



Should you be eating for TWO?

Gestational Diabetes

Gestational Diabetes or GDM is a temporary form of diabetes that occurs during pregnancy and usually goes away after the baby is born. Hormonal changes during pregnancy alter the body's requirement for insulin. To manage GDM effectively, it is important to control blood glucose levels while maintaining a healthy diet.

Will GDM affect me?

There is greater chance of developing Pre-eclampsia* and Urinary tract infections. Women who develop GDM are at high risk of developing type 2 diabetes later in life but this risk can be reduced through

lifestyle modifications. It is important that you receive dietary advice as well as education about your pregnancy and lifestyle issues.

Will GDM affect my baby?

Your baby will not be born with diabetes but if your GDM is not well controlled, it may affect your baby. The baby grows too large because extra glucose crosses the placenta into the baby's blood. The baby's pancreas then makes extra insulin to cope with this and the baby grows too large (a condition called Macrosomia), which increases the risk of complications during delivery.

GDM is usually managed by following a healthy well-balanced eating plan taking into consideration the carbohydrate intake and physical activity. For those who are unable to manage GDM with diet and activity alone, medication or insulin is needed.

Healthy Eating

- ❖ helps control your blood glucose levels.
- ❖ helps meet nutritional requirements for you and your growing baby.
- ❖ helps achieve suitable weight gain.



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How much weight should you gain?

Weight gain during pregnancy varies and your expected weight gain depends on your pre-pregnancy weight status as measured by the Body Mass Index (BMI).

$$BMI = \frac{\text{Weight (kg)}}{\text{Height (cm)} \times \text{Height (cm)}}$$

IF PRE-PREGNANCY BMI IS	RECOMMENDED WEIGHT GAIN DURING PREGNANCY SHOULD BE
<18.5	12.7 – 18.1 kg
18.5 – 24.9	11.3 to 15.9 kg
25.0 – 29.9	6.8 to 11.3 kg
≥30	5 – 9.1 kg

Reference: Healthy Start For Your Pregnancy, Health Promotion Board (HPB) Adopted from Institute of Medicine Guidelines (IOM 2009)

Pregnancy is not a time to diet as this may deprive the baby of nutrients needed for growth. Insufficient weight gain is also linked with preterm birth. Gaining too much weight during pregnancy can also cause problems such as high blood pressure, complications in delivery, and longer hospital stays for you or your baby. If you are gaining too much weight, try to minimise the intake of high-fat, high-sugar foods and exercise regularly.



Watch the sugar

Research has shown that including small amounts of added sugar (e.g., a small spread of jam on toast, a teaspoon of Milo in milk) does not significantly increase blood glucose level. However, taking excessive sugar and sugary foods makes it difficult to control diabetes and may contribute to excessive weight gain. Try to minimise your intake of foods such as:

- Sugar (raw/ brown/ white, honey, etc.)
- Honey, jam or syrup
- Chocolates, desserts, biscuits and sweets
- Soft drinks and sweetened drinks
- Flavoured milk
- Canned fruit in syrup



Eat regularly and consider carbohydrate intake

It is important to have regular meals because skipping meals usually leads to over-eating and can cause poor blood glucose control. Carbohydrate is still your important source of energy. It is recommended that you distribute carbohydrate evenly throughout the day into six to eight meals and snacks with smaller amounts of carbohydrate (15 to 45g) at breakfast and mid-meals. To know your carbohydrate requirements and the amount you need for each meal, you may consult your dietitian to get an individually designed diet plan.

Food items	Serving size for 15g CHO
Rice, cooked (white/ brown)	¼ bowl or 3 heaped tablespoons
Bread	1 slice
Crackers, plain/wheat	3 pieces
Oats	3 Tablespoons
Whole fruits, e.g., apple, orange and pear	1 fist size
Cut fruits, e.g. watermelon, papaya and honeydew	1 slice
Low fat milk	1 cup 300ml

Complex carbohydrates and some low Glycaemic Index* food items are recommended. Whole-grains, wholemeal bread, cereals, beans, vegetables and fruits are some good choices. (* Refer to the article, "The Highs and Lows of Glycaemic Index", in Diabetes Singapore Issue 38, Jul-Sep 2011, which is available online at www.diabetes.org.sg/publications)



Consider the fats in your diet

Eating a lot of fats may result in excessive weight gain and poor blood glucose control. All fats are equally high in energy, which can contribute to weight gain so consume or use them in moderation.

- Avoid deep fried food, fast food and junk food as most are high in fat. Select snacks with the Healthier Snack Symbol.
- Choose lean meat and skinless poultry. Remove all visible fat and skin before cooking. Avoid fatty meat (e.g., bacon, sausage, corned beef, Chinese sausage or *lapcheong* and luncheon meat.)
- Choose low fat dairy products (e.g., skimmed milk, low fat yoghurt and reduced fat cheese).
- Substitute cooking fat such as lard, ghee or blended vegetable oil with polyunsaturated or monounsaturated oils (e.g., olive oil, sunflower oil). Substitute butter with transfat-free polyunsaturated/monounsaturated margarine. Replace coconut milk and cream with skimmed/ low fat yoghurt or milk.
- Choose low fat cooking methods such as grilling, baking, steaming, boiling and microwave; avoid deep frying.



Am I getting enough nutrients?

Energy, protein and many other nutrients are important for growth and development; therefore it is important to eat according to the Healthy Diet Pyramid to meet your baby's and your nutritional requirements.

Recommended food servings:

FOOD GROUPS	EXAMPLE OF ONE SERVING	NO. OF SERVINGS	
		Pregnancy	Lactation
Rice & alternatives	½ bowl cooked rice or noodles	5 - 7	5 - 7
Fruits & Vegetables	1 fruit ¾ mug cooked vegetables	4 - 5	4 - 5
Milk/ milk products	1 cup milk 2 slices of cheese	3	4
Meat & alternatives	90g cooked meat /fish	2	2