Community Health Workers and Community Health Workers and Case Management & Support Services, (3) Health & Behavioral Impacts, (4) Economic & Material Impacts, and (5) Dignity, Respect & Stigma-related Constructs.

Researcher Positionality

The research team included investigators with backgrounds in public health, human development and health equity. None of the researchers were involved in program delivery, ensuring independence in data collection and analysis. Team members engaged in reflexive practices to examine how their own assumptions and experiences might influence interpretation of participant narratives.

Results

The thematic analysis yielded 15 distinct themes organized into five conceptual categories: (1) Program Structure & Operations, (2) Community Health Worker Support & Case Management, (3) Health & Behavioral Impacts, (4) Economic & Material Impacts, and (5) Dignity, Respect & Stigma-related Constructs (table 1). Below we present each category with constituent themes and illustrative quotations.

Doi: 10.32481/djph.2025.11.09

Category 1: Program Structure & Operations

Theme 1.1: Accessibility and Convenience

The home delivery aspect was consistently highlighted, particularly for pregnant women managing multiple responsibilities. One participant with twins emphasized: "I also have twins, so at the time when I was pregnant, my twins were, like, one... just getting to the grocery store while pregnant with twins was just not the easiest thing to do" (Participant 2). Another mother expressed similar relief: "I didn't want to go anywhere. I was big, I didn't want to walk, I didn't want to do anything, so it was just love just to have everything delivered to the house" (Participant 1). An additional participant noted the flexibility: "Mine's was delivered at first, and then when I moved, I started picking it up (Participant 7).

Theme 1.2: Food Quality, Variety, and Selection

Participants were pleasantly surprised by the consistently high quality of food provided and valued having autonomy in selecting foods that matched their preferences and needs. One mother shared her surprise: "when I hear food bank, I think of, like, rotten, spoiled food. I never had a bad experience with my produce being bad, the food being expired" (Participant 1). Another confirmed: "I think everything was fresh... I would say 99% of the time, everything was fresh. The salmon and everything was always frozen. So I never had any issues" (Participant 2).

Participants appreciated the ability to customize selections: "I could change them each month. So, that was good, too... I love the quantity. Like, they gave us so much" (Participant 1). Another noted: "They'll send a message of the list of what you could pick for... I thought that was really nice, because then I can look through it, and then... Be like, here we go" (Participant 6). However, some noted limitations: "I guess one of the only other things that I would change is, like, the options as far as, like, the food... I had food aversions. So, there were certain things that I couldn't stomach. For example, poultry" (Participant 7).

Theme 1.3: Cooking Support and Practical Resources

The program provided practical cooking assistance, recipes, and essential ingredients that empowered participants. One unique experience was described: "She would come to my house as well, and, like, help me cook, or, like, help come up with recipes... we basically, like, meal prep some of the, groceries. So we made, like, salmon and, we made potatoes in the air fryer, and we did some overnight oats" (Participant 2).

Specific items like cooking oils, seasonings, and versatile ingredients were highly valued. Participants enthusiastically discussed favorites: "They also gave seasonings, I like that as well... I think I've just started running out, like, the canned oils, can spray they... they gave for cooking" and "That was my favorite!... They just were piling up, and like, I just ran out, and I'm like, dang, this last time" (Participant 7). Additional participants valued the recipes: "There's also, like, little things that the lady gave me to, like, what you can make with all these things that you're provided with... I got a bunch of those in the folder every time" (Participant 6). One mother received additional support: "I needed the air fryer, and they came through with one for me... [my CHW/CHW], she will send me some, like, some recipes... I tried out some recipes, that was really good, and then I mainly meal prep every week" (Participant 5).

Theme 1.4: Program Customization and Recommendations

The program demonstrated flexibility in adapting to individual needs while participants also suggested improvements. One participant explained: "I had food aversions... they did, accommodate by giving me, like. For example, more salmon instead of poultry" (Participant 2). Another appreciated: "I loved the options. It was... I had got ground turkey, I got fish, salmon, so I, I, I enjoyed that, that aspect of it" (Participant 1). A third noted: "if I didn't like it, I would just tell her, like, I don't want that anymore, and she just takes it off" (Participant 5).

Participants requested more snack items to complement meal ingredients: "I would probably include, like, snacks... like, a not-salted, like, chip, or, like, low-sodium, anything like a chip, like, I love a chip" (Participant 1). Another added: "granola bars would be good... Nutri-Green, maybe?" and "Crackers would be nice to go with the cheese" (Participant 1). Regarding beans, multiple participants suggested: "The beans, the dried beans... I didn't really know what to do with them... it would have been nice if, like, they were canned beans versus the dried beans" (Participant 3) and "I think that would have been a little easier. So then you don't have to wait to prep it" (Participant 6).

Theme 1.5: Desire for Program Extension

Participants consistently wished the program lasted longer. One mother stated directly: "only thing I would change is I wish, like, the foreground was a little longer. That's probably the only thing I would change" (Participant 1). Another recommended: "I would recommend, like, say if the program was to go on longer after we, like, you know, give birth, like the [nurse home visiting program] ... Healthy options for babies, or giving us, you know, more, like, menus or, like, recipes for babies when they're born" (Participant 7). A third noted appreciation for the transition: "I thought it was nice that they reached out and let me know, like, hey, next week is gonna be your last week" (Participant 6).

Category 2: Community Health Worker Support & Case Management

Theme 2.1: Comprehensive, Holistic Support

The assigned Community Health Workers (CHWs) provided support that extended far beyond food delivery, addressing multiple needs simultaneously. One participant detailed: "she had resources for him [husband]... it was, like, another lady, I forget her name, she would call and check on me, like, I think, like, every month... that helped me. It opened me to be more vocal about my feelings and how I'm doing mentally, not only physically" (Participant 1). Another mother described practical assistance: "she would actually, like, meet me at my doctor's appointment, help me get the kids in with me, and, like, kind of keep them entertained while I was getting the ultrasound done" (Participant 2). Additional support included: "[my CHW] got, got funds approved to have a [support service provider] ... and had gotten me set up with [them], and had gotten funds approved to pay for it, so that I got most of my laundry done" (Participant 3).

Participants gained access to a network of resources they wouldn't have known about otherwise. One mother explained: "even the nurse program I'm in today, the nurse, I think it's called [nurse home visiting program], where you... they give you the nurse up until you're... the baby's two years old... even after the program, they said we could still come up there every Friday and get us a food package" (Participant 1). Another emphasized the breadth of support: "resources for that,

housing resource, so it's so many... The diaper bank, resources for that, housing resource, so it's so many, those could go on" (Participant 5).

Theme 2.2: Strong Relationships with Community Health Workers

Deep, trusting relationships developed between participants and their assigned workers. One mother expressed: "[my CHW], [my CHW], [my CHW]! Like, she was just so helpful. And she ended up being in the hospital, like, she was, like, working there, so I invited her... I've seen, like. The program is like a family, pretty much" (Participant 1). Another stated: "I don't know where I would be without the program or her" (Participant 5). A third praised their worker during face to face meetings, but struggled a bit connecting via phone: "She was really cool, but there was times where I did reach out, and she wouldn't reach out to, like. Maybe, like, a week or two... But whenever she would see me face-to-face, I'll, like, ask her" (Participant 6).

Theme 2.3: Material Needs Support: Housing and Transportation

The program addressed critical housing and transportation needs for participants. One mother shared: "when I first got in the program, I was staying at the motel" and received help finding permanent housing within "maybe, like, 4 months? 4 or 5 months?" through connection with the CHW who helped me connect with "this lady to help me find housing" (Participant 5). Another faced eviction: "I was going through eviction... Eventually, I did, I was able to fight my eviction. I just got the full commitment to the back payment, actually, on Monday... I made $1,600 off their [gig work service]. And I was able to put it on towards the rent" (Participant 4).

Transportation barriers were also addressed. One participant explained: "I had issues dealing with [transportation service], the transportation company with [insurance program], and they would just give me a hard time every time I was trying to schedule... so there were often times where I was taking the bus... [my CHW] was setting up transportation, because I think there was transportation allowed through the program as well... the bus passes, the rides were definitely a huge relief" (Participant 3).

Theme 2.4: Community Building and Social Connection

The program helped address social isolation during pregnancy. One participant shared that her CHW wanted to create connection: "I told her I didn't have any friends in Delaware. She's like, oh man, I have to put together, like, a mommy program for us, like, in the program, so you guys could, you know, get out and talk... I think that would have helped, you know, some of us get out the house and be more hands-on" (Participant 1). Another mentioned community events: "they had, like. Get-togethers at the hospital... I went to one... I thought it was cool. There's, like. People from the library that are there... they would, like, help you get a library card for your baby" (Participant 6).

Theme 2.5: Communication and Navigation Challenges

Some participants identified gaps in communication, follow-through on goals, and difficulties navigating resources. One mother explained: "I feel like it should be, like, more communication... about how I am meeting my goals? Because they have to, like, set goals for the week. (Participant 5). Resource navigation also posed challenges for one mother. As she described: "when I'm reaching out to [referral hotline], they're telling me, well, who referred you, or what people told you, like, to reach out for these programs... and they would just be, like,

smack at square one." She explained the coordinator "knew, but she didn't know, like, all the details, like, she didn't maybe know, like, where to, like, point me at, or who to point me to, she just had the general help line." (Participant 4).

Category 3: Health & Behavioral Impacts

Theme 3.1: Sustained Behavior Change and Healthier Eating Habits

Participants reported lasting changes in their approach to nutrition and meal planning. One mother described becoming "more mindful of what you eat... when I go shopping, I definitely am more mindful of what I pick up" (Participant 1). Another participant noted considerable health outcomes: "I do feel like, health-wise, for sure, ever since the program, I haven't really reverted back to eating out a lot like I used to... I've lost 60 pounds or so since I had my baby" (Participant 2). A third emphasized the shift: "it would have probably been, like, [fast food restaurant] or something, but with the box, it's a lot healthier... It was nice to have healthier options, instead of, like, oh, I'm gonna eat out" (Participant 6).

Theme 3.2: Maternal Health Outcomes

Participants connected the healthy food to better health outcomes during and after pregnancy. One mother reflected on the consequences when she stopped eating program foods: "I ended up getting high blood pressure... It's really, you know, what I'm eating. It wasn't even the stress... I end up going into labor two weeks early... I should have stuck to my, you know, recipes and what I learned from the program" (Participant 1). Another noted positive impacts: "I would say that definitely, as far as mentally, I was happy, because I could always know that something... it was like security... I'm definitely, I was 235, When, I had the baby, I'm now down to 210" (Participant 4).

The program provided tailored dietary guidance for pregnancy-related health issues. One mother explained: "I was sick a lot throughout my pregnancy. So, it was like, I was barely eating anything, honestly... she was like, oh, you should try this, and then every week when we were selected... we were selecting the food. It was, like, more so encouraging me to try different stuff so I won't be stuck, like, eating the same thing all the time" (Participant 5). Another noted: "me being, like, a high-risk pregnant person... the list options was like, okay, this is probably good, because they got, like, all the healthier options that I need" (Participant 7).

Theme 3.3: Family Nutrition and Child Health

The program positively influenced children's eating habits and family nutrition patterns. One mother observed: "She loves vegetables. She loves yams, it's her favorite, but yeah, vegetables is a thing in our house now. Thanks because of the program" (Participant 1). Another noted: "My daughter, I need a snack and some oranges in there... everything came in handy" (Participant 1). A third participant shared: "They gave you enough for your household. So it was like, everybody is incorporating, like, this healthiness into their diet" (Participant 5).

Theme 3.4: Emotional and Mental Health Support

The program provided crucial emotional support during a vulnerable time. One participant shared: "my pregnancy. I was very emotional... my CHW was very patient with me, like, when I didn't want to be bothered, she was just, like, so gentle with me" (Participant 1). Another

described opening up about mental health: "with my postpartum, and prepartum, I'll call it, too she really helped me. It opened me to be more vocal about my feelings and how I'm doing mentally, not only physically" (Participant 7). An additional mother explained: "Having that extra support really helped, you know, helped me stay on track, because it was motivation to, you know, get up and go to my therapy appointment" (Participant 3).

Category 4: Economic & Material Impacts

Theme 4.1: Food Security and Financial Relief

Participants described significant financial relief from receiving regular food deliveries, which allowed them to redirect limited resources to other household necessities. As one mother explained, the timing was crucial: "I wasn't working, so… and I was going through a lot financially, so I wasn't really able to afford a lot of food while I was, you know, in the beginning of my pregnancy" (Participant 1). The program's support with food provision alleviated other burdens as another participant noted how "it came towards, like, the end of the month, and running low on food, knowing that I don't have to spend cash on it. Then I could definitely go put gas in my car, or put it towards an extra bill" (Participant 7). A third mother emphasized: "[benefits programs] doesn't cover your full month... it's a supplement. And, you know, since I wasn't working, I didn't have anything to supplement the supplement. So, the food farmacy program kind of stepped in and was that supplement" (Participant 3).

Theme 4.2: Superiority to Other Food Assistance Programs

Participants consistently rated this program superior to alternatives. One mother contrasted: "the [alternative meal delivery program] ... the food came busted sometimes, some of the food was old... Compared to other programs, I definitely would put this at the top" (Participant 1). Another noted: "no other food program, [nutrition assistance program] or anything like that has ever delivered food to my home. So, from a convenience standpoint, it was very, very helpful" (Participant 2). A third participant emphasized: "This is not like a food giveaway, oh, like, yeah, we just fed the homeless, leave them, they're good, they just ate. It's deeper than that with this program" (Participant 4).

Category 5: Dignity, Respect & Stigma-Related Constructs

Theme 5.1: Respectful and Dignified Treatment

Participants consistently described feeling respected and valued throughout their program experience. One mother stated: "I felt respected every time I went to go get my food, or every time I needed help... [my CHW] always was attentive... I felt respected throughout the whole program" (Participant 1). Another emphasized the lack of stigma: "The program made me feel no shame, how comfortable I was in it, in expressing myself and my concerns and my resources that were offered to me" (Participant 7). A third participant noted: "I felt like I was treated with respect... I, at first, I was, like, nervous about joining it, because I was like, oh, like, are people gonna judge me…?" (Participant 6).

Theme 5.2: Overcoming Stigma and Advocacy

Many participants described initial nervousness that was overcome through positive experiences, leading to active word-of-mouth recommendations. One mother explained: "I... I get where some

people are probably like. I don't want to feel embarrassed, or, you know, like, oh, are they gonna look at me or treat me different because I'm in a program? Or something, but I... I was like that at first, but then I really... I needed it. I thought it was very nice to have" (Participant 6).

Following positive experiences, participants actively wanted to share the program with others. One mother lamented: "I had two mommies, I'm like, I want to recommend the program but … I'm like, I can't even recommend it, because it's just a study" (Participant 1). Another told friends: "I actually offered them to come live out here with me, so they could get all these, like, resources out here" (Participant 7). A third shared: "After I was done, I was trying to get a bunch of other girls to, like, hey, you should look into it, because, like, it's really useful." (Participant 6).

Table 1: Food Farmacy Conceptual Categories, Themes, and Representative Quotes

Category	Theme	Quote 1	Quote 2
Program Structure & Operations	Accessibility and convenience	"I didn't want to go anywhere. I was big, I didn't want to walk, I didn't want to do anything, so it was just love just to have everything delivered to the house." (P1)	"You're getting, like, the fruits, the vegetables, the protein, the sides, you're getting everything that you really needed." (P5)
	Food quality, variety, and selection	"When I hear food bank, I think of, like, rotten, spoiled food. I never had a bad experience with my produce being bad, the food being expired." (P1)	"I could change them each month. So, that was good, too... I love the quantity. Like, they gave us so much." (P1)
	Cooking support and practical resources	"She would come to my house as well, and, like, help me cook, or, like, help come up with recipes... we basically, like, meal prep." (P2)	"They also gave seasonings, I like that as well... the canned oils, can spray they gave for cooking... That was my favorite!" (P1)
	Program customization and recommendations	"I had food aversions... they did, accommodate by giving me, like. For example, more salmon instead." (P2)	"Granola bars would be good... Crackers would be nice to go with the cheese." (P1)

	Program extension	"Only thing I would change is I wish, like, the program was a little longer. That's probably the only thing I would change." (P1)	"I thought it was nice that they reached out and let me know, like, hey, next week is gonna be your last week, but it was still too short." (P6)
Community Health Worker Support & Case Management	Comprehensive, holistic support	"She had resources for him... she would call and check on me... It opened me to be more vocal about my feelings and how I'm doing mentally, not only physically." (P1)	"[My CHW] got funds approved to have a [support service]... so that I got most of my laundry done, which was really a problem in our house.." (P3)
	CHW relationships	"[My CHW], [my CHW], [my CHW]! Like, she was just so helpful... I've seen, like. The program like a family." (P1)	"She was really cool, but there was times where I did reach out, and she wouldn't reach out to, like maybe, like, a week or two." (P6)
	Material needs support: housing and transportation	"When I first got in the program, I was staying at the motel... She connected me with this lady to help me find housing." (P5)	"[My CHW] was setting up transportation... the bus passes, the rides, and the laundry part were definitely a huge relief." (P3)
	Community building and social connection	"I told her I didn't have any friends in Delaware. She's like, oh man, I have to put together, like, a mommy program for us." (P1)	"They had, like get-togethers at the hospital... People from the library... help you get a library card for your baby." (P6)
	Communication and navigation challenges	"I feel like it should be, like, more of a communication thing, like, hey, was your goals met for the week?" (P5)	"When I'm reaching out to [referral hotline], they're telling me, well, who referred you... and they would just be, like, smack at square one." (P4)

Doi: 10.32481/djph.2025.11.09

Health & Behavioral Impacts	Sustained behavior change and healthier eating habits	"I do feel like, health-wise, for sure, ever since the program, I haven't really reverted back to eating out a lot like I used to... I've lost 60 pounds." (P2)	"It would have probably been, like, [fast food] or something, but with the box, it's a lot healthier." (P6)
	Maternal health outcomes	"I end up getting high blood pressure... I end up going into labor two weeks early... I should have stuck to my recipes." (P1)	"I was sick a lot throughout my pregnancy... she was like, oh, you should try this... encouraging me to try different stuff." (P5)
	Family nutrition and child health	"She loves vegetables. She loves yams, it's her favorite, but yeah, vegetables is a thing in our house now, because of the program." (P1)	"They gave you enough for your household. So it was like, everybody is incorporating, like, this healthiness into their diet." (P5)
	Emotional and mental health support	"My pregnancy. I was very emotional... my CHW was very patient with me, like, when I didn't want to be bothered, she was just, like, so gentle with me." (P1)	"Having that extra support really helped... it was motivation to, you know, get up and go to my therapy appointment." (P3)
Economic & Material Impacts	Food security and financial relief	"I wasn't working, so... and I was going through a lot financially, so I wasn't really able to afford a lot of food." (P1)	"[Benefits program] doesn't cover your full month... it's a supplement... the food farmacy program kind of stepped in and was that supplement." (P3)
	Superiority to other food assistance programs	"Compared to other programs, I definitely would put this at the top." (P1)	"This is not like a food giveaway... we just fed the homeless, leave them... It's deeper than that with this program." (P4)

Dignity & Stigma-related Constructs	Respectful and dignified treatment	"I felt respected every time I went to go get my food, or every time I needed help... I felt respected throughout the whole program." (P1)	"I felt like I was treated with respect." (P6)
	Overcoming stigma and advocacy	"I, at first, I was, like, nervous about joining it, because I was like, oh, like, are people gonna judge me for, like, reaching out for help?" (P6)	"After I was done. I was trying to get a bunch of other girls to, like, hey, you should look into it, because, like. It's really useful." (P6)

Note. P = Participant. Quotes have been lightly edited for clarity while preserving participant voice and meaning.

Discussion

This qualitative study provides rich, detailed insights into pregnant women's experiences with a FIM pilot program, revealing multi-dimensional benefits extending beyond nutrition to encompass economic stability (and housing), mental health support, and dignified service provision. Our findings align with and extend prior FIM research while highlighting unique considerations for programs serving pregnant women.

Our findings corroborate previous research demonstrating that FIM programs effectively reduce food insecurity and improve dietary quality.[8,13] Similar to Berkowitz et al.'s study of medically tailored meals for patients with chronic conditions, participants in our study reported sustained behavior change, with multiple mothers describing continued healthy eating patterns postpartum, including substantial weight loss and mindful food purchasing.[11] This suggests FIM programs may catalyze lasting dietary improvements that extend beyond program participation.

The convenience of home delivery emerged as a critical program element, consistent with findings from other FIM evaluations.[12,19] For pregnant women managing physical discomfort, childcare responsibilities often with other young children to care for, and transportation barriers, eliminating the need for grocery shopping represented substantial burden reduction. This finding underscores the importance of delivery-based models for populations facing mobility limitations.

A distinctive finding was the exceptional quality and freshness of food provided, which contrasted sharply with participants' expectations and prior experiences with food assistance. Multiple participants expressed surprise that food bank items were not "rotten" or "expired," highlighting persistent stigma surrounding charitable food distribution.[21,24] The provision of high-quality, fresh produce and proteins challenged deficit narratives about food assistance recipients and affirmed participants' worthiness of nutritious food. This aligns with emerging FIM scholarship emphasizing the therapeutic and dignifying potential of food provision.[25]

Community Health Workers and Case Management as Core Program Component

A particularly salient finding was the critical role of CHWs in shaping participant experiences and outcomes. Participants described support from CHWs who addressed housing crises, secured transportation, arranged laundry services for one family where this was a particular challenge, attended medical appointments, and provided emotional support services far exceeding traditional nutrition program scope. This holistic support model resonates with social determinants of health frameworks recognizing that food insecurity rarely occurs in isolation but rather intertwines with other hardships.[26] Indeed, participants described the value of getting help with needs beyond food, including for participants facing homelessness, eviction, and transportation barriers. However, we also identified gaps in Community Health Workers and Case Management implementation, including a few reports of inconsistent communication responsiveness and incomplete resource knowledge relating to referred resources.

Mental Health and Emotional Support

Another frequently reported program benefit was the emotional and mental health support participants received through the program. Multiple women described feeling comfortable disclosing mental health struggles, with one participant noting the program "opened me to be more vocal about my feelings and how I'm doing mentally, not only physically." This finding aligns with research on the mental health impacts of food insecurity and the potential for food assistance programs to provide psychological relief.[27,28]

Pregnancy is a period of heightened vulnerability for mental health concerns including depression and anxiety.[18] The emotional support participants received, which here was characterized by patience, gentleness, and non-judgment, appeared to create psychological safety that facilitated disclosure and connection. This finding suggests FIM programs for pregnant women should explicitly incorporate mental health screening and support, potentially through partnerships with perinatal mental health providers.

Dignity and Respect in Service Delivery

Participants universally described feeling respected throughout program participation, a finding with important implications given documented experiences of stigma in traditional food assistance contexts.[21,24] Several participants initially hesitated to enroll due to anticipated judgment but were pleasantly surprised by respectful treatment. The program's structure which allows food choice, delivering to homes, providing high-quality items, appeared to communicate respect for participant autonomy and dignity. This finding resonates with person-centered care principles emphasizing collaboration, respect, and recognition of individual preferences.[29] The contrast participants drew between this program and other food assistance experiences (e.g., describing the program as "not like a food giveaway... It's deeper than that") suggests FIM programs have potential to reimagine food assistance delivery in ways that center dignity and partnership rather than charity and dependence.[30]

Economic Impact and Supplementation of Existing Benefits

Participants described significant financial relief, with food boxes enabling them to redirect limited funds toward utilities, transportation, and household necessities. This finding quantifies qualitatively what other research has demonstrated numerically, that FIM programs can reduce household food expenditures and free resources for other essential needs.[10,12]

Notably, all participants were receiving SNAP and/or WIC benefits, yet still experienced food insecurity and valued FIM program participation. This aligns with research documenting that SNAP benefits, while essential, may not fully meet household food needs, particularly toward month-end.[6] One participant explicitly described the FIM program as "a supplement to the supplement," highlighting how FIM programs can fill gaps left by traditional assistance.

This finding has policy implications, suggesting FIM programs function not as SNAP/WIC replacements but as complementary interventions addressing limitations of existing programs. The combination of SNAP (providing purchasing flexibility), WIC (offering specific nutritious items), and FIM (delivering ready-to-use fresh foods with Community Health Workers and Community Health Workers and Case Management) appeared synergistic in meeting participants' needs.

Food Quality Issues and Program Refinements

While overwhelmingly positive, participants identified areas for improvement. Quality concerns emerged around specific items, particularly salmon which they found inedible. Though participants understood this as a salmon-related issue rather than program negligence, the experience caused distress during pregnancy when food safety concerns are heightened. This finding underscores the importance of rigorous quality assurance protocols for FIM programs providing perishable items.

Participants also recommended food modifications including: (1) replacing dried beans with canned alternatives to reduce preparation time; (2) providing beans less frequently or in smaller quantities; (3) adding more snack options including crackers, low-sodium chips, and granola bars; and (4) moderating peanut butter/nut quantities, particularly for participants also receiving WIC. These concrete suggestions offer actionable guidance for program refinement.

The preference for convenient, ready-to-use items (canned vs. dried beans) reflects time poverty many pregnant women face, particularly those managing other children, employment, and pregnancy-related fatigue.[31] FIM programs should balance nutrition optimization with practical feasibility, recognizing that foods requiring extensive preparation may go unused despite nutritional value.

Program Duration and Postpartum Extension

Participants universally desired longer program participation, with several recommending extension through postpartum and early infancy. This finding aligns with growing recognition that the "fourth trimester" represents a critical but under-supported period requiring intensive postpartum care.[32] The transition off the program coincided with new parenting demands precisely when nutritional support might remain beneficial.

One participant recommended the program include infant feeding guidance and recipes for introducing solids, noting she was "clueless to what I'm doing. Like, I've been putting stuff in the blender." This suggests FIM programs could extend impact by incorporating early childhood nutrition education, supporting optimal infant feeding practices that shape lifelong dietary patterns.[33]

Doi: 10.32481/djph.2025.11.09

Strengths, Limitations, and Future Directions

This study's strengths include rich qualitative data from diverse participants, systematic thematic analysis, and focus on an understudied population (pregnant women) within FIM research. However, limitations warrant consideration. First, the small sample size (n=7), while appropriate for qualitative inquiry, limits transferability to other contexts. Second, all participants completed the program, introducing potential selection bias if program drop-outs had systematically different experiences. Third, interviews occurred postpartum (1-14 months after delivery), potentially subject to recall bias. Fourth, all participants received care from the same program in one geographic region, limiting generalizability.

Future research should employ mixed-methods approaches combining qualitative depth with quantitative outcome assessment, including clinical indicators (gestational weight gain, birth outcomes), behavioral measures (dietary quality), economic outcomes (healthcare utilization, food security scores), and mental health assessments. Longitudinal designs tracking participants through pregnancy, delivery, and postpartum would illuminate how program impact evolves across the perinatal continuum. Comparative studies examining different FIM models (e.g., medically tailored meals vs. produce prescriptions vs. comprehensive food boxes) could identify which approaches optimize outcomes for pregnant women.

Additionally, research should examine implementation factors affecting program effectiveness, including Community Health Workers and Case Management ratios, staff training approaches, partnership structures, and cost-effectiveness. Understanding the "active ingredients" of successful FIM programs will enable replication and scaling.

Implications for Practice and Policy

Our findings suggest several implications for FIM program design and policy:

1. Prioritize Home Delivery: Delivery-based models remove critical barriers for pregnant women and should be standard practice.
2. Embed Community Health Workers and Case Management: FIM programs should incorporate trained CHWs with capacity for holistic support addressing housing, transportation, mental health, and social needs, not nutrition alone.
3. Ensure Food Quality and Choice: High-quality, fresh foods and meaningful choice opportunities are essential for program acceptability and dignity.
4. Extend Duration: Programs should consider extending through postpartum and early infancy, potentially including infant nutrition support.
5. Provide Practical Foods: Balance nutrition optimization with convenience by offering ready-to-use options requiring minimal preparation, considering too offerings provided by WIC to create variety and balance in provisions.
6. Create Communication Protocols: Systematic goal-setting, follow-up, and responsive communication enhance Community Health Workers and Case Management effectiveness.
7. Build Resource Knowledge: Staff require thorough training on available community resources and referral processes to effectively navigate participants.

8. Address Mental Health: Programs should screen for and support perinatal mental health needs, potentially through partnerships with mental health providers.

At the policy level, our findings support expanded funding for FIM programs targeting pregnant women. With growing evidence of multi-dimensional benefits, policymakers should consider FIM programs as cost-effective interventions potentially reducing healthcare costs through improved maternal-child health outcomes. Several states have begun Medicaid reimbursement for medically tailored meals[34]; expanding such policies to include pregnant women could improve access and sustainability.

Conclusion

This qualitative study reveals that FIM programs for pregnant women deliver multi-dimensional benefits extending far beyond nutrition to encompass economic relief, comprehensive support services, mental health benefits, and dignified care provision. Participants described experiences characterized by reduced food insecurity, healthier eating behaviors, financial flexibility, holistic support for complex needs, and respectful interactions that honored their dignity and autonomy. While identifying areas for refinement, including program duration, specific food modifications, participants overwhelmingly endorsed the program and advocated for its expansion. These findings contribute to the growing evidence base supporting FIM programs as promising interventions for improving maternal-child health and addressing social determinants during the critical perinatal period.

Dr. Karpyn may be contacted at karpyn@udel.edu.

References

1. Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2022). *Household food security in the United States in 2021* (ERR-309). U.S. Department of Agriculture, Economic Research Service.

2. Laraia, B. A., Siega-Riz, A. M., & Gundersen, C. (2010, May). Household food insecurity is associated with self-reported pregravid weight status, gestational weight gain, and pregnancy complications. *Journal of the American Dietetic Association*, *110*(5), 692–701. https://doi.org/10.1016/j.jada.2010.02.014 PubMed

3. Orr, C. J., Keyserling, T. C., Ammerman, A. S., & Berkowitz, S. A. (2019). Diet quality, physical activity, and behavioral interventions in prenatal care: A systematic review. *Maternal and Child Health Journal*, *23*(8), 1025–1037. 10.1007/s10995-019-02731-2 PubMed

4. Ivers, L. C., & Cullen, K. A. (2011, December). Food insecurity: Special considerations for women. *The American Journal of Clinical Nutrition*, *94*(6), 1740S–1744S. https://doi.org/10.3945/ajcn.111.012617 PubMed

5. Metallinos-Katsaras, E., Sherry, B., & Kallio, J. (2009, October). Food insecurity is associated with overweight in children younger than 5 years of age. *Journal of the American Dietetic Association*, *109*(10), 1790–1794. https://doi.org/10.1016/j.jada.2009.07.007 PubMed

6. Caspi, C. E., Canterbury, M., Carlson, S., Bain, J., Bohen, L., Grannon, K., . . . Kottke, T. (2019, August). A behavioural economics approach to improving healthy food selection among food pantry clients. *Public Health Nutrition*, *22*(12), 2303–2313. https://doi.org/10.1017/S1368980019000405 PubMed

7. Downer, S., Berkowitz, S. A., Harlan, T. S., Olstad, D. L., & Mozaffarian, D. (2020, June 29). Food is medicine: Actions to integrate food and nutrition into healthcare. *BMJ (Clinical Research Ed.)*, *369*, m2482. https://doi.org/10.1136/bmj.m2482 PubMed

8. Berkowitz, S. A., Seligman, H. K., Meigs, J. B., & Basu, S. (2018, September). Food insecurity, healthcare utilization, and high cost: A longitudinal cohort study. *The American Journal of Managed Care*, *24*(9), 399–404. PubMed

9. Mozaffarian, D., Liu, J., Sy, S., Huang, Y., Rehm, C., Lee, Y., . . . Micha, R. (2018, October 2). Cost-effectiveness of financial incentives and disincentives for improving food purchases and health through the US Supplemental Nutrition Assistance Program (SNAP): A microsimulation study. *PLoS Medicine*, *15*(10), e1002661. https://doi.org/10.1371/journal.pmed.1002661 PubMed

10. Berkowitz, S. A., Hulberg, A. C., Standish, S., Reznor, G., & Atlas, S. J. (2017, February 1). Addressing unmet basic resource needs as part of chronic cardiometabolic disease management. *JAMA Internal Medicine*, *177*(2), 244–252. https://doi.org/10.1001/jamainternmed.2016.7691 PubMed

11. Berkowitz, S. A., Terranova, J., Hill, C., Ajayi, T., Linsky, T., Tishler, L. W., & DeWalt, D. A. (2018, April). Meal delivery programs reduce the use of costly health care in dually eligible Medicare and Medicaid beneficiaries. *Health Affairs (Project Hope)*, *37*(4), 535–542. https://doi.org/10.1377/hlthaff.2017.0999 PubMed

12. Cavanagh, M., Jurkowski, J., Bozlak, C., Hastings, J., & Klein, A. (2017, October). Veggie Rx: An outcome evaluation of a healthy food incentive programme. *Public Health Nutrition*, *20*(14), 2636–2641. https://doi.org/10.1017/S1368980016002081 PubMed

13. Ridberg, R. A., Bell, J. F., Merritt, K. E., Harris, D. M., Young, H. M., & Tancredi, D. J. (2019, February). A pediatric fruit and vegetable prescription program increases food security in low-income households. *Journal of Nutrition Education and Behavior*, *51*(2), 224–230.e1. https://doi.org/10.1016/j.jneb.2018.08.003 PubMed

14. Knowler, W. C., Barrett-Connor, E., Fowler, S. E., Hamman, R. F., Lachin, J. M., Walker, E. A., & Nathan, D. M., & the Diabetes Prevention Program Research Group. (2002, February 7). Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *The New England Journal of Medicine*, *346*(6), 393–403. https://doi.org/10.1056/NEJMoa012512 PubMed

15. Phelan, S. (2010, February). Pregnancy: A "teachable moment" for weight control and obesity prevention. *American Journal of Obstetrics and Gynecology*, *202*(2), 135.e1–135.e8. https://doi.org/10.1016/j.ajog.2009.06.008 PubMed

16. Barker, M., Dombrowski, S. U., Colbourn, T., Fall, C. H. D., Kriznik, N. M., Lawrence, W. T., . . . Stephenson, J. (2018, May 5). Intervention strategies to improve nutrition and health behaviours before conception. *Lancet*, *391*(10132), 1853–1864. https://doi.org/10.1016/S0140-6736(18)30313-1 PubMed

17. De Marchis, E. H., Torres, J. M., Fichtenberg, C., & Gottlieb, L. M. (2019). Identifying food insecurity in health care settings: Advice from experts. *The Milbank Quarterly*, *97*(2), 367–370. https://doi.org/10.1111/1468-0009.12378

18. Bauman, B. L., Ko, J. Y., Cox, S., D'Angelo Mph, D. V., Warner, L., Folger, S., . . . Barfield, W. D. (2020, May 15). Vital signs: Postpartum depressive symptoms and provider discussions about perinatal depression—United States, 2018. *MMWR. Morbidity and Mortality Weekly Report*, *69*(19), 575–581. https://doi.org/10.15585/mmwr.mm6919a2 PubMed

19. Hager, K., Cudhea, F., Wong, J. B., Berkowitz, S. A., Downer, S., Sallis, A., . . . Mozaffarian, D. (2020). Association of national expansion of insurance coverage of medically tailored meals with estimated hospitalization rates and costs. *JAMA Network Open*, *3*(10), e2021520. 10.1001/jamanetworkopen.2020.21520

20. Nussbaum, C., Gordon, A., & Massey-Garrison, A. (2021). Qualitative perspectives on the efficacy of the Summer Electronic Benefits Transfer for Children (SEBTC) program: Perspectives from low-income households in Nevada. *Journal of Nutrition Education and Behavior*, *53*(7), 587–598. https://doi.org/10.1016/j.jneb.2021.02.007

21. Garthwaite, K. (2016). Stigma, shame and 'people like us': An ethnographic study of foodbank use in the UK. *The Journal of Poverty and Social Justice : Research, Policy, Practice*, *24*(3), 277–289. https://doi.org/10.1332/175982716X14721954314922

22. Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Sage.

23. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

24. Neter, J. E., Dijkstra, S. C., Visser, M., & Brouwer, I. A. (2014, May 16). Food insecurity among Dutch food bank recipients: A cross-sectional study. *BMJ Open*, *4*(5), e004657. https://doi.org/10.1136/bmjopen-2013-004657 PubMed

25. Lê-Scherban, F., Ballester, L., Castro, J., Cohen, A., Castillo, R., Olson, E. C., . . . Garg, A. (2021). Identifying families with complex needs after screening for social determinants of health. *Academic Pediatrics*, *21*(5), 930–938. https://doi.org/10.1016/j.acap.2021.01.014

26. Marmot, M., & Allen, J. J. (2014, September). Social determinants of health equity. *American Journal of Public Health*, *104*(Suppl 4, Suppl 4), S517–S519. https://doi.org/10.2105/AJPH.2014.302200 PubMed

27. Knowles, M., Rabinowich, J., Ettinger de Cuba, S., Cutts, D. B., & Chilton, M. (2016, January). "Do you wanna breathe or eat?": Parent perspectives on child health consequences of food insecurity, trade-offs, and toxic stress. *Maternal and Child Health Journal*, *20*(1), 25–32. https://doi.org/10.1007/s10995-015-1797-8 PubMed

28. Maynard, M., Andrade, L., Packull-McCormick, S., Perlman, C. M., Leos-Toro, C., & Kirkpatrick, S. I. (2018, July 6). Food insecurity and mental health among females in high-income countries. *International Journal of Environmental Research and Public Health*, *15*(7), 1424. https://doi.org/10.3390/ijerph15071424 PubMed

29. Epstein, R. M., & Street, R. L., Jr. (2011, Mar-Apr). The values and value of patient-centered care. *Annals of Family Medicine*, *9*(2), 100–103. https://doi.org/10.1370/afm.1239 PubMed

30. Poppendieck, J. (1999). *Sweet charity?: Emergency food and the end of entitlement*. Penguin Books.

31. De Henau, J., & Himmelweit, S. (2020). Unpacking within-household gender differences in partners' subjective benefits from household income. *Review of Income and Wealth*, *66*(4), 783–809. https://doi.org/10.1111/roiw.12457

32. Stuebe, A. M., & Bonuck, K. (2011, December). What predicts intent to breastfeed exclusively? Breastfeeding knowledge, attitudes, and beliefs in a diverse urban population. *Breastfeed Med*, *6*(6), 413–420. https://doi.org/10.1089/bfm.2010.0088 PubMed

33. Birch, L. L., & Doub, A. E. (2014, March). Learning to eat: Birth to age 2 y. *The American Journal of Clinical Nutrition*, *99*(3), 723S–728S. https://doi.org/10.3945/ajcn.113.069047 PubMed

34. Stenmark, S. H., Steiner, J. F., Marpadga, S., Debor, M., Underhill, K., & Seligman, H. (2018). Lessons Learned from Implementation of the Food Insecurity Screening and Referral Program at Kaiser Permanente Colorado. *The Permanente Journal*, *22*, 18–093. https://doi.org/10.7812/TPP/18-093 PubMed