

Isn't It Sweet? Fighting Gestational Diabetes

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HPEB300: Introduction to Health Promotion Education and Behavior

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December 8, 2024

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Program Rationale

Gestational Diabetes Mellitus (GDM) is a common complication of pregnancy, affecting around 7% of all pregnancies nationwide (The American College of Obstetricians and Gynecologists [ACOG], 2018). This disease causes the baby to have an increased risk of excessive birth weight, respiratory issues, and still-birth (Mayo Foundation, n.d.). As for the mothers, GDM causes increased risk for pre-eclampsia, surgical delivery, and future diabetes (Mayo Foundation, n.d.). Most at risk for developing GDM are non-Hispanic black women between the ages of 25 and 40 who are obese prior to pregnancy and those who experience excessive weight gain during pregnancy (Venkatesh, 2022). With that, women with lower levels of educational attainment and those with lower annual incomes are specifically at a heightened risk of developing GDM, as compared to those with higher levels of education and income (Burks et al., 2017). The purpose of this program is to increase physical activity amongst pregnant non-Hispanic black women ages 25 to 40 to reduce their risk of developing GDM.

The existing research on GDM has shown that rates have continued to rise over the past ten years, thus this health issue should receive priority funding to decrease the rates of GDM and its associated complications (Gami et al. 2022). Developing GDM during pregnancy increases the risk of developing Type 2 Diabetes Mellitus (T2DM) by 35-60% later in life, which can result in high blood pressure, loss of limbs, and overall decreased quality of life (National Diabetes, 2011). Thus, increasing the rates of exercise to lower the risk of developing GDM is crucial in maintaining maternal health. The selected population resides in Dorchester County, South Carolina. This county has seen a significant increase in the rates of GDM since 2016, jumping from 7.78% to 9.88% of all pregnancies in only 6 years (PolicyMap, n.d.). This program

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requires commitment from stakeholders such as mothers residing in Dorchester County, local doctor's offices and gyms, insurance companies, and the HPEB300 fund.

The solution developed through this program revolves around the idea that increasing rates of exercise during pregnancy can reduce the risk of developing GDM. Non-Hispanic black mothers in Dorchester County, South Carolina will obtain education about GDM and exercise, as well as receive additional resources to make safe exercise more accessible. This program focuses on increasing accessibility to and knowledge surrounding exercise, and supporting behavior change through education. Inspired by previously used evidence-based programs and using the Transtheoretical Model as guidance, this curriculum aims to have 85% of participants see a statistically significant increase in physical activity levels and a statistically significant decrease in GDM diagnoses by the end of the program. Knowing that low exercise levels are directly related to GDM diagnoses during pregnancy and T2DM diagnoses after pregnancy (Cordero et al., 2015), this program focuses on making exercise easy for all. With GDM rates on the rise, there is no better time to make exercise accessible to our priority population and protect the health of future generations.

Introduction of Health Condition

Gestational Diabetes Mellitus (GDM) is one of the most common complications experienced during pregnancy, with 7% of all pregnancies nationally being affected (ACOG, 2018). In South Carolina specifically, the rate is similar at 7.1% (Gregory & Ely, 2022). In Dorchester County, South Carolina however, this problem is far more severe. From 2016 to 2022, the percentage of women with pregnancy induced diabetes in Dorchester County increased from 7.78% to 9.88%, a concerning jump considering the national and state averages (PolicyMap, n.d.).

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Gestational diabetes can lead to complications during and after pregnancy, affecting both the mother and baby. The disease puts the baby at higher risk for excessive birth weight, small gestational age, early (preterm) birth, respiratory issues, hypoglycemia (low blood sugar), future obesity or diabetes, and stillbirth. As for the mother, she becomes at a higher risk for pre-eclampsia, high blood pressure, surgical delivery (C-section), and future diabetes (Mayo Foundation, n.d.). Specifically, women with gestational diabetes have a 35-60% likelihood of developing Type 2 Diabetes Mellitus (T2DM) in the two decades following their pregnancy. T2DM specifically increases risk for heart disease, high blood pressure, nervous system diseases, and loss of limbs (National Diabetes, 2011). Gestational diabetes may also increase the risk of mothers developing postpartum depression because of higher stress levels (Centers for Disease Control and Prevention, n.d.). These health risks all threaten the lives or quality of life of the mother and baby.

Primary Target Population/Setting

Though rates of gestational diabetes have increased across all races since 2015, the population most severely affected by gestational diabetes is non-Hispanic black women during pregnancy, ages 25 to 40 (Venkatesh, 2022). Women classified as obese, as well as those who experience excessive weight gain during pregnancy, are specifically at risk for development of GDM due to their higher levels of free fatty acids which inhibit glucose reuptake (Rodriguez, 2024). Because exercise is associated with improved metabolic control, women who are less physically active are at a higher risk for developing GDM and T2DM after pregnancy (Cordero et al., 2015). Additionally, women with lower annual incomes and lower educational achievements experience worse GDM outcomes due to longer healthcare wait times when

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compared to women with higher incomes and education, adjusting for age, race, and BMI (Burks et al., 2017).

Located in the low country of South Carolina, Dorchester County has 12% of its residents living in poverty and 19.5% of its residents living in rural areas (Center of Rural and Primary Health Care [CRPH], n.d.). This county is home to major employers such as Bosch and Walmart Inc., both of which aid in keeping the unemployment rate 2.9%, or about 3% lower than the rest of the state (Dorchester County Economic Development, n.d.). When compared to other counties in South Carolina, Dorchester has a higher-than-average need for primary care providers and a significantly higher need for Obstetrics and Gynecology providers. Specifically of note are the zero birthing centers and zero midwives within the county (CRPH, n.d.). As mentioned, the women of this county have experienced increased rates of GDM since 2016, reaching 9.88% in 2022 - a rate almost two percent higher than the national average (PolicyMap, n.d.). The goal of this program is reducing Gestational Diabetes Mellitus by increasing physical activity levels in non-Hispanic Black women, ages 25-40, in Dorchester County, South Carolina.

Key Stakeholders and Relationship with Program Planners

Involved in this program are five key stakeholders: program participants, doctor's offices, insurance companies, local gyms, and the HPEB300 fund. Throughout the program, the participants will be responsible for monitoring their levels of physical activity via an Actigraph wGT3X-BT activity monitor. Once monthly, the mothers are instructed to attend group counseling sessions at their local doctor's office, in order to check-in on their physical activity (PA) levels, as well as receive support from other mothers involved in the program. With the goal of maintaining active participation within the program, the mothers are counseled together in a group setting. This allows for the chance to discuss their feelings and opinions about the

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program, as well as form lasting bonds with mothers of similar characteristics, which will maintain their participation in the program. Additionally, participants are encouraged to engage in PA with other program participants, as group activity is often correlated with increased and maintained PA levels (Lindsay-Smith et al., 2019).

Being that the setting of this program takes place in doctor's offices across the county, it is vital to consider the doctors and nurses providing the intervention as stakeholders. Holding group counseling sessions in the office will allow trust to be built between the patients and healthcare providers, which overall improves long-term relationships between the two. Doctors will stay engaged with the program by knowing that their patients are receiving proper care, and by forming intimate relationships with the program participants, they will gain more insight and knowledge on their community.

Partnering with the program are two local, low-cost gyms in Dorchester County: Rollins Edwards Community Center and Dorchester YMCA. Both gyms agreed to offer temporary, low-cost memberships to the program participants to help increase PA accessibility. To encourage these facilities to stay engaged with the program and continue providing these temporary memberships, the staff will be provided with once-monthly data reports and financial updates to understand the impact they are making. Reports showing the participants' increased levels of PA will be distributed, and the staff will be reminded of the long-term effects this temporary gym membership will have on both the life of the mothers and children.

Playing an important role in providing healthcare to patients are insurance companies. Knowing that insurance companies do not provide policies often for individuals with pre-existing conditions, such as diabetes, this program is particularly engaging. Insurance companies will save money due to the intended lower rates of mothers who develop GDM, and possibly T2DM.

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They will also save money in the long-term, considering that lowered rates of GDM correlates with lower rates of health issues experienced by the child.

Essential to the continuation of this program are the investors of the HPEB300 fund. To keep the investors engaged, the program planners will meet with them once monthly to provide progress reports on the program participants. These meetings will showcase the improved PA levels of the program participants as well as success stories from the group counseling sessions. Additionally, the investors will be shown how the ongoing results of the program contribute to preventative care of both the mothers and children, thus making them understand that their money will have long-lasting impacts.

Behavioral, Environmental, and Biological Factors

Possible behaviors that contribute to the health problem	Possible environmental factors that contribute to the health problem	Biological and other factors that contribute to the health problem
<ul style="list-style-type: none"> - Lack of proper nutrition - Inadequate sleeping habits - Inconsistent prenatal care - Lack of physical activity 	<ul style="list-style-type: none"> - Lack of accessible nutrient-rich foods and grocery stores - food deserts within county - Lack of access to gyms, parks, safe walking (e.g. sidewalks) - Lack of access to healthcare 	<ul style="list-style-type: none"> - Family history of diabetes - Existing high blood pressure - Overweight or obese before pregnancy - Prediabetes (high blood glucose levels) - Older age - Ethnic background - Disinterest in participating in physical activities

Behavioral Risk Factors

This proposal focuses on improving the health of pregnant mothers to reduce the likelihood of a GDM diagnosis. To do this, pregnant mothers must adjust their physical activity habits. Therefore, the behaviors that contribute to this health problem and put the priority population at risk include lack of proper nutrition, lack of physical activity, inadequate sleeping habits, and inconsistent prenatal care. Lack of proper nutrition and lack of adequate PA

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contributes to weight gain and obesity which can lead to the development of gestational diabetes (Rodriguez, 2024). Inadequate sleeping habits, whether too much or too little are associated with improper glucose metabolism increasing the risk for GDM (Myoga, 2019). Additionally, inconsistent prenatal care is associated with GDM because risk factors that contribute to it are not recognized before its onset. This inconsistency in prenatal care negatively affects the morbidity of the mother and child leading to undesired complications (Mayo Foundation, n.d.).

Environmental Risk Factors

Environmental factors such as lack of access to grocery stores, safe exercise areas, and healthcare settings are of focus in this proposal. Dorchester County is among one of the top counties in South Carolina experiencing high food insecurity, meaning that it is a difficult area to afford fresh and quality food (Stacker, 2022). Most of the stores in the area lack nutrient rich foods which significantly contribute to the amount of fresh foods that pregnant women in this county intake. Because of this, women may want to consume healthy foods but do not have the ability to do so. The lack of accessible exercise areas within the environment is influenced both by a structural lack of sidewalks or bike lanes, as well as gym memberships being too costly or too far away. Without accessibility to adequate exercise areas there are limitations on the amount of physical activity achieved (Okafor, 2022). The lack of healthcare access is also an environmental risk because this leads to inconsistency with prenatal care; without proper healthcare access pregnant women are unable to gauge how healthy they are during their pregnancy (Wallace et al., 2023).

Priority Analysis Matrix

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	More Important	Less Important
More Changeable <i>Usually newly adapted</i>	<ul style="list-style-type: none"> ● Lack of physical activity 	<ul style="list-style-type: none"> ● Inconsistency with prenatal care ● Lack of access to gyms, parks, and safe walking (e.g. sidewalks)
Less Changeable <i>Usually more culturally engrained</i>	<ul style="list-style-type: none"> ● Lack of proper nutrition ● Lack of accessible nutrient-rich foods and grocery stores 	<ul style="list-style-type: none"> ● Inadequate sleeping habits ● Lack of access to healthcare

The focus of this program is changing the behavior of pregnant mothers, specifically their physical activity levels, because increasing levels of physical activity can significantly prevent the development of Gestational Diabetes Mellitus.

Predisposing, Enabling, and Reinforcing Factors

Factor Type	Factor	Explanation of relationship with behavior
Predisposing	(1) Lack of knowledge on how to engage in physical activity. (2) Lack of interest in engaging in physical activity. (3) Belief that physical activity is dangerous while pregnant.	(1) Without understanding the importance of physical activity and how to engage in it, mothers may feel unmotivated and avoidant in trying to become active. (2) Poor attitude towards a healthy lifestyle may result in laziness and lack of urge to become healthier. (3) Misinformed mothers may be discouraged from becoming physically active due to fears of harming their baby.
Enabling	(1) Inaccessibility to physical activity centers due to safety concerns. (2) Lack of time for physical activities.	(1) Inaccessibility to safe, affordable exercise options limits physical activity, increasing the risk of unhealthy weight gain.

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		(2) Due to many life demands, such as work, school, or other time-consuming family responsibilities, mothers may not have time available to increase their physical activity.
Reinforcing	(1) Support from peers to engage in physical inactivity. (2) Lack of physical activity guidance from healthcare providers	(1) Receiving praise from peers/family for resting and being sedentary during pregnancy may discourage women from engaging in healthy behaviors like regular exercise. (2) Without guidance from healthcare providers on proper PA levels, women may unknowingly continue unhealthy habits.

The predisposing factor this proposal focuses on is the lack of knowledge on physical activity, which is selected due to the possibility of change in this population. Pregnant women being educated on the proper guidelines of physical activity will help reduce the risk of gestational diabetes (Rodriguez, 2024). Without education on proper physical health, pregnant women are not aware of the importance and continue their unhealthy habits. This program utilizes self-recorded levels of PA in conjunction with small support groups to encourage continuation of healthy habits during and after the program. Additionally, PA interventions with an included social aspect have been seen to maintain health-related quality of life for mothers and their infants (Lindsay-Smith et al., 2019).

The enabling factor to be focused on by this proposal is inaccessibility to physical activity centers due to safety concerns or affordability. Inaccessibility to safe exercise areas, such as gyms and walking areas, limits pregnant women's ability to increase their physical activity (Okafor, 2022). Many pregnant women are not able to purchase gym memberships during these

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life changes and choose to not participate in any activity at all as a result. Although having safe and accessible exercise areas increases PA, there are other solutions to increase this behavior. To promote the increase of physical activity participants are educated on ways to achieve proper PA levels during pregnancy, which is then monitored by the provided Actigraph *wGT3X-BT* activity monitor. Additionally, all participants are provided with temporary, low-cost memberships from two local gyms so that they have a safe location to engage in PA.

The reinforcing factor that the proposal focuses on is the lack of physical activity guidance from healthcare providers. Providers are key sources of information and advice on proper prenatal physical activity, and with sufficient counselling, pregnant women will become more motivated to engage in physical activity (Okafor, 2021). Knowing this, the setting of all the program group counseling sessions is local doctor's offices, in which both program staff and healthcare providers will be present. At the sessions, health coaches and community health workers inform the participants of the possible risks and important lifestyle modifications needed to prevent the risks of gestational diabetes. Participants will be asked to record their PA levels using the activity monitor; the data from which will then be assessed during the monthly support group meetings. This approach has a two-fold advantage, as program participants will feel more comfortable speaking to healthcare professionals, and that providers practice giving individual PA guidance. Physical activity helps prevent many diseases, specifically GDM, and receiving personal guidance from healthcare providers will encourage and reinforce healthy PA habits in program participants.

Mission Statement

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The mission of the Isn't It Sweet? Fighting Gestational Diabetes program is to decrease the prevalence of GDM by increasing physical activity levels to improve the quality of life for pregnant women in Dorchester County, South Carolina.

Program Goals

- Decrease the prevalence of GDM in pregnant mothers in South Carolina.
- Increase the individual motivation of pregnant mothers in Dorchester County, SC to choose/engage more in physically active habits.
- Increase the knowledge of pregnant mothers in Dorchester County, SC on how to properly engage in physical activity.
- Increase awareness of the importance of physical activity during pregnancy to pregnant mothers in Dorchester County, SC.
- Increase community and physician involvement in spreading awareness on the importance of/how to engage in physical activity during pregnancy

Process Objectives

- By January 2026, 30 women from the priority population within Dorchester County will be enrolled in the Isn't It Sweet? program via social media outreach on apps such as Facebook or Instagram, radio advertisements, in person recruitment by program coordinators, or recommendations at physicians' offices.
 - Who: the priority population
 - What: enrolled in the Isn't It Sweet? Program
 - When: by January 2026
 - To what extent: 30 women in the priority population

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- By June 2025, at least 5 physician's offices within Dorchester County will be recruited as the settings for the priority population group counseling sessions for the intervention program.
 - Who: physician's offices
 - What: settings for group counseling sessions.
 - When: by June 2025
 - To what extent: 5 physician's offices

Learning Objectives

- By June 2026, 85% of the program participants will be able to identify four different activities that they can engage in to increase their physical activity levels. These will include activities that can be done indoors and outdoors.
 - Who: the priority population
 - What: Will identify four different activities they can engage in to increase PA
 - When: by June 2026
 - To what extent: 85% of participants
- By May 2026, 90% of the program participants will be able to identify 3 specific reasons why physical activity is important during pregnancy.
 - Who: the priority population
 - What: Will identify 3 reasons why PA is important during pregnancy
 - When: by May 2026
 - To what extent: 90% of the program participants

Behavioral Objectives

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- By July 2026, 85% of the program participants will report a statistically significant increase in physical activity compared to baseline levels.
 - Who: the program participants
 - What: participants will report a statistically significant increase in PA compared to baseline levels
 - When: by July 2026
 - To what extent: 85% of the program participants
- By June 2026, 65% of pregnant mothers enrolled in the program will attend at least 10 support group meetings, as measured by attendance records.
 - Who: the program participants
 - What: Participants will attend support group meetings
 - When: by June 2026
 - To what extent: 65% of the program participants

Outcome Objective

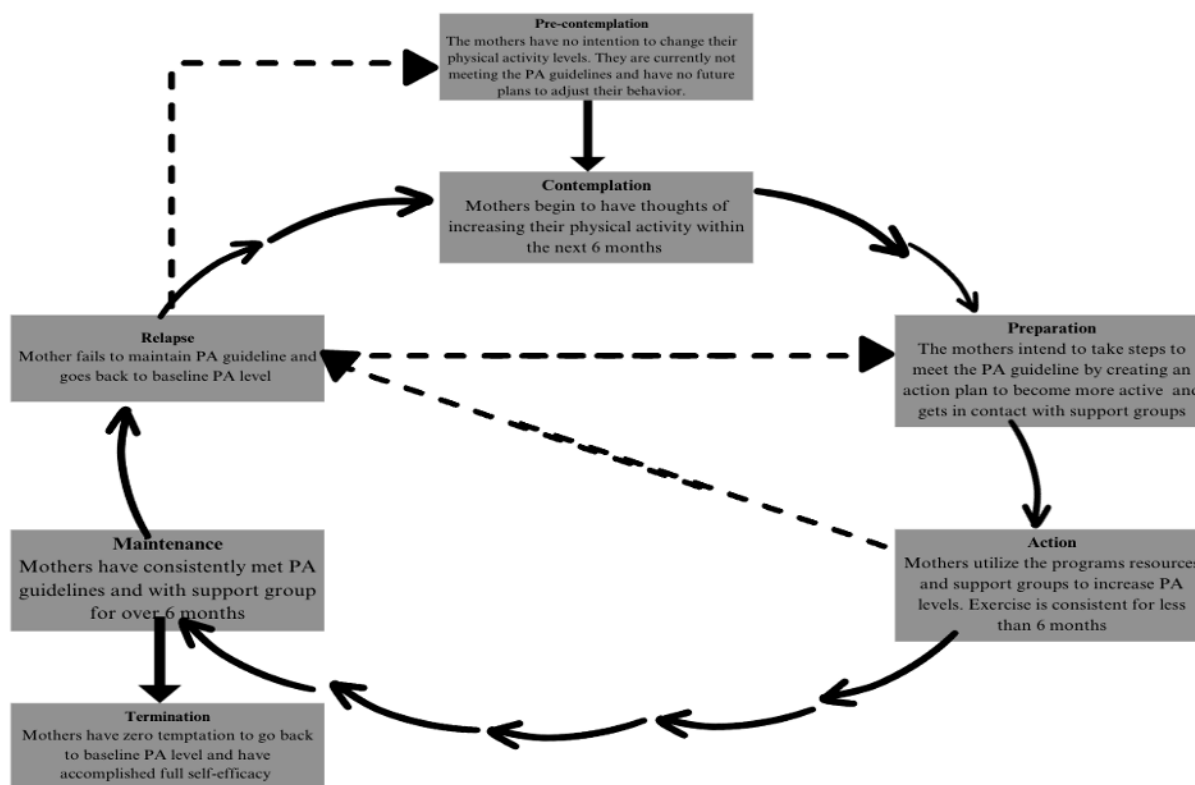
- By the end of the program, gestational diabetes diagnosis for 85% of the priority population will have a statistically significant decrease as compared to baseline levels at the beginning of the intervention program.
 - Who: the program participants
 - What: there will be a statistically significant decrease in gestational diabetes diagnosis as compared to baseline levels
 - When: by the end of the program
 - To what extent: 85% of the program participants

Transtheoretical Model

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The Transtheoretical Model (TTM), or Stages of Change Model, was developed to understand the processes of initiating and adhering to behavior change (Serin and Saritas, 2021). The TTM has been used in countless studies to understand how individuals and communities progress towards behavior change, specifically in studies involving sedentary lifestyles, eating disorders, and exercise. Being that Isn't It Sweet? targets mothers who are at risk for developing GDM due to lack of exercise, the TTM is particularly useful. In a study, the TTM was used to understand postpartum mothers' ability to adjust their diet and exercise habits within the first two years after giving birth. It was found that due to a lack of lifestyle modification interventions, most mothers were still in the precontemplation stage of behavior change. It was also found that non-Caucasian women were more likely to be in the precontemplation stage compared to Caucasian women. The implications of this study are that lifestyle interventions should be culturally relevant and be focused on encouraging behaviors that can be maintained (Sarma et al., 2024). In another study, the TTM was used to understand adults with diabetes' ability to increase their physical activity levels over the course of six months. It was found that interventions should focus on adjusting each patient's level of self-efficacy and promoting their behavioral process of change to effectively promote an increase in physical activity levels (Plonikoff et al., 2010). More specifically, placing special emphasis on promoting the behavioral processes of change was found to be especially useful in the action and maintenance stage (Plonikoff et al., 2010). Due to the importance of sustainable behavior change, the TTM is the appropriate theory to be applied to the Isn't It Sweet? Intervention. This intervention not only aims to increase physical activity to prevent GDM, but also to lower the likelihood that mothers will develop T2DM in the future. Saying that, it is vital to tailor this intervention to the stages of change so that behavior will be altered long-term.

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Objective	Theory – Construct	Intervention Strategy	Possible Activities
Learning	TTM - Process of Change	Health Communication Health Education	<ul style="list-style-type: none"> - Distribute brochures in doctor's offices and advertise the program on social media and the radio to inform patients about physical activity during pregnancy. - Completing a health risks assessment provided by partnering clinics. - Organize workshops during meetings of the 2-year program focused on creating and achieving physical activity goals. - Hold information sessions at meetings about the risks and

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			symptoms of GDM.
Behavioral	TTM - Self-Efficacy	Health Communication Health Coaching Motivational Interviewing	<ul style="list-style-type: none"> - Health coaching is provided by participating gym staff members and doctors who offer workout strategies to improve attitudes toward physical activity. - Participating doctors will offer motivational interviewing at group counseling appointments. - Provide participants with activity trackers to monitor progress and increase their confidence in achieving physical activity goals.
Environmental	TTM - Process of Change	Environmental Change Health-Related Community Service	<ul style="list-style-type: none"> - Through partnerships with low-cost local gyms (Edwards Community Center and Dorchester YMCA), program participants can routinely workout in support groups without the financial barrier of an expensive gym membership. - Organize aerobic activities with support groups at parks, gyms, etc. - By partnering with local clinics to offer routine check-ins and support sessions, women are supported in their journey toward increased physical activity.

Resources

The Isn't It Sweet? Fighting Gestational Diabetes program will require specific personnel, space, and additional supplies to be successful. Staffing needs begin with the program

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manager at the top, whose role will be to oversee the program as a whole and be in control of the budget. Underneath the program manager is the implementation coordinator, whose role focuses on hiring and managing staff, coordinating events, and overseeing day-to-day operations of the intervention. Underneath the implementation coordinator are six part-time employees, three of which are board-certified health coaches who run the counseling and PA-coaching aspects of the intervention. Another part-time employee is the data analyst, who will focus on collecting and analyzing the participant's activity watch data while also preparing it for presentation to stakeholders. The remaining part-time employees are the two Community Health Workers (CHWs). They will be present at all monthly group counseling sessions and will focus their efforts on connecting the participants to culturally appropriate community resources that can aid in maintaining behavior change. Additionally, CHWs will administer oral glucose tolerance tests (GTTs) to each participant at each session to measure current glucose levels. Completing the program staff are the 10 program volunteers, all of which require no funding. Their roles within this program range from recruiting program participants through word-of-mouth, delivering educational materials to the group counseling sites, and being a program point-of-contact for the participants. The Isn't It Sweet? program headquarters will be located in an office building in Columbia, South Carolina, but the program will be implemented in doctor's offices throughout Dorchester County. Supplies such as the Actigraph *wGT3X-BT* watches, journals, educational materials, gym vouchers, and rideshare vouchers are crucial to the success and implementation of this program, which is listed in detail in the budget.

The Isn't It Sweet? program staff will create its own curriculum, though it will be heavily influenced on previous programs developed by Diabetes Free SC and the Center for Community Health Alignment. With the needs of our priority population in mind, the health coaches and

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CHWs will develop a program that focuses on the constructs of the Transtheoretical Model and maintained behavior change. The CHWs and health coaches will train volunteers on proper interactions with the program participants and will be present at all group counseling sessions to facilitate the guided conversations. Through the group counseling sessions, the Isn't It Sweet? program aims to educate participants on the benefits of consistent physical activity (PA) related to GDM and provides resources for maintaining this behavior. Supplemental material such as pamphlets, journals, and gym vouchers are provided in person, as well as in an online format available to all participants via the program website.

The Isn't It Sweet? program applied for and received the HPEB PPP grant, which will fund up to a total cost of \$250,000 each year for two years.

Implementation Plan

To effectively implement the Isn't It Sweet? program, sequential steps must be taken to properly reach the target population. Funding must first be acquired through grants, which will then be used to hire the needed staff, purchase the needed intervention supplies such as activity trackers and journals, and reserve vouchers for gym memberships and rideshare companies. Within the first year of the program, this funding will be used to hire the full-time program manager and implementation coordinator, as well as the six part-time employees. Local, low-cost gyms will be contacted and recruited into the program, with the intention of providing program participants free one-year memberships; the cost of which will be absorbed by the grant funding. Additionally, doctor's offices within Dorchester County will be contacted and asked to provide space for the group counseling sessions. With that, healthcare providers at these doctor's offices will be asked to donate their time to be present at the once-monthly counseling sessions taking place in their office. Finally, rideshare companies will be contacted, and a contractual agreement

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will be made, in which the companies will provide a limited number of vouchers to program participants; the cost of which to be paid for by the grant funding.

Before the onset of the program, the 10 program volunteers will be recruited from the local community, and special interest will be placed on gathering volunteers from community-based organizations, such as churches. These volunteers will be trained by the two part-time CHWs on proper terminology and recruitment techniques, as their role will revolve around participant recruitment and support throughout the program. As mentioned, these volunteers will be initially overseen by the CHWs, but throughout the program will also be guided by the two certified health coaches. For the duration of the program, the health coaches will focus their efforts on the group counseling sessions, in which they will provide educational information regarding PA and guide group discussion amongst the participants. The CHWs will also be present during these group counseling sessions but focus their efforts on connecting the program participants to community resources that can aid in the maintenance of their behavior change. The implementation coordinator will oversee all staff and program components, with the program manager supervising all program operations including upholding the budget and contractual agreements. All employees will work together to plan discussion topics and curriculum for the group counseling sessions, as well as devise plans for recruitment strategies within the priority populations.

Program participants will be recruited through the developed marketing strategy. As part of the recruiting process, all participants are asked to complete an online screening questionnaire to determine if they meet the requirements of the priority population. Program participants will be limited to pregnant non-Hispanic Black women, ages 25 to 40, in Dorchester County, South Carolina. To aid in furthering targeting, participant eligibility is confined to women who are 2-7

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months pregnant and have an annual household income equal to or less than the federal poverty level (FPL).

During the first year of the program, a pilot test will occur to ensure effectiveness within the priority population. The pilot test will take place with a group of five individuals, recruited from the priority population via word-of-mouth. Participants will be asked to come to a test session at a local doctor's office, in which they will receive group counseling from one certified health coach and one CHW. One healthcare professional from the participating doctor's office will also be present during this test session. Participants will be assessed on their current levels of PA and then will receive group counseling with an emphasis on the benefits of PA and behavior change techniques. GTTs will be administered to each participant to understand their current blood glucose level. The participants will then receive all the necessary resources: an Actigraph *wGT3X-BT* activity tracker, a pair of athletic shoes, a gym membership voucher, a journal and pen, and an appropriate number of rideshare vouchers. Using these resources, the participants are then encouraged to increase their amount of daily PA for the next month and use the journals to record any thoughts, feelings, or PA progress. Throughout the month, the participants are also encouraged to keep in contact with the CHWs and program volunteers, as they function to provide support and resources throughout the program. After one month, the participants are welcomed back to the same doctor's office for a second group counseling session, in which their activity monitor data will be assessed and another GTT will be administered. Additionally, the participants will be encouraged to share any difficulties or successes they shared throughout the month. This monthly cycle will continue for the duration of three months. At the end of the pilot period, participants will be given a survey at their final group counseling session. It will ask questions regarding their thoughts and feelings towards the

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program, as well as assess their level of self-efficacy, perceived well-being, and blood glucose level. With this feedback, the group counseling sessions will be adjusted, and any additional resources suggested by the participants will be purchased with the remaining grant funds. After the pilot test occurs and all adjustments have been made, the program will shift its focus to meeting the goal of 30 program participants.

Marketing Plan

The marketing plan for the Isn't It Sweet? program involves a variety of promotional tools. The first marketing tool will be to use space in grocery stores, doctor's offices, and convenience stores in Dorchester County, South Carolina to display brochures and flyers. The brochures and flyers will include important information, such as program goals, how to enroll, program staff, and the program's website URL. These are tools that can be passed along to others to advance the program's enrollment numbers in the community. The Isn't It Sweet? program will also promote the intervention through social media marketing tools. To reach a larger audience, accounts on Instagram, Facebook, and TikTok will be created and managed by the Isn't It Sweet? team to share content that encourages pregnant women to participate and serve as a connection tool for mothers in the community. The Isn't It Sweet? team will also reach out to local radio stations to advertise the program and share the telephone number and website to get enrolled. In addition, the program's team and volunteers will come together to increase engagement and enrollment by hosting an event prior to the start of the program. The Isn't It Sweet? kickoff event will be held at a local park in Dorchester as a form of in-person recruitment and promotion. This event will be advertised on the mentioned promotional tools, such as on flyers, brochures, radio, social media, and website. At the event, food and refreshments will be provided to attendees while the Isn't It Sweet? team offers an informational presentation.

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The program also offers a range of incentives for program participants to encourage enrollment and participation throughout the program. In addition to the free educational materials, journals, and Actigraph *wGT3X-BT* devices that would be provided to record and track progress throughout the program, the Isn't It Sweet? team will also provide free athletic shoes and reusable water bottles to ensure safe and equipped participation. Along with the physical incentives that the program offers, mothers will also have access to support groups to foster a sense of community and motivation. Motivational interviewing by physicians will also be provided to these groups, offering free professional advice and regular counseling.

Evaluation plan

Objective/Level of Evaluation	Key Indicator (Measure)	When Data Collected and How Collected
Process: <ul style="list-style-type: none"> By January 2026, 30 women from the priority population within Dorchester County will be enrolled in the Isn't It Sweet? program via social media outreach on apps such as Facebook or Instagram, radio advertisements, in person recruitment by program coordinators, or recommendations at physicians' offices. By June 2025, at least 5 physician's offices within Dorchester County will be recruited as the settings for the priority population group counseling sessions for the intervention program. 	<ul style="list-style-type: none"> This will be measured by reviewing the number of people who enroll in the program using social media, calling in because of radio advertisements, or signing up in-person with a program coordinator or physician. This will be measured by the number of contractual agreements obtained with the physician's offices. 	Process: <ul style="list-style-type: none"> A full list of participants' names and demographic information will be made using enrollment information from social media, radio advertisements, or in-person signups. A list of physicians' offices will be compiled that make a contractual agreement to hold the group sessions.

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<p>Impact (Learning):</p> <ul style="list-style-type: none"> By June 2026, 85% of the program participants will be able to identify four different activities that they can engage in to increase their physical activity levels. These will include activities that can be done indoors and outdoors. By May 2026, 90% of the program participants will be able to identify 3 specific reasons why physical activity is important during pregnancy. 	<ul style="list-style-type: none"> Participants will demonstrate four different activities during a post-skills test. Participants will be tested on their knowledge of the relationship between physical activity and pregnancy before and after the intervention. The two tests will then be compared to evaluate the participants' understanding. 	<p>Formative:</p> <ul style="list-style-type: none"> The participants will demonstrate different activities to see how many they can successfully complete. <p>Summative:</p> <ul style="list-style-type: none"> The participants' tests will be compared and assessed with levels from the beginning of the program to see knowledge obtained.
<p>Impact (Behavioral):</p> <ul style="list-style-type: none"> By July 2026, 85% of the program participants will report a statistically significant increase in physical activity compared to baseline levels. By June 2026, 65% of pregnant mothers enrolled in the program will attend at least 10 support group meetings 	<ul style="list-style-type: none"> By using the activity watches, Actigraph <i>wGT3X-BT</i>, we will be able to track the PA levels of participants and differentiate the results from the baseline levels In order to track enrollment in the support group we will measure through attendance records 	<p>Formative:</p> <ul style="list-style-type: none"> The data from the Actigraph <i>wGT3X-BT</i> activity watch will be recorded at the monthly meetings by the CHWs/ Health Coaches and analyzed Data Analyst CHWs and Health Coaches will take attendance at the monthly meetings
<p>Outcome:</p> <ul style="list-style-type: none"> By the end of the program, gestational diabetes diagnosis for 85% of the priority population will have a statistically significant decrease as compared to baseline levels at the beginning of the intervention program. 	<ul style="list-style-type: none"> This will be measured by comparing the baseline glucose tolerance levels to the participants' levels after the program. To get these results we will use the oral Glucose Tolerance Test (GTT) 	<p>Summative:</p> <ul style="list-style-type: none"> At each monthly meeting, a GTT will be administered by the CHWs and compared to the levels detected at the beginning of the program

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Appendix A

Year 1 Tasks (2025)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Fundraise/acquire grant money	X	X	X									
Reach out to local gyms and confirm contractual voucher agreements	X	X										
Hire all full-time and part-time staff		X	X	X								
Recruit program volunteers		X	X	X								
Reach out to rideshare companies and confirm contractual voucher agreements		X	X									
Create group-counseling lesson plans and intervention curriculum				X								
Create program website and social media accounts; program screener is released				X	X							
Reach out to local radio stations for advertisements				X								
Create and distribute marketing materials				X	X	X	X					
Enroll 5 participants in the Isn't It Sweet? Pilot test group					X	X	X					
Isn't It Sweet? pilot test								X	X	X		

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and journal data collection and assessment												
Share updates and successes of program participants with stakeholders						X						X
Final outcomes (glucose level and PA level) of intervention are assessed and effectiveness is determined												X

Appendix B

Budget Year 1

Category	Amount Requested
Salaries and wages <ul style="list-style-type: none"> Program Manager (Full-time) Implementation Coordinator (Full-time) 6 Employees (Part-time) 	<ul style="list-style-type: none"> \$65,000 \$55,000 \$93,000 (\$15,500 each)
Professional fees (contracts, consultant fees) <ul style="list-style-type: none"> Lawyer fees for signing of contractual agreements with rideshare companies and local gyms 	<ul style="list-style-type: none"> \$350
Supplies and materials <ul style="list-style-type: none"> Actigraph wGT3X-BT (5) Journals (3 12-packs) Educational materials (pens and pamphlets) GTT kits (15) 	<ul style="list-style-type: none"> \$1,625 \$33.99 \$145.23 \$675
Travel <ul style="list-style-type: none"> Program Manager Mileage Implementation Coordinator Mileage 	<ul style="list-style-type: none"> \$500 (\$250 each employee)
Services <ul style="list-style-type: none"> 3-month gym membership vouchers (5) 	<ul style="list-style-type: none"> \$270

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<ul style="list-style-type: none"> • Rideshare vouchers for participants 	<ul style="list-style-type: none"> • \$1,225
Other <ul style="list-style-type: none"> • Marketing flyers (100) • Radio advertisement fee • Reusable water bottles (30) • Athletic shoes for participants • Group counseling space rental • Isn't It Sweet Kickoff Event <ul style="list-style-type: none"> ○ Food ○ Decor ○ Ribbon-cutting supplies ○ Space rental 	<ul style="list-style-type: none"> • \$12.93 • \$300 • \$64.99 • \$3,000 • \$1,500 • \$1,440 <ul style="list-style-type: none"> ○ \$400 ○ \$400 ○ \$39.99 ○ \$600
Total Direct Cost	\$224,142.14

Budget Year 2

Category	Amount Requested
Salaries and wages <ul style="list-style-type: none"> • Program Manager (Full-time) • Implementation Coordinator (Full-time) • 6 Employees (Part-time) 	<ul style="list-style-type: none"> • \$65,000 • \$55,000 • \$93,000 (15,500 each)
Supplies and materials <ul style="list-style-type: none"> • Educational materials (pens and pamphlets) • GTT kits (360) 	<ul style="list-style-type: none"> • \$200 • \$16,200
Travel <ul style="list-style-type: none"> • Program manager mileage • Implementation coordinator mileage 	<ul style="list-style-type: none"> • \$500 (\$250 each employee)
Services <ul style="list-style-type: none"> • 1-year gym membership vouchers (30) • Rideshare vouchers for participants 	<ul style="list-style-type: none"> • \$10,800 • \$7,400
Other <ul style="list-style-type: none"> • Group counseling space rental 	<ul style="list-style-type: none"> • \$1,500
Total Direct Cost	\$249,600

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