

TwoHearts Study - Participant Handbook

PREGNANCY



Session 1

Welcome to Session 1! We are delighted to support you as you learn more about pregnancy, healthy eating and an active lifestyle. In this session you will cover four topics with your health coach. These topics are the pillars of how we aim to support you in this program.

Feel free to dive into the module! You'll find all the links to the resources mentioned throughout on the last page for easy access.

Before this Session - please complete a quick Diet History using the [Intake 24 Tool](#)

Topic 1. Understanding your future risk of Diabetes & Heart Disease

1.1. Introduction to pregnancy complications

In the Session 1 Pregnancy Knowledge Video, you learnt about a range of complications that could happen in pregnancy. Here, we are going to focus on:



Gestational Diabetes (or high blood sugar in pregnancy)

a form of diabetes that happens in pregnancy because the placenta might cause a hormone problem that affects insulin. Insulin is the hormone that helps control blood sugar, therefore blood sugar levels can become not normal.



Hypertensive disorders of pregnancy (or high blood pressure in pregnancy)

a common medical condition when a pregnant woman's blood pressure is regularly measuring as greater than 140/90 mm/Hg

Resource 1 contains details of additional pregnancy complications, symptoms and treatment.

Resource 2 and **resource 3** are fact sheets on gestational diabetes and high blood pressure in pregnancy.

1.2. Links to future health problems

Lowering your chances of developing gestational diabetes and high blood pressure during pregnancy are important because they can affect your future health and the health of your children. Developing one or both of these conditions can increase future risk of diabetes and heart disease for you and your children.



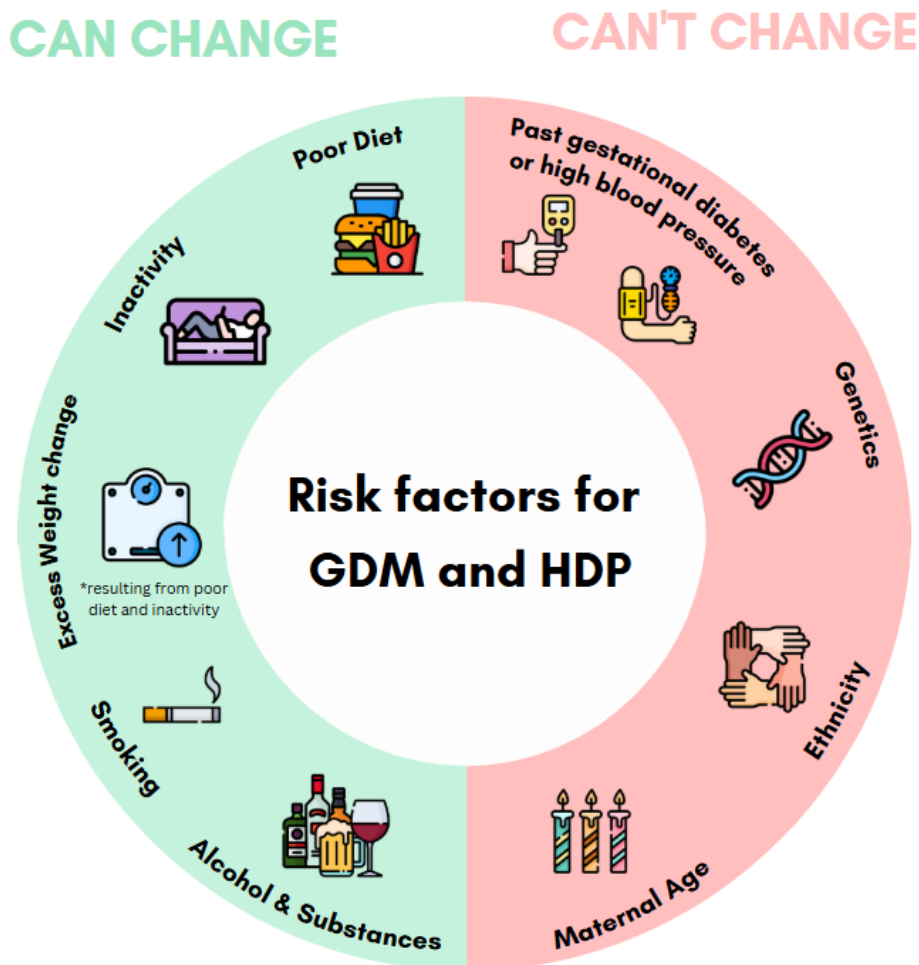
Discuss the meaning of diabetes and heart disease, as well as these complications in more depth with your health coach.

1.3. What puts you at higher risk of developing these conditions?

Factors that influence whether or not we develop a health condition can be classified into:

- Modifiable, meaning a person **can change** or control them, or
- Non-modifiable, meaning a person **cannot directly change** or control them.

Gestational diabetes and high blood pressure in pregnancy have their own set of risk factors. They are presented in the diagram below and your health coach will discuss these factors with you.


















GDM; Gestational Diabetes, HDP; Hypertensive Disorders of Pregnancy

Topic 2. Eating well for a Healthy Pregnancy

2.1. A Healthy Diet

Pregnancy is a life stage that requires Mums-to-be to get enough energy and nutrients for growth, development and other important processes. The recommended serving sizes for each food group (per day) *during pregnancy* are listed in the figure below.

Fruit	Vegetables, Legumes/Beans	Grain and/or Cereal	Dairy and/or alternatives (eg. soy, oat or others fortified with calcium)	Lean meats and/or alternatives (eg. eggs, tofu, nuts, seeds, legumes)
2 serves	5 serves	8.5 serves	2.5 serves	3.5 serves
What does one 'serve' of each food group look like? See examples below.				
 1 medium	 2 medium or half cup frozen	 1 slice	 1 cup	 100 grams
 2 small	 1 cup	 Half cup cooked	 2 slices	 80 grams
 1 cup	 1 cup	 Half cup cooked	 3/4 cup	 30 grams

For more information, see [the Australian Dietary Guidelines for pregnancy](#).

Remember to drink plenty of water, limit your intake of processed foods and drinks and don't drink alcohol when planning pregnancy or when pregnant.

Resource 4 shows how the dietary guidelines provide health benefits and what some of those benefits are for you and your growing baby.

2.2. Heart Healthy Diet Elements

The Session 1 Pregnancy Knowledge Video introduced the key principles of a heart healthy diet. Following these principles can lower the risk of diabetes and heart disease.

Please access **Resource 5**, to view the principles of a heart healthy diet and practical tips for making heart healthy diet changes.



Discuss the benefits of eating a healthy diet with your health coach. Your health coach will explain how the foods and nutrients eaten influence growth and how your body functions.

Topic 3. Staying active during pregnancy

3.1. The benefits of physical activity in pregnancy

Regular physical activity can improve your physical, mental and emotional well-being during this transformative time.

Benefits of Physical Activity for a Healthy Pregnancy

Staying active during your pregnancy can improve all of the areas listed below.

Healthy Pregnancy

- Helps to keep body weight in the recommended range
- Reduces the risk of high blood sugar and blood pressure in pregnancy

Mood and Sleep

- Balances emotions
- Reduces anxiety & depression
- Improves body image & self-esteem
- Reduces insomnia
- Increases quality of sleep

Energy and Pain

- Improves energy levels
- Increases coordination and awareness
- Reduces pelvic and lower back pain
- Improves posture
- Helps manage urinary incontinence

Heart Health and Fitness


- Improves the heart's ability to pump blood to lungs and throughout body
- Boosts breathing ability
- Improves overall fitness

Birth Outcomes

- Decreases caesarean births and operations during birth
- Helps natural birth

Postpartum

- Leads to better recovery
- Helps postpartum mental health
- Decrease postnatal depression
- Improves overall wellbeing



3.2. Let's get some guidance! (Guidelines to Physical Activity during pregnancy)

Just like the dietary guidelines for pregnancy, there are research-based, expert-endorsed [physical activity and sedentary behaviour recommendations for pregnancy](#). The guidelines provide advice about optimal timing, type and intensity of physical activity. This will benefit both you and your growing baby's health. In the Session 1 Pregnancy Knowledge Video, you were introduced to:

- **Timing** – Try to do about 30 minutes of moderate intensity exercise, five days a week.

When you add it up, that equals 150 minutes every week. *Well done!*



- **Intensity** – Try Measure the exercise intensity by doing The Talk Test



The talk test is one of the easiest ways to monitor your exercise intensity on a scale. To do it, you see if you can talk or hold a conversation during activity. In general, if you're doing moderate-intensity activity, you can talk but not sing during the activity.

- **Types** – Aerobic: Brisk pace walking, swimming/aqua jogging/stationary cycling.
Strength: 2 times a week, 2-3 sets of 12-15 reps.
Use body weight, light hand weights, and/or resistance bands.
Pelvic floor exercises.

A Few Things to Note

- Guidelines advise women not to sit for long periods of time. Stand up, walk around and move around.
- For women who routinely participated in a larger amount of exercise or more vigorous exercise (e.g., running) before pregnancy. This may be continued during and after pregnancy, if it is an uncomplicated pregnancy.
- It is important to keep hydrated and avoid raising body temperature too high.

Resource 6 is a great way to make sense of the guidelines.



Your health coach will break down each recommendation presented in resource 6 and together explore how being active influences growth and bodily functions.

3.3. Warnings and Cautions to Physical Activity during Pregnancy

Physical activity is safe for pregnant women without any pre-existing reasons that make keeping physically active a problem. Although most types of physical activity are safe, there are some positions or movements that can be uncomfortable and some that may be harmful to you and/or your baby.

Here's a few things to avoid:



Don't raise your body temperature too high – don't soak in hot spas or attend hot Pilates.



Don't exercise to the point of exhaustion.



Don't lift heavy weights, or start doing a lot more exercise than you did before you were pregnant or overextend your stretches.



After 28 weeks, you should not do exercises lying flat on your back. Instead, tilt your upper body to a 45-degree angle or do the exercises lying on your side. Start getting into this habit.

If you experience any of the following, please stop exercise immediately and see your doctor:

- Headaches, dizziness or feeling faint
- Heart palpitations or chest pain
- Swelling or pain in the face, hands, feet or calves

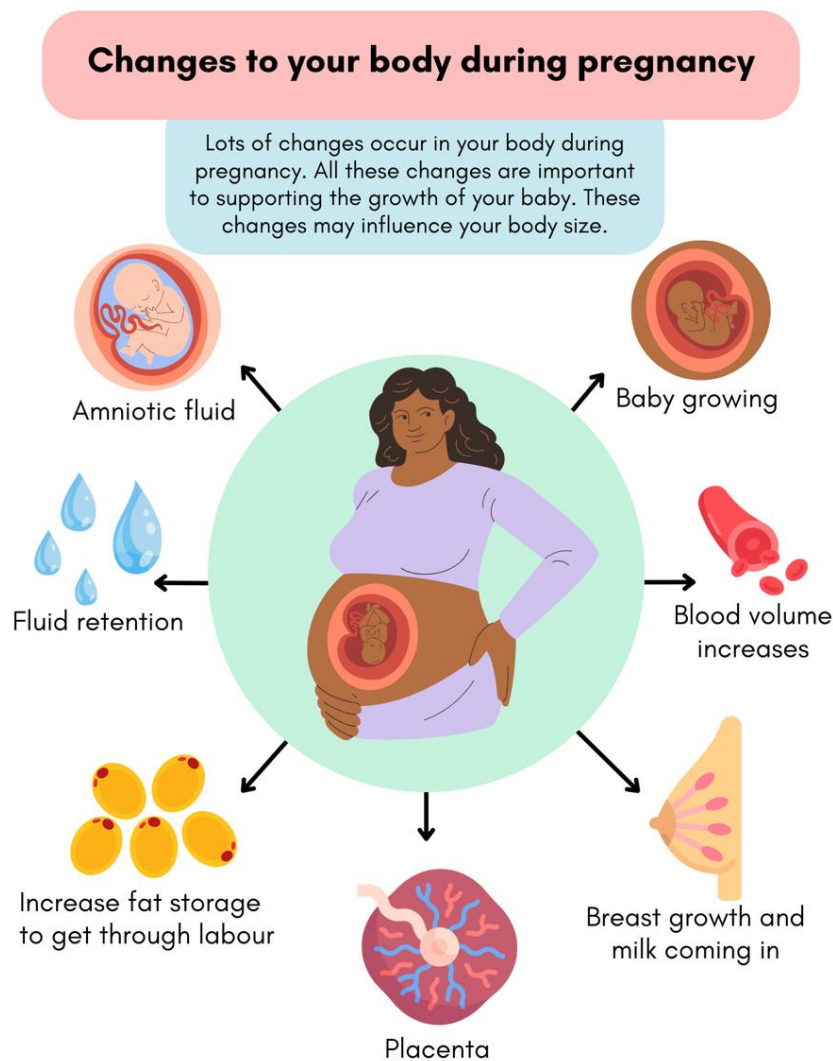
- Vaginal bleeding
- Pain, cramping or muscle weakness in the lower abdomen, lower back or pelvis
- An unusual change in your baby's movements



Check with your doctor, midwife or physiotherapist before doing any movements that you have not done before or feel unsure of.

Topic 4. Body changes during pregnancy

During pregnancy your body changes in many different ways to support the growth and development of your baby. These changes to your body may influence the number you see on the scales but are often an essential part of pregnancy including the placenta and amniotic fluid which are critical for your baby. Other changes such as fluid retention, blood volume and breast tissue growth/milk coming in can influence the number you see on the scales.



Gaining Weight during Pregnancy

Putting on weight is a normal and unavoidable part of pregnancy. Every woman and the development of her baby is unique, and many factors influence changes in body size during pregnancy. Maintaining a balanced approach to nutrition and health is important, as very big changes in body size can sometimes have long-term impacts.

As a guide, the table below displays the recommended changes in body size for each stage of pregnancy based on body mass index (calculated using weight and height) before pregnancy. The ideal amount of weight you put on during pregnancy very much depends on your pre-pregnancy weight, as well as things like your age, ethnicity and so on.

	BMI Ranges	Less than 18.5 kg/m ²	18.5 - 24.9 kg/m ²	25 - 29.9 kg/m ²	Higher than 30 kg/m ²
Stage of Pregnancy	First Trimester (Total over 13 weeks)	1 - 3kg	1 - 3kg	0 - 1kg	0 - 1kg
	Second and Third Trimester (Amount per month)	2 - 2.6kg	1.5 - 2.3kg	1 - 1.15kg	0.8 - 1.2kg
	Total Healthy Weight Gain	12.5 - 18kg	11.5 - 16kg	7 - 11.5kg	5 - 9 kg

As part of this study, we will help you to monitor any changes to your body size during your pregnancy using:



Bluetooth Scales: Record your weight weekly, save it to the mobile application or take a screenshot. Provide this to your health coach during or before each live session.



Healthy weight gain during pregnancy Calculator: This calculator is designed to help you check in on your progress throughout your pregnancy.

Need a little extra support?

Striking the right balance when it comes to changes in your body size during pregnancy can be tricky. If you have any questions or concerns about the amount your body size has changed during your pregnancy, you can chat to:

Your Health Coach (via email or phone).

TwoHearts Study Coordinator: Dr Anj Reddy (anjana.reddy@monash.edu) or 0468 733 432.

Your experienced and qualified midwife or health professionals at Monash Health Antenatal Care.

Let's get SMART!

Setting Goals related to heart healthy eating during pregnancy

It is now time to discuss your habits, goals and potential obstacles with your health coach. We will help you to plan and continue to make healthful lifestyle changes for yourself and your baby. What goals around heart healthy eating during pregnancy would you like to set? This is a **patient-centred approach** so all of our advice will be **tailored to you, your wants, needs, preferences and cultural considerations**. Our aim is to assist, empower and encourage you to create SMART goals (1-2) related to healthy eating during pregnancy.



Remember, before this session please complete a quick Diet History to discuss with your coach.

Session Resources

Resource 1 – Pregnancy complications, symptoms and treatment
Resource 2 – Gestational Diabetes Factsheet
Resource 3 – High Blood Pressure Factsheet
Resource 4 – Making Sense of the Dietary Guidelines during Pregnancy
Resource 5 – A Heart Healthy Diet Guide
Resource 6 – Making Sense of the Physical Activity Guidelines during Pregnancy

Quick Access Glossary

<https://mchri.org.au/2hearts/glossary/>