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For easy reference, the book has been classified into three trimesters and an additional section on “Getting ready to be a dad”. However, some chapters are applicable to all stages of pregnancy and even after childbirth.

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This resource is designed as a general reference and should not replace any health advice provided by your doctor.
Congratulations!

We are really happy for you and your spouse! Your biggest responsibility now must be to ensure that your baby is the healthiest he or she can be, even before birth.

Taking steps to ensure you are healthy during pregnancy can influence the physical and mental well-being of your baby from birth to his or her later years.

This Healthy Start For Your Pregnancy guide provides you and your spouse with informative and practical tips to maintain a healthy pregnancy. It is designed for easy reading and use. Sections are categorised according to each trimester of the pregnancy. We have included pages for you to create a memorable journal of your pregnancy and your baby’s progress and development.

We hope this guide will help both of you ease into this new phase of life and prepare for the amazing ride ahead. Have a wonderful and healthy journey.

Health Promotion Board

Healthy Start For Your Pregnancy is published under the Healthier Child, Brighter Future initiative
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- Centre for Fathering Singapore
- Children’s Services, National Library Board
- Dads for Life
- Early Childhood Development Agency
- Singapore Sports Council
What happens in the first trimester

**Weeks 1–6**

**Baby’s development**
After the embryo has implanted in the lining of your womb, the foetal brain, lungs, central nervous and intestinal systems start to form. By the end of week six, the embryo measures about 4mm and the heart starts to beat. At this juncture, an ultrasound scan through the vagina can detect the heartbeat and confirm that the pregnancy is in the right location. The foetus is too small to be seen clearly by the abdominal scan at this stage.

**Your symptoms**
You may feel fine and the first clue that you might be pregnant is usually a missed period. Some women complain of breast tenderness or tiredness. You can do a home pregnancy test and consult a doctor for confirmation at about six weeks. Let him know if you are on long-term medication or have any medical conditions.

**Weeks 7–12**

**Baby’s development**
The foetus will go through rapid growth. By week 12, most of the major organ systems would have developed and the foetus measures about 6cm from head to the buttock. The following changes are observed:
- The head is growing to accommodate the enlarging brain.
- Eyelids are present in the shape of folds. By the end of week 12, they will meet and fuse, remaining closed until the end of week 24.
- External sex organs are well differentiated by week 12.
- Limbs continue to develop and nails appear on the digits. The moving limbs can be “seen” on a scan but movements cannot be felt yet.

**Your symptoms**
Your pregnancy hormones will start to kick in. You may experience morning sickness, breast tenderness and fatigue.
I’m going to be a mum!

Do not feel anxious about the changes that pregnancy brings. There are positive steps you can take to make this a wonderful experience for you.

Being pregnant is a major milestone in a woman’s life. You are ecstatic about carrying a new life, yet there may be periods when you worry that you might not be a good mum. Allay these fears by learning to manage stress, gathering family and friends around you for support so that you can enjoy your pregnancy and be better able to cope with the challenges ahead.

Positive changes
Studies have shown that some chronic diseases such as heart disease, obesity and diabetes in adulthood are “programmed” during pregnancy and the early stages of a child’s life. A woman’s diet and lifestyle before conception and during pregnancy have important effects on the subsequent health of her child. It is therefore important that you adopt healthy habits even before you plan for a baby. However, it is never too late to start even if you are already pregnant. Now is a great time to take positive steps in making changes that will benefit your baby and yourself.
Keeping Healthy
Start with a good diet. Eating well not only ensures that you stay healthy but it also gives your unborn all the nutrients he needs. Include low-impact exercises such as walking and swimming to your daily regime to maintain a healthy weight, which is helpful in reducing the risk of complications during pregnancy.

Say no to vices
Cigarette smoke is bad for you and your unborn child. It contains carbon monoxide and ammonia, chemicals that are easily absorbed into your blood stream and passed on to your baby.

Smokers have an increased rate of miscarriage, premature birth and complications during labour.

Smoking compromises the health of the unborn child. Each time a pregnant mum draws a puff, the baby’s heart beats harder. Babies born to smokers tend to have lower birth weight, slower growth, damages to airways resulting in breathing problems or asthma, and have a higher chance of Sudden Infant Death Syndrome (SIDS).

The risk is just as great if you do not smoke, but your family members do. It is best to get them to quit smoking.

Another no-no during pregnancy is drinking alcohol. You have a higher chance of miscarriage and the risks to your baby include low birth weight, congenital abnormalities and defects in intelligence, language and memory.

Now is the best time to make a switch. Eat balanced meals, quit smoking, avoid alcohol, and give you and your baby a healthy start.

TIPS TO HELP YOU QUIT SMOKING
- Draw up the reasons why you want to quit smoking so that you are motivated to keep off cigarettes for good.
- Set a quit date and do not give yourself excuses.
- Call QuitLine at 1800 438 2000 to speak to the counsellors or request for free resources to help you stub it out.
- Throw away all cigarettes, lighters and ashtrays.
- Get family members and fellow smokers to support you and ask them to respect your decision to quit.
- Stay away from people, places and situations that might tempt you to smoke.
- If you experience withdrawal symptoms such as constant cravings or headache, follow the 3Ds:
  o Distract yourself by doing something else
  o Do deep breathing exercises
  o Drink a glass of water, fruit juice or milk slowly
- Use the money saved from the cigarettes to treat yourself.

* For the sake of simplicity, he/his/him are used to represent both genders.
Prepare your older child

If you have an older child, do prepare him for the arrival of his new sibling. Share the good news with him as you inform the rest of the family that you are expecting. By reiterating that the baby is “ours” and not “mine”, you are helping him to accept the unborn as part of the family.

You can manage your older child’s expectations by talking positively about the baby. Explain to him that if he receives less attention from you when the baby arrives, it does not mean you love him less. Emphasise that you still love him very much. Let him know that he is a big brother to the newborn and you are relying on him to teach and look after the baby. This will give him a sense of importance and responsibility. Check out libraries for colourful books that will introduce the idea of an upcoming baby in a fun manner (see page 100). You can also prepare him by letting him touch your growing belly, getting him to remind you to eat healthily or even helping you to decorate the baby’s room.

If your child is a toddler, do not wean him off his bottle, or pacifier if he is on it, or pack him off to nursery school once the baby arrives. Such actions may cause him to feel insecure and unwanted, and inadvertently create unhappiness over the new baby.

Most important of all, relax and enjoy your pregnancy!
Eat well, mum

Eating well should start even before you plan for a baby and this should be maintained throughout your pregnancy. Good nutrition safeguards your health during pregnancy and ensures that the foetus grows and develops well in the womb.

It is best to get nutrients from the food you eat. If you are concerned about your diet, speak to your doctor or dietitian who will be able to guide you on the types and portions of foods to eat and the areas you can work on. Do not take any form of supplement without consulting your doctor.

**Nutrients and benefits**

There are more than 30 different types of nutrients needed daily to sustain good health and promote foetal growth. These include both macronutrients (e.g. carbohydrate, protein and fat) and micronutrients (e.g. vitamins and minerals), all of which have different functions for the body.

A healthy diet during pregnancy is essential for both the mother and the baby.
The nutrients that have been proven to be crucial in ensuring good pregnancy outcomes are:

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>What it does</th>
<th>Food Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folate (folic acid)</td>
<td>Helps prevent neural tube defects (malformations of the brain and spinal cord) in foetuses and anaemia in pregnant women.</td>
<td>Dark green leafy vegetables, citrus fruit and juices, lentils, fortified foods.</td>
</tr>
<tr>
<td>Iron</td>
<td>Aids in the formation of red blood cells and prevention of anaemia in pregnant mothers.</td>
<td>Red meat, chicken, eggs, fortified cereals, green vegetables, legumes, nuts.</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Enhances iron absorption.</td>
<td>Fresh fruits and vegetables.</td>
</tr>
<tr>
<td>Calcium</td>
<td>For building baby’s strong bones and teeth.</td>
<td>Dairy foods such as milk, yoghurt, cheese, leafy green vegetables such as broccoli, kale, spinach, nuts, tofu (calcium-fortified) and fish with edible bones, e.g. ikan bilis.</td>
</tr>
<tr>
<td>DHA (Docosahexaenoic acid)</td>
<td>One of the omega-3 fatty acids that is important for brain and eye development.</td>
<td>Fish, plant sources including a wide variety of seeds and nuts such as flaxseeds and walnuts.</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>For normal growth and vision.</td>
<td>Eggs, milk, red and yellow fruit, red and green vegetables.</td>
</tr>
</tbody>
</table>
What and how much should I eat
When planning what to eat, it is essential to include the right number of servings from the following food groups daily to get the nutrients you need.

<table>
<thead>
<tr>
<th>Food Groups</th>
<th>Recommended number of servings per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown Rice &amp; Wholemeal Bread</td>
<td>6–7</td>
</tr>
<tr>
<td>Fruit</td>
<td>2</td>
</tr>
<tr>
<td>Vegetables</td>
<td>3</td>
</tr>
<tr>
<td>Meat &amp; Others</td>
<td>3½</td>
</tr>
<tr>
<td>of which Dairy foods or calcium-rich foods</td>
<td>1</td>
</tr>
</tbody>
</table>

It is also important to limit foods and beverages that are high in fat, salt and sugar and ensure that you get a good mix of vitamins and minerals.

Know the serving sizes
The table below illustrates the size of one serving for each of the food groups.

Examples of 1 serving*

<table>
<thead>
<tr>
<th>Brown Rice &amp; Wholemeal Bread</th>
<th>Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 2 slices wholemeal bread (60g)</td>
<td>• 150g raw leafy vegetables</td>
</tr>
<tr>
<td>• ½ bowl** brown rice (100g)</td>
<td>• 100g raw non-leafy vegetables</td>
</tr>
<tr>
<td>• 2 bowls** brown rice porridge (500g)</td>
<td>• ¾ mug*** cooked leafy vegetables (100g)</td>
</tr>
<tr>
<td>• ½ bowl** whole-grain noodles, bee-hoon or spaghetti (100g)</td>
<td>• ¾ mug*** cooked non-leafy vegetables (100g)</td>
</tr>
<tr>
<td>• 4 plain wholemeal biscuits (40g)</td>
<td>• ¼ round plate+ cooked vegetables</td>
</tr>
<tr>
<td>• 2 wholemeal chapatis (60g)</td>
<td></td>
</tr>
<tr>
<td>• 1½ cups*** whole-grain breakfast cereal (40g)</td>
<td></td>
</tr>
<tr>
<td>• ½ bowl** uncooked oatmeal (50g)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Meat &amp; Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1 small apple, orange, pear or mango (130g)</td>
<td>• 1 palm-size piece meat, fish or poultry (90g)</td>
</tr>
<tr>
<td>• 1 wedge papaya, pineapple or watermelon (130g)</td>
<td>• 2 glasses*** milk (500ml)</td>
</tr>
<tr>
<td>• 10 grapes or longans (50g)</td>
<td>• 2 small blocks soft bean curd (170g)</td>
</tr>
<tr>
<td>• 1 medium banana</td>
<td>• ¾ cup*** cooked pulses (peas, beans, lentil) (120g)</td>
</tr>
<tr>
<td>• ¼ cup*** dried fruit (40g)</td>
<td>• 5 medium prawns (90g)</td>
</tr>
<tr>
<td>• 1 cup*** pure fruit juice (250ml)</td>
<td>• 3 eggs (150g)</td>
</tr>
</tbody>
</table>

NOTE:
* All weights listed are for edible portions only.
** rice bowl *** 250ml + 10 inch plate

Fluid needs
You should drink 8–10 glasses of water a day, while aiming for 9–12 glasses of total fluid intake per day. Total fluid intake is the total amount of fluid intake from foods (such as soup and porridge) and beverages (such as water and milk). If you are very active, you should increase your fluid intake.
# Sample Daily Menu for Mothers-to-be

<table>
<thead>
<tr>
<th>Sample Meal Plan</th>
<th>Number of Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td></td>
</tr>
<tr>
<td>Brown Rice &amp; Wholemeal Bread</td>
<td>1</td>
</tr>
<tr>
<td>Fruit</td>
<td>1</td>
</tr>
<tr>
<td>Vegetables</td>
<td>½</td>
</tr>
<tr>
<td>Meat &amp; Others</td>
<td>¼</td>
</tr>
<tr>
<td>2 slices of wholemeal bread with low-fat cheese and tomato</td>
<td>1</td>
</tr>
<tr>
<td>1 glass of low-fat milk (250ml)</td>
<td>½</td>
</tr>
<tr>
<td><strong>Mid-morning snack</strong></td>
<td></td>
</tr>
<tr>
<td>1 small wholegrain vegetable pau</td>
<td>1</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
</tr>
<tr>
<td>1 bowl* of sliced fish brown rice beehoon soup with vegetables</td>
<td>2</td>
</tr>
<tr>
<td>1 wedge of papaya</td>
<td>1</td>
</tr>
<tr>
<td><strong>Afternoon snack</strong></td>
<td></td>
</tr>
<tr>
<td>Vegetable sticks with dip</td>
<td>¼</td>
</tr>
<tr>
<td><strong>Dinner</strong></td>
<td></td>
</tr>
<tr>
<td>1 bowl of brown rice</td>
<td>2</td>
</tr>
<tr>
<td>1 palm-size piece of grilled chicken</td>
<td>1</td>
</tr>
<tr>
<td>¾ mug** of stir-fried mixed vegetables</td>
<td>1</td>
</tr>
<tr>
<td>1 apple</td>
<td>1</td>
</tr>
<tr>
<td><strong>Supper</strong></td>
<td></td>
</tr>
<tr>
<td>1 glass of low-fat milk (250ml)</td>
<td>½</td>
</tr>
<tr>
<td>2 plain wholemeal biscuits</td>
<td>½</td>
</tr>
<tr>
<td><strong>Total Servings</strong></td>
<td>6½ 2 3 3½</td>
</tr>
</tbody>
</table>

**NOTE:** This chart is based on a woman 1.60m tall, weighing 55kg, with a Body Mass Index of 21.

* rice bowl ** 250ml mug
Healthy snacks

Some pregnant women take smaller but more frequent meals. If you need a small snack in between main meals, here are some ideas:

**Cereal ‘n’ milk**
Have whole-grain cereal or oats with low-fat milk. Top with some sliced fruit.

**Fruit kebabs**
Thread some cubes of apples or grapes onto satay sticks and serve with a small tub of low-fat yoghurt.

**Handful of nuts**
Have a handful of mixed nuts for a quick snack or mix some ready-to-eat cereal, dried fruit and nuts in a sandwich bag for a snack on-the-go!

**Corn-on-the-cob**
Brush olive oil over steamed corn.

**Sandwiches**
Toasted wholemeal bread and include different fillings (e.g. baked beans, low-fat cheese, an omelette or cooked sardines/tuna).

**Homemade strawberry milkshake**
Blend ½ cup*** of low-fat yoghurt, ¼ glass of low-fat milk and ½ cup of strawberries, bananas or any fruit of choice for a delicious smoothie.

***250ml cup
**Foods and beverages to avoid**

Foods can affect you and your baby’s health more than you realise. Certain foods if not cooked or prepared properly can be associated with illnesses such as listeriosis. For a safe pregnancy, it would be advisable to avoid the following food and beverages:

- Unpasteurised milk, soft cheeses e.g. Blue, Brie, Feta and Camembert
- Raw salad and vegetables
- Alcohol
- Excessive caffeine. Limit your intake of caffeinated beverages to no more than two cups per day. Caffeine can be found in coffee, tea and some soft drinks.
- Raw or undercooked meat, poultry, seafood such as raw oyster, cockles, sashimi, and raw or half-boiled eggs and liver pâté
Debunking food myths

Once a woman becomes pregnant, she will receive a lot of well-meaning advice, particularly in the area of food. If you are concerned about the best nutrition for the baby and yourself, talk to your doctor or dietitian. Meanwhile, here are some common myths to take note of:

**Myth:** I am skinny, so I can eat whatever I like during pregnancy.

**Fact:** Do not adopt the “eating-for-two” approach. To ensure that baby gets optimal nourishment, focus on the quality of your diet. Cut back on fat, salt and sugar but increase your intake of whole-grains, fruits, vegetables, legumes and low-fat dairy products.

**Myth:** Eating bird’s nest will give baby fair skin.

**Fact:** There is no clinical evidence to show that eating bird’s nest can lighten skin pigmentation.

**Myth:** If I eat more tofu and soya bean products and avoid dark-coloured foods or beverages, I will have fair babies.

**Fact:** Skin colour is genetic. No food can change a child’s genetic make-up. Avoiding certain foods or food groups may mean missing out on necessary nutrients that these foods provide.

**Myth:** Eating papaya, pineapple and “cooling foods” such as grass jelly and green bananas may lead to miscarriages.

**Fact:** There is no documented case of miscarriage from eating these fruits and food. Miscarriages could be due to abnormally formed foetuses, or infections, or certain medical conditions. Eat a healthy and well-balanced meal with foods from all four food groups. Fruits are high in fibre, vitamins and minerals. Eating a variety of coloured fruit is encouraged. If you are worried, eat other fruits to make up the required two servings per day.

**Myth:** Eating herbs and tonics will make my baby more intelligent.

**Fact:** There is no evidence to show that consuming herbs and tonics during pregnancy will help the baby become more intelligent.

**Myth:** Full-cream milk is more nutritious.

**Fact:** Low-fat and skim milk products have all the valuable nutrients that full-cream milk has, but come with less fat, especially saturated fat. Low-fat milk or dairy product is the preferred choice for expectant and breastfeeding mothers as it is lower in calories too.
During pregnancy, many women worry that if they eat too much, they will put on too much weight. If they eat too little, they worry that their baby’s health is at risk. You need to eat a well-balanced diet to ensure that your baby gets the optimal nutrition needed for good health and growth.

It is important to maintain your weight in the healthy weight gain range, as putting on too much weight in pregnancy increases your risk of developing gestational diabetes (see page 40), pregnancy-induced hypertension (see page 41), a more difficult childbirth and a higher chance of requiring a caesarean section (C-section). It is also more difficult to administer epidural anaesthesia for pain relief in obese mothers during their labour.

Excessive weight gain may also result in large babies that are more likely to become obese and diabetic later in life. Mums who do not shed the excess kilos after childbirth are also more likely to develop diabetes, high blood pressure and heart diseases when they get older.
However, do not embark on a weight loss programme during pregnancy even if you are overweight as it can be dangerous for you and your baby. Make healthy changes in your diet or talk to your doctor if you are worried about your weight.

So, how much should you gain? It depends on your Body Mass Index (BMI) and pre-pregnancy weight. There is no one-size-fits-all approach to pregnancy weight gain, so discuss this with your doctor if you are unsure. The table below will give you a general guide on your healthy weight gain range.

### Guidelines for Pregnancy Weight Gain

<table>
<thead>
<tr>
<th>BMI (Pre-pregnancy)</th>
<th>Recommended Weight Gain (During pregnancy)</th>
<th>Recommended Weight Gain for Twin/Multiple Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18.5</td>
<td>12.7 – 18.1kg</td>
<td>Discuss with your obstetrician and/or dietitian</td>
</tr>
<tr>
<td>18.5 – 24.9</td>
<td>11.3 – 15.9kg</td>
<td>16.8 – 24.5kg</td>
</tr>
<tr>
<td>25.0 – 29.9</td>
<td>6.8 – 11.3kg</td>
<td>14.1 – 22.7kg</td>
</tr>
<tr>
<td>≥ 30</td>
<td>5.0 – 9.1kg</td>
<td>11.3 – 19.1kg</td>
</tr>
</tbody>
</table>

* Adopted from Institute of Medicine Guidelines (IOM 2009)

**PREGNANCY WEIGHT GAIN CHECKLIST**

My pre-pregnancy weight: ___________ kg

My height: ___________ m

My BMI: \[
\text{Weight (kg)} = \frac{\text{Weight (kg)}}{\text{Height (m) X Height (m)}}
\]

Based on the above, my recommended weight gain range during pregnancy should be ___________ kg.
What should I do if I am not gaining enough weight?
Gaining too little weight may cause premature birth or a low birth weight baby (< 2.5kg). This could be related to your pre-pregnancy weight and diet. This could also mean your baby may not be getting the optimal nutrition he needs for growth. Morning sickness in early pregnancy is common and some women may experience slight weight loss at this time. It is important to ensure adequate hydration and get enough sustenance to tide over this time. Try to have at least three meals a day, with two to three regular snacks in-between. Turn to page 15 for ideas on nutritious snacks and page 37 for tips on managing nausea.

Morning sickness usually improves in the second trimester and this is when weight gain is likely to become more significant. See your doctor if you cannot retain any food or fluid or if you have any concerns about your weight.

What should I do if I am gaining weight too quickly?
Learning to control your weight is important as gaining too much weight during pregnancy can increase your blood pressure and may increase your risk of developing gestational diabetes. It is important to watch what you eat by following a well-balanced diet and limiting your intake of foods high in fat, salt and sugar.

Do not adopt the “eating-for-two” approach and remember to include exercise in your daily routine.

Here is how you can limit your consumption of high-fat food:
• Cut down on creamy cakes, pastries, deep fried foods such as goreng pisang (banana fritters), curry puffs and keropoks (fried crackers). Opt for healthier snack choices instead (see page 15).

• Choose low-fat dairy products (e.g. milk, cheese, yoghurt).
• Trim fat from meat and remove skin from poultry before cooking.
• Use healthier cooking methods such as grilling, steaming, baking or stir-frying, instead of deep-frying.

Reduce sugar intake by:
• Drinking water, not sweetened beverages or fruit juices.
• Limiting chocolates, ice creams, sweets and desserts.

In general, choose foods labeled with the Healthier Choice Symbol or Healthier Snack Symbol as these are usually lower in fat (especially saturated fat), sugar and salt, and higher in fibre compared to other regular products of a similar range.

Pregnant and active
Do not settle for a sedentary lifestyle once you are pregnant. Eat well and stay active. Being physically active has many benefits for you and your baby.

Turn to page 22 for information on suitable exercises during pregnancy.

Did you know...
The greatest amount of weight loss occurs in the first three months after you give birth and continues at a slow and steady rate until six months after birth. You can return to your pre-pregnancy weight relatively quickly once you start breastfeeding as the weight gained during pregnancy is used as fuel to make your breast milk. Healthy eating and physical activity will help you keep weight gain in check during your pregnancy and will also help you shed the excess weight after childbirth.
Being fit when pregnant

Keeping active during pregnancy is good for you and your baby
Getting pregnant does not mean you should cease all physical activity. In fact, keeping fit during pregnancy improves your stamina and helps you maintain strength and endurance. It helps you cope and may even shorten your labour. More importantly, it helps you get back into shape after your delivery.

It is advisable to check with your doctor before you start an exercise regime, especially when you have any medical condition (e.g. serious heart disease, high blood pressure etc) or have some problems in your past or current pregnancy.

**Suitable exercises and sports throughout pregnancy**

You can continue your normal daily physical activity such as walking for as long as you feel comfortable. If you are in a gym or exercise class, do let your instructor know that you are pregnant. If you are not normally active, do not start strenuous exercises suddenly. You can start slowly with as little as five minutes of physical activity and increase the intensity and duration as your stamina increases.

Moderate physical activity is recommended on most, if not all days of the week. It is important not to over exert yourself. As a general rule, you should be able to carry a conversation while exercising.

For normal pregnancies, the following exercises and sports are suitable throughout the pregnancy. As the pregnancy progresses, you may have to reduce the intensity.

- Brisk walking (outdoor or treadmill)
- Swimming
- Cycling (stationary) – a recumbent bike with back support may be more comfortable
- Working out using cross training machines
- Non-contact sports that do not involve the possibility of contact with another player or falling, e.g. golf, bowling

If you cannot fit an exercise routine into your schedule, you can increase physical activity by using the stairs instead of the lift. If you take public transport, consider getting off the bus one stop earlier and walk home. Even a walk after dinner will do you good.

**Pelvic floor exercise**

The pelvic floor muscles support the bowel, bladder, womb and vagina. Pregnancy and childbirth can stress the pelvic floor muscles and cause leaking of urine when you sneeze, cough or strain (also known as stress incontinence) during pregnancy which may persist later in life. Strengthening the pelvic floor muscles will reduce this risk. It should start during pregnancy and continue even after delivery.

Imagine trying to hold or stop urinating by squeezing the lowest muscles of your pelvis. Try to hold the squeeze for 5-10 seconds and release slowly. Relax your abdominal muscles while doing it and do not hold your breath. Alternatively, perform short and hard squeezes and repeat 10 times. This exercise can be performed lying down, sitting or standing.

**Sports to avoid during pregnancy**

Be sensible when you exercise during pregnancy because it can have an impact on the foetus. Avoid sports or exercises that put you at risk of:

- Being hit, such as contact sports like judo, kickboxing.
- Falling, such as horse riding, cycling outdoor.
- Decompression sickness, such as scuba diving.
Altitude sickness from the decreased oxygen, such as exercising in high altitude before acclimatisation.

Feeling faint, such as lying flat on your back after 16 weeks of pregnancy. The weight of the womb and baby can compress the big blood vessel located at the back.

Stop exercising and see your doctor if you feel unwell or have any concerns about your foetal well-being. Some of these symptoms include:

- Vaginal bleeding
- Decreased baby movements
- Fluid leaking from the vagina
- Painful womb contractions
- Chest pain or irregular/rapid heartbeat (palpitation)
- Dizziness
- Shortness of breath
- Headache
- Calf pain/swelling
- Excessive fatigue
# How to exercise safely during pregnancy

<table>
<thead>
<tr>
<th>Trimester</th>
<th>Changes in your body</th>
<th>Things to note during exercise</th>
<th>Safety measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Throughout pregnancy</strong></td>
<td>Heart rate, metabolic rate and body temperature increase. Baby gets oxygen and nutrients for growth and development via the placenta.</td>
<td>Exercise increases blood flow to the working muscles, which may compromise blood flow to the placenta for baby’s use. Be careful not to over-exercise as this may cause your body to overheat and may result in organ malformation in baby.</td>
<td>This is not the time to train or participate in competitive sports or to beat your personal best. Heart rate is a poor indicator of exercise intensity during pregnancy. Always drink water before, during and after exercising. Pick the coolest time of the day to exercise. Warm up first by walking. Maintain your workout at a level that allows you to have a conversation. After exercising, cool down by gradually reducing the intensity and stretching your muscles.</td>
</tr>
<tr>
<td><strong>1st</strong> (week 1 - 12)</td>
<td>Breast soreness, fatigue, morning sickness.</td>
<td>If you often vomit or have poor fluid intake, you will dehydrate and this may increase the risk of overheating, resulting in organ malformation in the baby.</td>
<td>Always drink lots of fluids and keep your body cool. If you are not well, do not exercise.</td>
</tr>
<tr>
<td><strong>2nd</strong> (week 13 - 28)</td>
<td>Appetite returns, weight increases, breasts and womb start to enlarge.</td>
<td>This is a good time to begin or carry on with your exercise regimen as risks and discomfort of pregnancy are at their lowest.</td>
<td>Once past your fourth month, do not work out while lying on your back. The weight of the womb may interfere with blood circulation.</td>
</tr>
<tr>
<td><strong>3rd</strong> (week 29 - 40)</td>
<td>Your enlarging womb will press against the rib cage causing shortness of breath. Hormonal changes result in loose joints and you may experience lower abdominal and back discomfort. Increased pressure on bladder causes frequent urination.</td>
<td>You will feel more tired and may use up more energy during exercise. Risk of falls, injury on lower back, pelvis, joints and muscles increase. Possible urine leakage during exercise.</td>
<td>Expect a decline in overall activity and fitness level at this point. Reduce exercise volume and intensity if you feel tired or uncomfortable. Before exercising, empty your bladder to minimise urine leakages. Practise pelvic floor exercise to strengthen the pelvic floor muscles. Avoid contact sports and strenuous activities. Appropriate resistance training during pregnancy helps to keep muscles and joints strong and reduces body aches and pain.</td>
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Information in this chapter adapted from “A Must-Have Sports Guide For Mums”, courtesy of the Singapore Sports Council and KK Women’s and Children’s Hospital.
In the mood for love...

... and you are pregnant! By keeping the lines of communication open, physical intimacy during pregnancy can still be both satisfying and safe.
Sexual activity during a normal pregnancy is harmless unless there is a medical reason to indicate otherwise. The most important aspects to be considered are your safety and that of your unborn child, and the feelings and comfort of you and your husband.

Regardless of whether you are having sex or not during pregnancy, it is important to keep the lines of communication open between you and your husband. Here are four pointers to note:

**Sex is generally harmless except for those with a bad pregnancy history**
This includes those who have recurrent miscarriages or premature labour in previous pregnancies.

Mums with a low-lying placenta should also avoid it if there is bleeding after sex. It would be wise to consult your doctor who may suggest a period of abstinence.

**It’s all about the position**
Experiment with different positions to find one that feels right for you and your husband. Some women find that being on top or lying on the side feels more comfortable as the missionary position puts pressure on the growing belly.

**Look out for heavy bleeding**
Abstain from sex if heavy bleeding occurs during pregnancy or if your water bag has broken. When in doubt, do not be embarrassed to ask the doctor.

**It is all right if you are not in the mood**
During the first trimester, newly pregnant women often struggle with morning sickness and changes in their body.

Things usually improve in the second trimester when many women become more receptive. In fact, many women have reported that sex is more enjoyable during this period as they feel more responsive to their husband’s touch, thanks to the rise of hormones during the pregnancy.

By the third trimester, you may be feeling tired and uncomfortable with an enlarged uterus, so sexual activities may take a dip again.

Look out for other opportunities to maintain a loving relationship, such as spending quality time “dating”, having long chats or cuddling in bed as you take this journey to parenthood together.
Tests for me and my baby
If you are expecting, you should ensure that your health is optimum for both you and your baby. Going for your antenatal appointments is a must. It is during this time your doctor checks for any potential problems and addresses them. It is also a chance for you to clear any doubts that you may have.

**Think in weeks, not months**

Your doctor will count your pregnancy in terms of weeks, starting from the first day of your last period, to estimate your Estimated Delivery Date (EDD). The “standard” is 40 weeks, although babies are considered full term once they reach 37 weeks. Some women may even have a 42-week pregnancy. A more accurate way to determine when you are due is by doing an ultrasound scan which may be scheduled anytime from the 6th to the 12th week. This will be your first view of your baby and the first time you can see his heartbeat.

**At every check-up**

- **Blood pressure:** Your pressure will be checked at every visit to ensure you do not develop pre-eclampsia (see page 41).

- **Urine test:** This tests for the presence of protein, which may suggest pre-eclampsia, kidney problem or urinary
tract infection; and sugar, which may indicate gestational diabetes (see page 40) although it can also be normal in pregnancy.

- **Weight:** To gauge adequacy of maternal nutrition.

**6 - 12 weeks**

- **Dating scan:** This is the scan to ascertain that the foetus is in the correct location, see the baby’s heartbeat and to estimate the due date.

- **Full blood count:** This test screens for low blood count and thalassaemia (a common genetic blood disorder in Singapore where an abnormal form of haemoglobin is formed). Low-blood counts are often caused by a lack of iron due to inadequate intake or the greater demands of pregnancy.

- **Hepatitis B antigen screening:** Hepatitis B is a virus that infects the liver. Many people who are infected may not have any symptoms. Hepatitis B can be passed on to the baby at birth. If you are tested positive, your newborn will be given the Hepatitis B vaccine and Hepatitis B Immunoglobulin (HBIG) within the first 12 hours of birth to prevent him from getting infected.

- **Venereal Disease Research Laboratory (VDRL) test:** This tests for Syphilis, a sexually transmitted infection which can be passed to the baby through the placenta during pregnancy. It can cause birth defects and is treatable with antibiotics.

- **Human Immunodeficiency Virus (HIV) test:** HIV can be spread to a baby during pregnancy, labour and delivery. If detected early, appropriate treatment and intervention can greatly reduce the risk of the baby being infected and also improve the mother’s health.
• **German Measles (or Rubella) antibody screening:** This blood test will test your immunity to German measles but has no impact on your current pregnancy. Immunity is lifelong and so if you are immune, there is nothing to worry about. If you are not immune and got infected with German Measles during the first four months of your pregnancy, your baby is at risk of having serious birth defects such as hearing loss and heart defects. You should go for vaccination after delivery to protect your future pregnancies.

• **Blood grouping and rhesus status and antibody testing:** Knowing the blood group and presence of antibodies can facilitate getting blood in any emergency situation where a pregnant woman may be bleeding. This test also checks if the mother may develop antibodies. This can occur if the mother is rhesus negative but the father is rhesus positive. Anti-D injection will be offered at 28 and 34 weeks of pregnancy, and after the delivery to prevent the mother from developing antibodies. This minimises the risk of future babies developing haemolytic disease while in the womb or in the newborn, a condition that can lead to anaemia, heart failure and jaundice.
What is Down syndrome screening?
When a child is born with an extra copy of the chromosome 21, he has Down syndrome. The risk of having a child with Down syndrome increases with the age of the mother although it can occur at any age. It happens randomly and is rarely hereditary.

This is a developmental disorder and the child will have mild to moderate intellectual delay and he is also likely to have heart, hearing and visual defects. Children with this disorder can benefit from stimulation programmes; and some of them can lead a healthy life and live up to 40-50 years.
In the past, mothers over the age of 35 were offered amniocentesis or chorionic villous sampling to detect if they may have a Down syndrome baby. This strategy picks up only 30% of Down syndrome babies. Amniocentesis involves taking some amniotic fluid from the baby at about 15-20 weeks of pregnancy while chorionic villous sampling involves biopsy of the placenta at about 10-13 weeks for testing.

There are now better screening tests which are non-invasive and are offered to all mothers regardless of their age. These tests do not tell you if you have a Down syndrome baby but tell you your risk of having one. From this risk, you may make a second decision whether you want to have a confirmatory test. Down syndrome screening is optional and whether you should have one is a decision that only you and your spouse can make. There are various screening tests.

- **Nuchal Translucency (NT) measurement**: This test measures the thickness of the fluid-filled area at the back of the baby’s neck at 11-14 weeks. Detection rate is 80%.

- **Maternal serum screening**: The mother’s blood is measured for AFP (alphafetoprotein) and HCG (human chorionic gonadotrophin), substances produced by the baby and the placenta at 15-20 weeks of pregnancy. Mums with low AFP and high levels of HCG have a higher risk of having a baby with Down syndrome. Detection rate is about 66%.

- **Combined Test**: This test combines both nuchal translucency as well as maternal blood test at 11-14 weeks. Detection rate is 90% and is the recommended test.

If the screening test shows that the risk of Down syndrome is higher than 1 in 300, you are screen positive. Being screen positive does not mean your baby has Down syndrome. It just means the risk is high enough to consider doing further confirmatory tests which may be in the form of the following:

- **Chorionic villus sampling (CVS)**: This is biopsy of the placenta which may be done through the vagina or abdomen. It is usually performed about 10-13 weeks. The risk of miscarriage is about 1%. This is also used to test for other genetic problems.

- **Amniocentesis**: This test involves putting a needle into the amniotic sac under ultrasound guidance and drawing out amniotic fluid for testing. This is performed at 15-20 weeks. It carries a small risk of 0.5% to 1% of miscarriage.

### 18-22 weeks

- **Detailed ultrasound scan (anomaly scan)**: The purpose of this scan is to make sure the baby is growing well and there are no major physical defects. However some defects are hard to see and abnormalities may be missed. You may also find out the gender of your baby at this time if he is “cooperative”. A frequently asked question is how accurate that is. Suffice to say, it is fairly accurate but you can only be 100% sure after the birth of your baby!

It is important to note that while these tests are advised to allow early detection of abnormalities in the baby, no test is 100% accurate and some abnormalities may remain undetected.
A to Z of Pregnancy Health

Some conditions or symptoms are common in pregnancy. Know what they are and how you can deal with them.
Most of these conditions or symptoms are caused by hormonal changes and the extra strain your body undergoes during pregnancy. These are usually temporary and may cause minor discomfort.

**Backache**

**Cause:** Strain on your back caused by your growing belly.

**Symptoms:** Nagging pain at the base of your back, which may spread to the upper back and shoulders in extreme cases.

**Tips:**
- Do not wear high-heeled shoes.
- Support your back with a cushion when seated, especially for long hours. Whenever possible, walk or do stretches at intervals.
- Avoid carrying heavy weights.

**Bleeding gums**

**Cause:** Hormonal changes may cause your gums to become softer and therefore more prone to gum disease (gingivitis) and other dental problems.

**Symptoms:** Reddened, swollen, tender and bleeding gums when you brush your teeth.

**Tips:**
- Practise good oral hygiene.
- Brush at least twice daily.
- Floss once a day.
- Have your teeth cleaned and regularly examined by your dentist.

**Constipation**

**Cause:** The hormone progesterone which increases during pregnancy slows down your digestive system and movement of the intestines. Iron supplements or a history of irregular bowel movement may worsen it.

**Symptoms:** Difficulty or needing to strain while trying to move your bowel.

**Tips:**
- Drink plenty of fluids especially water.
- Eat high-fibre foods e.g. whole-grain bread, cereals, fruits, vegetables, legumes, nuts and seeds.
- Do light exercises such as swimming and walking.

**Dizziness**

**Cause:** Due to hormonal changes in pregnancy. Dizziness occurs when your brain is not getting enough blood and therefore not enough oxygen.

**Symptoms:** Feeling giddy, especially when you suddenly get up from the bed or chair, prolonged standing or lying on your back.

**Tip:**
- Get up slowly after sitting or lying down. If you feel faint, sit down or lie down on your side.

**Frequent urination**

**Cause:** The pressure of your growing belly on the bladder and water retention due to hormonal changes in pregnancy.

**Symptoms:** Needing to urinate frequently or waking up to pass urine.

**Tip:**
- If it is associated with pain or blood in the urine, it may be a sign of urine infection. Otherwise, the condition usually improves after pregnancy.

**Haemorrhoids/piles**

**Cause:** Hormonal changes and the increased abdominal pressure from your growing belly.

**Symptoms:** Lumps at the anus; painful, itchy anus; bleeding when you go to the toilet.

**Tips:**
- Avoid sitting or standing for long periods.
- Eat plenty of fibre and drink lots of water to prevent constipation.
- Using hot or cold compresses can relieve the discomfort.
- Usually improves after delivery.
Heartburn/Reflux

**Cause:** The uterus enlarges gradually during pregnancy and as it pushes on the stomach, it causes acidic contents to flow back into the oesophagus.

**Symptoms:** An uncomfortable or even painful burning sensation in the chest, or an “acidic” sensation in the throat, especially when lying down.

**Tips:**
- Eat small and frequent meals.
- Avoid eating a few hours before bedtime.
- Drink a glass of milk to ease the heartburn.
- Prop yourself up with pillows while sleeping.
- If the problem persists, tell your doctor.

Itchy skin

**Cause:** Your growing belly is stretching the skin on your abdomen.

**Symptoms:** An annoying itch over your belly.

**Tips:**
- Avoid very hot showers as these will make your skin drier and more itchy.
- Use a mild, fragrance-free detergent to wash your clothes.
- Wear loose-fitting clothes.
- If your itch is severe and affects the palm of your hand and soles of your feet without any rash, usually after 28 weeks, see your doctor.

Leaking urine

**Cause:** The extra weight gain and the pressure of your growing belly on your bladder and pelvic floor.

**Symptoms:** When you laugh, sneeze or run, you may leak some urine.

**Tip:**
- Regular pelvic floor exercises during pregnancy and after delivery help. This condition usually improves after delivery. If it persists, talk to your doctor.
Leg cramps

**Cause:** Uncertain, may be due to the increasing weight of the baby putting a strain on your legs.

**Symptoms:** Painful muscle spasms, usually in the calves. This happens at night or when lying down.

**Tips:**
- When you are having the cramps, straighten your leg and point your toes towards your face, bending it at the ankle, or try walking around on your heels for a few minutes.
- Some gentle stretching exercises may help to aid circulation but remember to warm up to avoid further discomfort.

Nausea and vomiting

**Cause:** Hormonal changes during pregnancy. Usually occurs in the first trimester of pregnancy.

**Symptoms:** Feeling of nausea or throwing up often.

**Tips:**
- Eat small and frequent meals.
- Eat less fatty and sugary foods.
- Avoid strong smells and foods that seem to aggravate your nausea.
- Eat nutritious, dry snacks e.g. toast and crackers.
- Ginger has been shown to help with morning sickness. Try ginger ale.
- Make sure you get adequate fluids.
- See your doctor if you are not well.

Swollen feet or hands

**Cause:** Water retention. This may be more pronounced for those who are overweight.

**Symptoms:** Swelling in your ankles, feet, fingers, wrists and face, especially towards the end of the pregnancy. Stiffness of your wrist and fingers.

**Tips:**
- Rotating your ankles and flexing your calf muscles to improve your circulation can reduce swelling in your ankles and feet.
- Wear flat shoes and sit with your feet raised, where possible.
- Gentle massages also help.
- Cut down on your salt intake.

Vaginal discharge

**Cause:** Increased blood flow to the vaginal area and increase in pregnancy hormones.

**Symptoms:** Vaginal discharge is clear or milky and odourless. Infection may be present if an itch persists or if the discharge has an unpleasant smell.

**Tip:**
- See your doctor for appropriate medication.

Varicose veins

**Cause:** The extra weight of your baby putting pressure on the veins.

**Symptoms:** Extended veins in your calves, back, legs or thighs, which may throb and cause pain.

**Tips:**
- Get plenty of gentle exercise such as walking to work the calf muscles and improve circulation.
- Raise your feet whenever possible and if you need to stand, keep flexing your calf muscles.
- Avoid crossing your feet. Sleeping with your feet raised will help to improve the condition.
When exposed to infections

Being infected with an illness in pregnancy is something that can happen. If that occurs, here’s what to do

**Chicken pox**

If you have had chicken pox before or have been vaccinated, you are probably immune to further infection. However, you should still avoid contact with people who are infected. If you are not immune or unsure of your status and have been exposed to the illness, you should consult your doctor as soon as possible. Your doctor will perform a blood test to check if you already have immunity. If you are immune, there is nothing to worry about. If you are not, your doctor will discuss the option of giving you antibodies to prevent you from being infected. This is because unlike in young children, chicken
pox in pregnancy can be serious. If you have chicken pox and you experience breathing difficulties, headache, or do not feel well, go directly to the A&E for assessment.

If you come down with chicken pox within a week of giving birth, your newborn may be infected. This infection is potentially life-threatening because of his immature immune system.

**Group B Streptococcus (GBS)**
This bacteria is found in up to 30 per cent of women (usually in the vagina or intestine) but it does not cause any harm or symptoms. In a small percentage of women, the baby can get infected by GBS as he passes through the vagina during delivery. This infection is potentially serious. The baby is more likely to be infected if you have premature labour, your water bag has leaked, you have a fever, and if you are a GBS carrier. Women with GBS urinary tract infection during pregnancy or a previous baby infected with GBS will need antibiotics at delivery. Speak to your doctor about the risks and benefits of GBS screening which is an optional test performed at 35-37 weeks of pregnancy.

**Hand, Foot and Mouth Disease (HFMD)**
This infectious disease occurs mainly in children under five years of age. It is spread through direct contact with saliva, nasal discharge, faeces or fluid from the blisters of an infected person, or touching objects contaminated by these secretions.

There is no clear evidence that being infected with HFMD during pregnancy will cause adverse outcomes such as miscarriage, stillbirth or congenital defects. But if you get infected close to your delivery date, then you risk passing it to your newborn. This can be potentially severe in the first two weeks of his life.

If you develop any type of rash when you are pregnant, consult your doctor.

Reduce your risk of getting HFMD by practising good hygiene. Wash your hands often and thoroughly.

**Influenza (flu) infection**
The common cold is commonly mistaken for an influenza infection with symptoms of runny nose, congestion and sore throat. Colds usually develop slowly, whereas the flu tends to come on suddenly with more severe symptoms for example, high fever, severe cough, headache and fatigue. Flu can also result in life threatening complications like pneumonia.

It is spread through respiratory droplets propelled by coughing and sneezing or through contact with contaminated surfaces.

If you suspect you have an influenza infection, stay at home and avoid contact with other people. You should also avoid strenuous physical activity. If you are worried about your illness, please see your doctor.

Annual influenza vaccination is recommended to protect against influenza for women in the second and third trimester of pregnancy. Consult your doctor for more information on the influenza vaccination.
Coping with the unexpected

While most pregnancies are smooth sailing, some women do have a tougher time than others

Anaemia

Anaemia is a condition in which mums-to-be have less than the usual number of red blood cells in their blood. It can occur during pregnancy and is most often caused by the increased iron demands of the baby and the necessity for the pregnant women to expand their blood volume.

If you are anaemic, you may feel tired and are less able to cope with any loss of blood when you give birth. If routine blood tests during pregnancy show that you are anaemic, the doctor may prescribe iron and folic acid tablets. Sometimes anaemia occurs due to excessive blood loss e.g. bleeding piles or gastric ulcers. Do let your doctor know if you have any of these symptoms.

Antenatal depression

Depression during pregnancy can occur when changes experienced by the mums-to-be are overwhelming. Symptoms include low mood, irritability, loss of interest, poor appetite, poor concentration, excessive self-blame or guilt, and feeling that life is meaningless.

If these symptoms continue for two weeks or more, and/or affect your work and the people around you, talk to your doctor. With proper care and management, you can still enjoy the journey to parenthood and reduce the chances of developing postnatal depression.

Gestational diabetes

Due to the hormonal changes in pregnancy, some women may become diabetic during pregnancy. If it clears up after delivery, it is merely gestational diabetes. This means they are diabetic only when pregnant but it also means they are at risk of becoming diabetic
later in life. Risk factors for gestational diabetes are first degree family history of diabetes (i.e. parents and siblings), obesity, previous baby weighing more than 4kg or past history of gestational diabetes in pregnancy. Some women remain diabetic even after delivery. These women are true diabetics who happen to be picked up at pregnancy.

Diabetic mums-to-be may be at risk of:
- Having a large baby weighing more than 4kg. This may mean a more difficult delivery and an increased possibility of requiring a caesarean section (C-section). There is also a higher risk of the baby’s shoulders being stuck at delivery, which may result in birth injury and rare brain damage.
- Having a miscarriage or stillbirth.
- Aggravating existing diabetes-related problems of the eyes and kidneys.
- Developing pre-eclampsia (see following paragraphs) in the later half of pregnancy or Type 2 diabetes after pregnancy.

Their babies may be at risk of:
- Congenital abnormalities.
- Having health problems shortly after birth such as breathing difficulties, low blood sugar or low calcium levels.
- Becoming overweight or developing diabetes later in life.

If you have gestational diabetes, it is important to keep a close tab on your blood sugar by watching your diet and monitoring your blood sugar level. If necessary, your doctor may start you on medication. Having good control of your sugar intake will help minimise the risk to you and your baby. Reduce your sugar and carbohydrate intake and do some exercises. Work closely with your doctor to ensure a safe outcome for you and your baby.

**Pre-eclampsia**

This is known as pregnancy-induced high blood pressure and is associated with protein in the urine. It usually occurs in first-time mothers in the second half of the pregnancy. Pre-eclampsia affects 10 per cent of pregnancies and can run in families.

If you have bad headaches, blurred vision, vomiting, a pain just below the ribs and sudden swelling of hands, feet and face, please see your doctor immediately.

Most cases of pre-eclampsia may not cause any symptoms, but it can be life-threatening if left unchecked. Hence it is important that you attend the antenatal appointments. You may need to be hospitalised or even deliver your baby early through induction of labour or C-section.

**Multiple pregnancies**

Such babies will usually be smaller than single babies and are at risk of premature delivery. It is very important to establish whether you have identical or non-identical twins by ultrasound scan early in pregnancy. This is because identical twins have a higher risk of twin-to-twin transfusion which is an imbalance in blood distribution between the two babies who share a common placenta. This might result in one being growth restricted and the other being larger and at risk of heart failure. This type of twins need close monitoring scans to pick up potential problems so that appropriate treatment can be instituted early.

Even non-identical twins require regular scans to monitor their growth. The mode of delivery will depend on the circumstances. This is best discussed with your doctor.

*If you have an existing medical condition prior to being pregnant, it is important to ensure a safe outcome for you and your baby during pregnancy by continuing consultation with your doctor.*
"Someone call the doc!"

When should you sound the alarm?

**Before 12 weeks:**

**Vaginal bleeding:** Light spotting or bleeding early in the pregnancy may be a sign of miscarriage or an ectopic pregnancy (where the foetus is outside the womb). Consult your doctor.

**Abdominal pain:** Severe abdominal pain may be a sign of ectopic pregnancy and could be life-threatening. See the doctor immediately.

**Severe vomiting:** If you are throwing up so badly that you cannot keep any food or drinks down, see the doctor. He can prescribe medication to help you manage this better, and may admit you to the hospital if you are severely dehydrated.

**From 13 – 24 weeks:**

**Vaginal bleeding:** This could be due to a late miscarriage. See your doctor immediately.

**Vaginal discharge:** It is common to experience vaginal discharge during pregnancy because of hormonal changes. If there is an excessively large amount or it changes in texture, colour and smell, tell your doctor.

**From 25 – 37 weeks:**

**Headache and limbs swelling:** If your headache and limbs swelling are severe or associated with dizziness, vomiting, blurred vision or upper abdominal pain, it could be a sign of pre-eclampsia (see page 41), which is dangerous if left unchecked.

Attend your antenatal appointments faithfully and complete your blood pressure and urine assessment each time.

**Abdominal pain:** Regular, painful uterine contractions or tightening of the abdomen can be a sign of pre-term labour. If the pain persists, go to the hospital.

**Vaginal bleeding:** If you spot blood stained mucus before you are due, this could be a “show” – a mucus plug that is dislodged from the neck of the womb when it begins to dilate. If it is accompanied by painful contractions, you may be in pre-term labour!

You will also need immediate attention if there is bright red bleeding (like menses). This is potentially serious and could be due to low placental placement or premature placental separation.

**Reduced foetal movement:** If you feel that your baby is moving less than usual, monitor your baby’s movement for a while. If you are worried, see your doctor or go to the hospital immediately.

**Leaking of water:** It could be a continuous flow or a sudden gush of clear fluid from the vagina. If you are not certain if your water bag is leaking, consult your doctor immediately, as you are at risk of infection and going into labour.

Adapted from the booklet “Care for Your Pregnancy and Newborn”, courtesy of Singapore General Hospital.
What happens in the second trimester

**Weeks 13–16**  
**Baby’s development**  
You may be able to tell the baby’s gender. His limbs are now fully developed and can move vigorously.

**Your symptoms**  
Your appetite would have started to return. Your weight begins to increase gradually. Your breasts will enlarge and your nipples will darken. Your womb would have risen out of your pelvis by now and can be felt if you touch your abdomen.

**Weeks 17–24**  
**Baby’s development**  
Hair on the head develops while fine hairs on the body (lanugo) appear.

**Weeks 25–28**  
**Baby’s development**  
After 24 weeks, the baby is considered to be potentially viable. A baby delivered prematurely between 24 and 28 weeks has a fairly good chance of survival. By the end of the 28 weeks, the baby should weigh about 1.2kg.

**Your symptoms**  
Varicose veins may start to appear on your legs. You may have trouble sleeping at night. Try to find a sleeping position that will make you feel comfortable.
Glow as baby grows

As your belly grows bigger, it is time to enjoy your pregnancy
Pregnancy is a time of change. A suitable exercise regime and a healthy diet, coupled with some self-pampering, will keep you on a happy note! Chances are, if you look good, you’ll probably feel great!

**What to wear**

As your pregnancy progresses, you probably will not be able to fit into your clothes, or your shoes. To save cost, you may consider having hand-me-downs from friends and relatives. In any case, here are some stuff you will need:

**Maternity wear:** Most women don’t start showing until week 12, so you can still wear your usual clothes. But as your waistline starts to thicken between weeks 18 - 22, look for clothes that can last you through the pregnancy.

It is best to stick to comfortable, loose-fitting clothes. Choose breathable materials such as 100 per cent cotton, or silk so as not to irritate your skin. Opt for loose cotton underwear. Avoid tight socks or half leg stockings as they may reduce blood circulation in the feet and lower legs, increase swelling, fluid retention and worsen varicose veins.

**Bras:** Your breasts will get fuller towards the end of the pregnancy as your body prepares for breastfeeding. Wear bras that fit well, and have adjustable straps that are thick enough to carry the weight of your heavier breasts.

Wearing a lightweight bra at night for some support may be more comfortable than not wearing one at all. If you feel breathless and tight around the chest, it may be because of your bra.

**Footwear:** Keep to sensible flats or low-heeled shoes to reduce the risk of falling or tripping. Your feet will also swell and expand, so be prepared to wear bigger shoes. Feet will usually go back to normal after delivery.

**What to expect**

Like everything else, your skin will undergo some changes during pregnancy. Know what are some of these common changes to your skin or looks so you will not worry unduly over them.
**Stretch marks:** Most women will get stretch marks on the abdomen, breasts, buttocks and thighs. These fade to a lighter silver shade after your baby is born and should gradually pale and become less noticeable.

**Spots:** Pregnancy may cause some women’s skin to retain more moisture, smoothening out wrinkles, and giving them a lovely glow. However, the higher levels of hormones can sometimes also mean greasy skin and acne. Spots may appear unexpectedly on the face and occasionally on the back too. These should disappear after your baby is born.

**Pigmentation:** Chloasma, also known as “the mask of pregnancy”, may appear. These brown patches on the face and neck may appear as lighter patches on darker-skinned women. These are due to the effect of pregnancy hormones, which stimulate the pigment formation on the skin. They will eventually lighten or fade off a few months after delivery.

Linea nigra – the dark vertical line usually from your navel to the pubic area – may appear for some but will also go away after baby is born.


Hair changes: Hormonal changes may increase hair growth or temporarily alter the hair texture in some women. Some women may see their hair becoming shiny and luscious while others may have lifeless and greasy hair.

After the baby is born, your hormonal levels decrease and some may experience loss of hair. Do not be alarmed as this change is temporary.

Teeth and gums: The increased levels of progesterone that are produced during pregnancy may cause your gums to become softer, spongy and more sensitive, making them susceptible to infection. Avoid sugary drinks and snacks. Practise good oral hygiene and have regular checkups with the dentist. See your dentist if your gums bleed due to pregnancy gingivitis. It is important to tell the dentist that you are pregnant so that he can avoid any treatment that may be harmful to your baby.

Stay connected
A stable and supportive network is important as it will help you cope with your pregnancy, delivery and care of your newborn. Couples should find ways to spend time and do things together to strengthen the relationship and improve communication as you prepare for the arrival of your baby.

Travelling: If you plan to spend time on a “baby moon” or holiday during the second trimester, make sure you are fit for travel. Most pregnant women are allowed to travel up to week 32, but check with the doctor and the airline before you plan your trip. Always carry a doctor’s letter with you certifying that you are safe to travel and your due date. Check whether there are vaccinations that you may need and find out what healthcare facilities are available in case of an emergency.

During the journey, especially if it lasts more than five hours, make sure that you walk every half hour, flex or extend the ankles to prevent the possibility of getting Deep Vein Thrombosis (DVT), a condition where blood clots in the leg. Drink plenty of water to prevent dehydration. It is important to wear your seat belt while travelling. It should be diagonally strapped across your body, between your breasts and with the lap belt over your upper thighs. The straps should not be worn over your bump, but should lie above and below it.

Family and friends: If you have older children, do not forget to spend quality time with them. They need assurance that you still love them and that they would not be neglected when the new baby arrives.

Allow your parents and parents in-law to share your joy or any anxiety you may have. Their experience in child care is an invaluable source for you to tap on. Spending time with your friends and doing things together can also help you to de-stress, and better cope with the challenges and responsibilities ahead.
Talk of the class

Clear your doubts at antenatal classes organised by the hospitals
In Hollywood movies, parents-to-be are often seen attending antenatal classes, practising “Push! Breathe! Push!” While less common in Singapore, antenatal classes are now gaining popularity as more new parents-to-be appreciate the wealth of information they can get from these classes to prepare them for the experiences and challenges ahead.

**What will I learn?**
Classes typically cover topics such as
- Nutritional needs during pregnancy and after delivery
- Exercises to help you keep fit and build stamina for childbirth
- What to expect during labour and birth
- Breastfeeding
- Care of your newborn including how to carry or bathe your newborn

Many antenatal classes conducted by hospitals for parents-to-be often include a tour of the delivery suite. The classes are also a great opportunity for you to ask any questions that may be bothering you and ease your anxieties. You may wish to check with the respective hospitals on the actual topics covered.

**What other benefits are there?**
Antenatal classes give you the chance to meet fellow parents-to-be who are also going through the same experiences as you. This is a great time to compare notes. Many new mothers meet up regularly during their pregnancy and also after birth, forming support groups for mothers or play-groups for their babies. Besides preparing you for childbirth, antenatal classes also educate you on how to feed and care for your baby. Many women find talks about successful breastfeeding and how to overcome difficulties to be extremely useful.

**When should I sign up for a class?**
You may wish to check early with the respective hospitals for registration as some classes are very popular and may have waiting lists.

**How can I sign up?**
There are many classes offered by re-structured and private hospitals.

*Please refer to page 98 for contact details.*
A little planning can go a long way so start early

You have spent your first trimester getting used to being pregnant. As you enter the second trimester, you would usually feel much better as most women enjoy a burst of energy at this time. Take this time to plan for your baby’s arrival so that you can cope with the changes and transit smoothly into motherhood.

Get help for the first few weeks with baby
Getting a trusted friend or a family member such as your mother or mother-in-law to care for you and your baby during the early days after delivery is a good option. If you have no support, hiring an experienced confinement nanny in-house for the first month may help you ease into motherhood. She can help to take care of your meals and your baby.

Check out reputable providers for more information, but you may want to ask for recommendations and do your own research first.

Whether you seek help from a trusted friend, a family member or a confinement nanny, it is important to define the roles and expectations. Share with them your decision to breastfeed and get their support.

Prepare your domestic helper
If you have a domestic helper, prepare and train her, especially if she is not a mother herself. But if you do not have one and plan to hire one, try to get her in a few months before your delivery date so that you can train her. It will also allow you and your family time to adjust to her and your expectations of her, as well as to give her time to familiarise herself with her chores. This allows both parties to build a level of trust, thereby reducing unnecessary conflicts and stress for the family when your baby arrives.

Sort out coverage for work
You will get 16 weeks of maternity leave, so once you know your estimated delivery date, inform your boss. Find out who will be taking over your work during your absence.
and plan for a smooth handover. The last thing you want is to juggle between work and your newborn.

**Child care arrangement**

It is important to think about child care arrangement for your baby after the maternity leave if you are a working mum. Generally, children under three years of age benefit most from one-to-one interaction with adults. Most mothers would turn to their family members such as parents or in-laws first for help.

If you require centre-based care, some child care centres offer infant care services for babies from 2 - 18 months. Alternatively, you may consider hiring an experienced home-based babysitter.

If you are considering infant care or child care, you would want your child to be cared for in a safe, happy and nurturing environment. Locate centres convenient for you, visit these centres to find out more about their operations, educators, programmes, safety, health and hygiene level. This will help you in choosing an appropriate centre. Visit the Child Care Link website at www.childcarelink.gov.sg or call 6258 5812 for more information on centre-based infant and child care.

If you have an older child and you are currently his primary caregiver, you would also need to plan for his care. Start him in his new care environment a few months before your newborn arrives so that he does not feel he is being packed away to strangers because of his new sibling. This will also allow both of you to have ample time to adjust to the new arrangement. Start thinking about your child care options early and have Plan B ready in case things do not work out.

**Decide if you want cord blood banking**

Cord blood is the baby’s blood that remains in the placenta and umbilical cord after the baby is born. It contains stem cells which can be used for treating many blood diseases, immune diseases and metabolic diseases. Stem cells from the cord blood can be collected after you give birth and stored for future use.

You can choose to discard the cord blood or store it in a private bank for a fee. You can also donate your baby’s cord blood to the Singapore Cord Blood Bank, where it is made available to those in need. The bank may also store cord blood for families with a known genetic disorder or other disease.
Feeding your baby

It is never too early to start thinking about breastfeeding your baby

Every parent wants the best for their baby and it is important to start right. Breast milk is the perfect nourishment for your baby.

Why is breastfeeding best for my baby?

- Breast milk meets all of your baby’s nutritional needs as it contains all the essential vitamins, minerals and nutrients for your baby’s complete growth and development.
- Breast milk is more easily digested and your baby is less likely to develop stomach upset, constipation and diarrhoea.
- Breast milk is supercharged with antibodies which improve your baby’s immunity and reduce the risk of infections.
- The close body contact and interaction during breastfeeding aids in creating a special bond between you and your baby.
- Breastfeeding reduces the risk of Sudden Infant Death Syndrome (cot deaths), obesity and diabetes in adulthood.
- Babies who are breastfed are known to have higher IQ scores and better eyesight.

Why is breastfeeding best for me too?

- Early suckling helps your womb contract faster and reduces blood loss after childbirth.
- It delays the return of your menstrual period and exclusive breastfeeding is a natural (although imperfect) contraceptive.
- You burn calories during breastfeeding and this helps you shed some of the weight gained during pregnancy.
- Your risk of developing breast, ovarian and womb cancers, and heart disease is lower.
- It lowers the risk of osteoporosis (brittle bones).

Why is breastfeeding good for the family and the community?

- Breastfeeding is free and convenient.
- It is environmentally friendly.
- Your baby would not fall sick so easily, so medical cost is reduced. You are also less likely to miss work.
- You can save money from the direct cost of formula milk and fewer visits to the doctor.
**How long should I breastfeed?**

For optimal growth, development and health, the World Health Organisation (WHO) and Health Promotion Board (HPB) recommend exclusive breastfeeding (with no other food or drink) for the first 6 months (i.e. 180 days) of a baby’s life. Mothers are encouraged to continue breastfeeding their children until they are 12 months old and thereafter as long as mutually desired, together with the timely introduction of solid food from 6 months of age.

**How do I prepare for breastfeeding?**

**Attend antenatal classes:** Experts will give you valuable tips on how to breastfeed, as well as answer your queries.

**Read up on breastfeeding:** Ask your doctor for information booklets on breastfeeding, borrow books from the library or research online. Books often feature step-by-step guides on how to latch on your baby and the different positions you can adopt.

**Talk to other mums who have successfully breastfed:** Having a strong support network is important as they will encourage you and share their experiences on how they overcome obstacles.

**Get support from your spouse, family members or confinement nanny:** Share with them your intention or decision to breastfeed. This is important as sometimes, anxious family members or others may stress you out by questioning you on the need to breastfeed. They may doubt if your baby has drunk enough or if you have adequate milk for your baby.
Inform your doctor and nurses that you intend to breastfeed exclusively:
Successful breastfeeding depends on early initiation and a good latch. Make sure your doctor and the nurses know that you do not want your baby to be given any formula milk. You can request for your baby to room-in 24 hours a day with you in the postnatal ward to facilitate breastfeeding.

What is required for breastfeeding?
You just need to have some knowledge and a bit of perseverance for breastfeeding. In the initial stage, you may wish to consider getting:
- **Nursing bra**: The cups come with clips so you can breastfeed your baby without having to remove the bra. For better fit, get the bra in the last trimester.

- **Breast pads**: These are placed inside your bra to absorb leakage from your breasts especially when they are full or if you are expressing from only one side.

Some items you may consider getting later on:
- **Nursing wear**: These are specially designed with cleverly hidden openings to make it easier for you to breastfeed, especially in public.

- **Breast pump**: Available in single and double pump which can be hand-operated or electric. A breast pump is a good investment as you can express and freeze your excess milk which can later be reheated in a bottle. It is a necessity for mothers returning to work.

- **Breast milk containers or bags**: These let you store and freeze your milk hygienically.
Breastfeeding

When and how should I initiate breastfeeding?

If you and your baby are well with no medical concerns, place your baby on your chest for at least an hour of skin-to-skin contact within five minutes after delivery. Your baby’s suckling reflex is most intense in the first hour after birth. Being close to each other after sharing the birth experience helps your baby to calm down, keeps him warm and encourages him to breastfeed. Guide baby when he shows signs of readiness to feed.

You are also encouraged to room-in 24 hours a day in the postnatal ward with your baby to promote bonding, facilitate breastfeeding and allow you to recognise the early feeding cues. Do not be afraid to seek help from the nurses or lactation consultants if you need to.

Observe for early feeding cues. Feed your baby when he does any of the following:

- Increases his eye movements under closed eyelids or open eyes.
- Opens his mouth, stretches out the tongue and turns his head to look for the breast.
- Makes soft sucking sounds.

- Shows a strong rooting reflex such as sucking or chewing on hands, fingers or other objects that come in contact with the mouth.
- Moves towards your finger when you place it near the corner of his mouth.

What are the signs of a good latch?

- Your baby’s upper and lower lips flare out to form a good seal on the breast.
- Your baby’s chin is touching the breast and the nose is slightly away from the breast.
- The areola is drawn into your baby’s mouth.
- The baby’s cheek is round.
- You may feel the initial tug on the nipple when your baby suckles but you should not have nipple pain or discomfort.
- You can observe your baby’s sucking rhythm to ensure good milk transfer: Suck > Swallow > Breathe (pause) rhythm

Tongue over gum ridge. Nipple drawn far into mouth and milk flows.

Tongue behind gum ridge. Nipple is pinched and milk cannot flow.
HOW SHOULD I POSITION MY BABY TO FEED HIM?

You can breastfeed sitting or lying down.

- Sit comfortably making sure that your back and the arm with which you hold your baby is well supported (with a pillow or cushion).
- Gently massage your breast to clear any blocked milk ducts.
- Hold your baby at the breast level with your baby facing you (chest to chest). Support your breast with the other hand.
- Tease your baby to open his mouth as wide as possible and direct your nipple to the roof of your baby’s mouth.
- Make sure your baby takes the whole areola and not just the nipple.
- Finally, take a breath, sit back and relax.

You can breastfeed in various positions. Pick a position that is comfortable for you.

1. **Cradle hold** is suitable when you and your baby are able to co-ordinate well and latch on easily. Support your baby’s head in the crook of your arm and hold buttocks with your hand with your baby’s face and body turned towards you.

2. **Cross cradle hold** is ideal for newborn, small or premature babies. It is also good for mothers with a short nipple. Support the back of the baby’s head and shoulder at the nape of neck using your palm and the baby’s body and buttock with your forearm.

3. **Football hold** is ideal for small babies, mothers with large breasts and short nipples or mothers who have undergone a caesarean section. Support your baby’s head and shoulder at the nape of neck with your palm and the baby’s body and buttock with your forearm. Tuck your baby under your arm so that the legs are behind you and the head is at your breast.

4. **Lying down** is ideal for mother after a caesarean section, forceps delivery or for feeding at night. Lie on your side with a pillow under your head and behind your back with the baby facing you.

If you have any problems, approach your hospital’s lactation consultants for help.
BREASTFEEDING AT WORK

There is no need to stop breastfeeding just because you are returning to work. With a bit of planning, your baby can still be fully breastfed and receive the best nourishment. Here are some tips to help you juggle with resuming work and the desire to continue to breastfeed:

- Two weeks before your maternity leave ends, start expressing and storing your milk.
- Feed your baby just before you go to work, and as soon as you return home.
- While you are at work, express and store the breast milk in the fridge (usually at lunch break and just before leaving).

If you have problems with lactation or are worried, speak to your doctor, lactation consultants or even mothers who have balanced breastfeeding and work.

Expressing breast milk
You can express your breast milk manually by using your hands or with a manual or electrical breast pump.

How to express breast milk with a breast pump?
- Wash hands thoroughly before expressing milk.
- Ensure all the equipment are clean and sterilised.
- Use your pump correctly, starting with low pressure and switching between breasts after 5 - 10 minutes of expressing milk.
- Express your breast milk every three hours and store the breast milk in the refrigerator or freezer.

Storage of the expressed milk

Place of Storage

- Expressed milk at room temperature of 25°C
- Expressed milk in a cooler with ice pack at 15°C
- Breast milk freshly expressed and stored in the fridge at 4°C
- Frozen milk in 2-door fridge stored at -5°C to -15°C
- Frozen milk in deep freezer at -20°C
- Thawed breast milk stored in the fridge at 4°C

Recommended Storage Duration

- 4 hours
- 24 hours
- 48 hours
- 3 - 6 months
- 6 - 12 months
- 24 hours

Thawing process

- Thaw frozen milk in the refrigerator or in a cup of warm water.
- Use the milk immediately or within one hour.
- Avoid boiling or heating breast milk in a microwave.
Some frequently asked questions on breastfeeding

Breastfeeding may sound challenging initially, but once baby latches successfully, it is fulfilling and enjoyable. These are some common questions you may have:

Q1. What is “let-down reflex”?  
When your baby starts suckling, a hormone called oxytocin releases milk into the breast ducts causing it to flow towards the nipple. This is called the “let-down reflex”, which has a tingling or tightening sensation on the breast. If you are stressed, the let-down reflex can be inhibited. So, relax!

Q2. If milk production comes later, will my baby “starve” in the first few days?  
When you first start breastfeeding, your first milk is colostrum which is:
• Yellow, thick and sticky, very rich in protein, minerals and antibodies.
• Small in quantity, but that is all your baby needs in the first few days. Breast milk changes to mature milk by about 7 -10 days after birth.

Mature breast milk consists of:
• The initial foremilk which is watery, low in fat and serves to satisfy the baby’s thirst.
• The later hindmilk, which contains more fat, calories, nutrients and antibodies, and will satisfy the baby’s hunger and ensure weight gain.

Q3. Will I have sufficient milk?  
It is normal for mothers to worry that they may not have enough milk for their babies. Milk production occurs regardless of the mode of feeding. Frequent and effective milk removal is important to ensure a good supply. Hence,
• Ensure that your baby latches on correctly.
• Breastfeed regularly every 2 -3 hours a day according to your baby’s demand and avoid supplementary feeding with formula milk.
• Express and store breast milk if your baby is not feeding well or is separated from you.
• Rest, eat well and drink plenty of fluids.
• Reduce caffeine intake and totally avoid alcohol and tobacco products as these can inhibit milk “let-down reflex”.

Q4. How do I know that my baby is getting enough milk?  
If your baby has had enough,
• Your breasts will feel soft after nursing.
• Your baby is contented and satisfied.
• Your baby is passing clear urine and has bowel movements 2 - 5 times or more in a day.
• Your baby’s weight is increasing after the initial drop in birth weight. Your baby will gain about 150 - 200 grams per week.

Q5. How long and how often do I feed my baby?  
• Allow your baby to suckle for as long as possible on one breast until satisfied to ensure he gets the high caloric hindmilk. This may take about 20 - 30 minutes. Avoid looking at the clock; instead, observe his sucking and swallowing. Offer the other breast if he desires more.
• Alternate the breasts for subsequent feed.
• Your baby may come off the breast when full. If you have to take him off your breast, insert a small finger at the side of the baby’s mouth between the gums to release the suction before removing the nipple from his mouth.
• As breast milk is easier to digest, feed on demand (every 2 - 3 hours) round the clock.
Q6. If I latch my baby on and at times feed him expressed breast milk from a bottle, will it confuse him?

This is known as “nipple confusion”, which occurs when a baby is offered both the breast and a bottle. Suckling from the breast and drinking from a bottle need different techniques. Some babies who have been fed expressed milk from a bottle at the start may refuse to latch directly. To avoid confusing your baby, feed exclusively from the breast where possible. If you need to express milk for various reasons, give him expressed milk in a cup, a spoon or from a syringe.

Mothers of premature babies can:
- Initiate expressing of breast milk 6-8 times a day including at night and store the milk.
- Learn how to express, collect, transport and store breast milk correctly.

Q7. My baby gets hungry very quickly all of a sudden. Is it because I am not producing enough milk?

During growth spurts — around 2-6 weeks, 3 and 6 months of age — there will be an increased demand for nursing. The increased frequency of feeding will help to increase the milk supply to meet the baby’s needs. Do not worry; it only lasts for a few days.

Mothers who do not breastfeed are at greater risk for:
- Breast and ovarian cancers
- Osteoporosis

Q8. What about breastfeeding premature babies?

Premature babies often have medical problems that require close monitoring in the hospital.

Q9. What are the risks of not breastfeeding?

Babies who are not breastfed are at greater risk for:
- Gastrointestinal infection
- Urinary tract infection
- Respiratory disease
- Allergies
- Obesity and diabetes later in life

Q10. Can I breastfeeding after six months?

You can breastfeed up to one year and beyond. Although your baby may be getting nutrients from other sources of food, breast milk is still an important form of nutrition. Breastfeed as long as you and your baby desire. You can continue to breastfeed even if you are pregnant again.

Please refer to page 98 for contact details of hospital lactation consultant services, breastfeeding support groups and helplines.

TIPS FOR SUCCESSFUL BREASTFEEDING:
- If you and your baby are well with no medical concerns, place your baby on your chest within five minutes after delivery for at least an hour of skin-to-skin contact. Guide baby when he shows signs of readiness to feed. Room-in 24 hours a day in the postnatal ward with your baby to promote bonding, facilitate breastfeeding and allow you to recognise the early feeding cues.
- Ensure a good latch to ensure smooth flow of milk.
- Make sure you have a well-balanced diet, limit caffeine intake and avoid alcohol and tobacco products. Get enough rest and sleep.
- Feed your baby on demand. Allow him to suckle for as long as possible.
- Avoid supplementary feeds as far as possible because your baby will have no desire to suckle to maintain the milk production and flow.
- Avoid feeding from a bottle or using a pacifier in the first few weeks until breastfeeding is established as that will discourage the learning process of breastfeeding for your baby.
Gearing up

Take advantage of the energy spurt you will enjoy in your second trimester and prepare for the baby’s arrival.
Preparing for Birth

One of the most exciting things for the expectant parents is getting ready the stuff – either second-hand or new – for your baby when he arrives.

You do not need to prepare a lot of things. It is most important to provide a safe place with a firm mattress that is not too far away from you for your baby to sleep.

**Items you may wish to prepare**

Below is a list to check off some of the other items you may wish to prepare before the baby’s arrival:

- **Towels.** Handkerchiefs, bath and face towels for the baby.
- **Wash basin.** For bathing the baby.
- **Toiletries.** Baby wash, nappy wipes, nappy rash cream.
- **Nappies.** Cloth diapers are washable and cheaper over the long term. Some come with Velcro fasteners or you can use nappy pins. If you are using disposable diapers, buy just a few packs in “newborn” size; your baby may outgrow this size quickly.
- **A changing pad.** More practical than buying a changing table as a pad is light and portable and allows you to change your baby’s diapers anywhere you want.
- **Baby clothes.** Buy just enough to last him through each growth spurt. You may consider choosing one-piece body suits (or onesies) with an opening so that you can change diapers easily without having to undress your baby. Also prepare enough socks, booties and mittens.
☐ **Small table lamp or night light.** Very useful during night feeds.

☐ **Baby cot.** The cot should be sturdy with smooth moving parts so that fingers or clothing would not get trapped. If you are recycling a borrowed or old cot, make sure you get a new firm mattress.

**Tips on selecting a baby cot:***
- The mattress and bedding should fit snugly in the cot to prevent the baby from getting tangled in the excess material.
- The base should be adjustable so that you do not have to bend too far down to carry your baby during the early months.
- As your baby grows, you should be able to lower the base so he cannot climb out of bed. One or both of the side rails should also be adjustable.
- Side rails should be protected with a plastic covering. When the baby starts teething, he may chew on the side rails.
- The distance between the slats should not be more than the width of a soda can so as to prevent the baby’s head from getting stuck in between.
- There should be lockable castor rollers so that you can move the cot around.

☐ **Cupboard and/or chest of drawers.** Storage space for his clothes and toys.

☐ **Baby carrier.** Baby carrier, also known as a sling, lets you carry your baby in front to keep him warm and close to you. This will allow you to manage your baby hands-free if you are out and about without a pram. Get one that has good support for his head and his back.
Stroller. Young babies need fully reclining seats. Check the adjustable sleeping positions that allow this.

Tips on selecting a stroller:
• Look out for strollers with multiple functions. Some can convert from a pram (with the baby facing the mummy) to strollers. Others can transform from a pram to a bassinet and to a stroller. Some also come with a carry-cot fixed onto the pram, which can later be removed and converted into a stroller when the baby outgrows it. Always ensure that the parts are well anchored and not loose.
• Make sure the brakes are working well.
• If you take public transport, consider the weight and ease of opening/closing. Mothers who usually travel alone with their baby may prefer a stroller with one-hand easy-fold mechanism. If you drive, make sure that the stroller can fit into your boot when it is folded up.

Car seat. It is regulated by law to use a car seat when travelling. Prepare a car seat for your newborn as he will need to travel in one, right from the first ride home from the hospital. Newborn babies should use a rear-facing infant car seat (baby faces the back of the vehicle) which is well-padded. Make sure the car seat is properly installed. If your front passenger seat is fixed with an air bag, do not use a rear-facing baby seat there. Put it in the back seat instead.
Preparing the hospital bag

- Letter of admission
- Documents for birth registration. Births should be registered within 14 days from the date of birth. Some hospitals have a birth registration centre so if you intend to do it there, prepare both parents’ identity cards, your marriage certificate and the Notification of Live Birth issued by the hospital.
- Toothbrush, toothpaste and facial care products
- Comb or hair brush
- Nursing gowns that open in front to facilitate breastfeeding
- Slippers
- Cardigan and socks to keep you warm
- Nursing bras and nursing pads
- Maternity sanitary pads
- Underwear. Some mums prefer disposables, or pack your old undies which can be thrown out after wear.
- An outfit to wear home. Your body won’t go back to your pre-pregnancy size instantly so pick clothes that you can fit into. Mums who are doing a caesarean section (C-section) may prefer something loose around the waist.
- A new set of clothes for the baby
- Music, magazines and books to help you relax
- Breast pump (optional)
What happens in the third trimester

**Weeks 29–34**

**Baby's development**
Lanugo starts to disappear and the skin becomes pinkish. The baby appears rounder. His movements are more varied and may alternate between a state of rest and active moving.

**Your symptoms**
Your tummy feels taut and you may feel irregular tightening over your womb — known as Braxton-Hicks contractions. Your baby becomes considerably heavier and you will feel more tired.

Expect shortness of breath as the enlarging womb presses against your rib cage. At times, your baby's sudden movements may be painful and his moving limbs may be felt from the surface of your tummy.

You may get heartburn because of the enlarging womb and a reduction in gastric movements. The milk glands in your breasts start to produce colostrum, which is nutrition for your baby during his first few days of life.

**Weeks 35–40**

**Baby's development**
By now, the baby has fully formed and the head is more proportionate to the size of his body. The lanugo would have completely disappeared and the baby's skin is now smooth.

As the due date approaches, the baby's head will begin to descend into your pelvis — a phenomenon known as "engagement". The baby's weight continues to increase such that he usually weighs more than 2.8kg at the time of delivery.

**Your symptoms**
As your baby grows, the aches from the ligaments stretching in your pelvis will increase. The lower abdominal aches and frequent urinating sensations from the pressure on the bladder can be troubling. From 37 weeks onwards, your baby is considered fully matured (full term) and labour contractions can begin at any time. In 10 per cent of women, pre-term labour may happen.
As your Estimated Date of Delivery (EDD) approaches, your belly gets bigger and heavier and you will feel more tired. Try these tips and get enough rest so that you are all ready to welcome your baby.

It is normal to feel worried and anxious about childbirth especially of the pain and the delivery process. It is important to have a positive outlook, be relaxed and stay cheerful, so that you do not give yourself undue stress.

**Manage your stress and anxiety**

If you have any uncertainty or worries that keep bothering you, you can check with your doctor, attend antenatal classes or chat with other parents and new mums-to-be. These avenues of support will prepare you for the process.

Some mothers have a fear of surgery. If you are worried that you might need a caesarean section (C-section), or fear that your baby might be in a breech position, talk to your doctor. If an emergency C-section is required, do not blame yourself – it is better for you and your baby to have a safe and smooth delivery than to have both of you stressed out in a long labour.

Although recovery will take longer than via vaginal delivery, most mothers who have been through a C-section should have little difficulty breastfeeding and caring for their newborn.

**Forget online reports and old-wives tales**

Do not pay too much attention to sensationalised stories on the Internet or assume the worst after reading statistics on birth emergencies and stillborn cases. Some mothers worry that their babies may have some
health emergencies, or that they have not taken good care of their babies during the pregnancy. If you are worried, attend all your antenatal checks and report unusual symptoms to your doctor. Staying mentally relaxed will be much more helpful during childbirth than fretting constantly. And if you have medical symptoms you are unsure of, do not make a self-diagnosis based on hearsay and online information. It is best to speak with your doctor.

Be mindful of backaches or activities that may cause you to fall
As you grow bigger and heavier, avoid over-exerting your body. Try not to stand for long hours, carry heavy objects or huge bags of groceries. If you have a toddler, try not to carry him. Shower him with attention in other ways.

Carry on with daily chores but be mindful of activities that may cause you to slip and fall. Get someone to help out with housework such as mopping the floor or scrubbing the toilet.

Find ways to relax
For some, exercises such as walking or swimming are great ways to relax. You can also listen to soothing music, which can calm your baby down too. Read a book or magazine leisurely and enjoy the last days of your pregnancy.

Do not bottle up your feelings. You need to talk to someone to get support; set priorities so that you do not get overloaded with too many things at the last minute.

Try different sleeping positions
Aim for at least eight hours of sleep a day. However, some mums-to-be may suffer from insomnia as the baby keeps them awake with his movements. Take frequent short rests or naps to recharge. A warm beverage (avoid coffee and tea) and a hot bath will help you relax and sleep better.

Experiment and find the best position that accommodates your growing belly. You should avoid lying flat on your back for long periods, unless your upper body is propped up by pillows. It can cause a decrease in blood circulation to your heart and your baby. Sleep on one side instead and most importantly, in a position which you are comfortable.
Labour and delivery—what to expect

As you count down to your baby's delivery, here is what you can expect

You are all excited that your baby is arriving soon. Knowing what to expect when the time comes will help you feel more confident and less anxious. Do you know what are the signs of your baby's arrival? For a start, look out for regular painful contractions, a “show” or leaking of water from your “water bag”. When any of these happens, you should call or go to the hospital.

Contraction
Contractions come in waves in the form of a muscular pulling sensation. Sometimes they are described like period cramps or the sensation of needing to go to the toilet. They get stronger, peak, then fade before the next wave. At the start, you may experience low backache and on-off contractions. The duration of labour varies from women to women and is generally longer for first-time mothers. Wait a while if you are not sure if it is time to go to the hospital. If the pain is persistent and gets progressively more painful, then it is time to go. When the contractions intensify to once every 5 - 10 minutes and accompanied by the urge to “bear down”, your baby is ready to come.

The “show”
The cervix is protected by a mucus plug that prevents infection. When you are in labour, the cervix will soften and dilate, causing the plug to dislodge.

This bloody mucus or “show” will stain your underwear or pad. If the blood loss is as heavy as your period, go straight to the hospital – it may be a sign of complication.

When the water bag breaks
This could be a sudden gush of water or a steady trickle, and it can happen before labour (when there are no contractions). If you suspect your water bag has burst, go to the hospital, as there is a risk of infection for the baby and you.

At any time if you notice that the baby is moving less than usual, go to your doctor or hospital immediately.

What will happen when I am in labour?
In the hospital, the doctor will hook you up to a machine to track your
baby’s heartbeat, and the duration and frequency of your contractions.

The cervix or neck of your womb that has been closed for about nine months needs to open to allow passage of the baby. There are three stages of labour:

The First Stage: This occurs when the closed cervix opens up (dilates) to 10cm. This can be divided into two phases — the latent and active phase. In the latent phase of labour, the cervix which is closed, dilates to about 3cm. Normally a tubular structure, the cervix also thins out and becomes soft and stretchable. The latent phase can be many hours. Usually contractions are not so painful at this stage. As the contractions become stronger and more regular, you go to the active stage of labour. It is at the active phase that you need to be in the labour ward so that you and your baby can be monitored. Generally cervical dilation is expected to progress at about 1cm per hour during labour. Your doctor will monitor your progress and may intervene if it is deemed to be too slow.

The Second Stage: This occurs when the cervix is fully dilated to about 10cm until the delivery of the baby. Contractions are now more intense and there is an urge to push. There may be a heavier “show”.

The baby’s head will push on the rectum and you may also feel like passing motion. This is when your doctor or nurse will ask you to “push”! This stage may last up to 1 and 1.5 hours for a new mother, or just a few minutes for experienced mums.

The contractions of the uterus help to push the baby through the birth canal, while the muscles in your diaphragm (as you hold your breath momentarily) and the abdominal wall also help to expel the baby when you are pushing. Once the baby’s head touches the pelvic floor, it will rotate and prepare to go through the pelvis.

The skin of the perineum (the area between your vagina and anus) usually stretches well, but may tear. The doctor may perform an episiotomy, which is a cut made on your perineum, to prevent it from tearing at all directions as the baby makes his way out. Once the baby’s head is out, his shoulders will adjust accordingly and the rest of the body will slide out.

Assisted delivery
You may need assisted delivery if:
- The second stage of labour is prolonged and you have been pushing for more than an hour.
- You are too tired and can no longer push effectively.
- Your baby shows signs of distress and delivery need to be expedited.
**Assisted delivery methods**

The methods used will depend on the circumstances and the preference of your doctor. You may need:

- **Forceps** (like a large pair of salad servers), which is inserted into your vagina to cup the baby’s head, to help the baby’s head ease its way through. The forceps may leave some marks on the baby’s face but they’ll fade gradually.

- **Ventouse or vacuum extraction,** which uses a suction cup on the baby’s head to hold on to the baby and may help the baby rotate and manoeuvre down the birth canal as you push.

**The Third Stage:** This is defined as the stage after the birth of the baby to the delivery of the placenta. A few minutes after birth, the placenta will separate from the uterine wall when the uterus contracts after the baby has been delivered. You will be given an injection at the thigh to prevent excessive bleeding. The doctor will check that the placenta is complete and stitch up the episiotomy or any tears you may have. Most mothers are so engrossed with cuddling their new baby that they may not even notice this stage.

Different hospitals may have slightly different practices but at some time your baby will be weighed, measured, given a health check and an identity tag as well as intramuscular vitamin K injection and Hepatitis B vaccination if you are agreeable. Resume skin-to-skin contact with your baby as soon as you can.
TYPES OF PAIN RELIEF DURING LABOUR

Listening to music and taking deep breaths will help you relax and handle the pain better. Before you decide on the pain relief method, discuss the options with your doctor.

Entonox (known as laughing gas)
How it works: You breathe in a mixture of oxygen and nitrous oxide through a mask intermittently throughout labour. This is the commonest form of pain relief used.
Side effects: You may experience nausea and drowsiness.

Transcutaneous Electrical Nerve Stimulation (TENS)
How it works: Electrode pads – connected to a small battery-operated stimulator – are taped onto your back. A current is passed across the pads, stimulating the production of endorphins, your natural pain-relieving hormones. Easy to use but takes 30 minutes to take effect. It is not effective when contractions are longer and more intense during the second stage of labour.
Side effects: Generally considered safe but it is best to check with your doctor.

Pethidine
How it works: This is a drug similar to morphine and heroine, and it is usually injected into the thigh or buttock.
Side effects: Nausea and vomiting, confusion and drowsiness. It may affect the baby’s breathing if it is given close to delivery as the baby may be drowsy. The baby may need an antidote and closer observation.

Epidural Anaesthesia
How it works: This is the most popular form of pain relief. It involves inserting a special needle into the lower part of your back. A fine plastic tube is then passed through the needle (the needle will then be withdrawn) to allow the doctor to inject the drug through the tube to numb the pain from the womb and birth canal.
Side effects: It allows you to be pain-free and fully awake to take part in the birthing process. Some possible complications include moderate backache, a drop in blood pressure, and partial failure of epidural to work. Serious complications are rare as epidural is administered by a trained anaesthetist.

WHAT HAPPENS DURING A CAESAREAN SECTION (C-SECTION)?

You may need an “emergency” C-section if your baby or both of you are at risk during labour, e.g. if the labour stops progressing or the baby shows signs of distress. A “planned” C-section may sometimes be needed if the mother has a serious medical condition such as heart disease; if the baby is in an abnormal position that makes vaginal delivery dangerous; or if there are complications with the pregnancy.

The procedure:
• Usually performed under a spinal or epidural analgesia where you will be awake. You may feel the pressure but no pain. You can see and cuddle your baby immediately after birth. General anaesthesia where you are put to sleep is sometimes used, particularly if a C-section needs to be done very urgently or if the epidural does not work well.
• The doctor usually makes a horizontal skin incision below your bikini line. This is less painful and allows the scar to be hidden with your pants. The incision in the womb is made at the lower segment as this part is thinnest and is technically easier. It also has a lower risk of rupture in future pregnancies compared to a midline incision in the womb. However, there may be circumstances when a midline incision has to be made.
First days of our lives

Your newborn is here and it is an exciting and fulfilling time. Here is what to expect with the new addition.

After months of preparation, your baby has finally arrived and you can now see and hold him. As you enter the confinement period, which is a period of recuperation, be mindful of the changes that may come and take this time to adjust to your newborn. Stay positive and learn to manage your expectations. If you are in doubt, do not be afraid to ask for help.

Dealing with Changes

Adapting to a new lifestyle
Having a baby will be a whole new experience for you, so be patient as you learn the ropes. Your baby will wake up for frequent feeds, so you may not be able to get eight hours of sleep at a stretch. Shorter and regular naps will help you adjust to the new schedule. Rest well and eat well, so that you can continue to give your baby plenty of quality breast milk.

Some mothers find that having a confinement nanny or an experienced female friend or relative can help them settle in well during those crucial first weeks. Share your concerns with your husband so that he can help out whenever possible.

You would not fit into your pre-pregnancy clothes just yet
Do not be surprised or embarrassed that your belly still looks bloated after giving birth. That is perfectly normal. Breastfeeding helps the womb to contract and most mums burn off calories producing milk, thus shedding the weight.

Getting back in shape may take a few months. A sensible diet and appropriate postnatal exercises will help tone the muscles of your pelvic floor and abdomen. You will also feel more fit and energised to take care of your baby. If you had a caesarean section (C-section), ask your doctor what exercises are safe and when you can start before jumping into a strenuous workout.
The First Days

Stretch marks
These are here to stay although they will fade from dark red to light silver and look less visible. Be proud and consider these as battle scars because you have carried and nourished your baby for nine months.

Urinary incontinence
You may leak urine when you laugh, cough or move suddenly after childbirth. Do pelvic floor exercises by squeezing the muscles as if you are trying to hold back urine. If these exercises still do not help after three months, see your doctor.

Increased vaginal discharge
After delivery, you will have lochia, a vaginal discharge, which is a mixture of blood and tissue from the lining of the uterus. It is bright red during the first few days (like a heavy menstrual period) and tapers off to a more watery and pinkish discharge. Ten days after delivery, it appears as a small amount of white or yellow-white discharge, mostly composed of white blood cells and cells from the lining of the uterus. It may take two to four weeks before the discharge stops completely, and some women may notice intermittent spotting for a few more weeks.

Postnatal blues
Many mums, first-time or experienced, may feel exhausted from caring for their newborn. If you are feeling easily irritable, tearful, anxious or frustrated, you are experiencing postnatal blues. Postnatal blues refer to a temporary period of emotional rejection and withdrawal,
which usually occurs in the first week after delivery and may not last more than two weeks. It is due to hormonal as well as physical and emotional changes that come from taking care of the newborn. Here are some ways to cope with postnatal blues:

- **Family support.** It is natural to feel overwhelmed as parenting can be challenging. Establish open communication with family members especially when you are feeling low. Do not bottle up your feelings as suppressing them will only make you more moody and depressed. A simple hug or sign of affection will do wonders. Remember, they are there to love and support you.

- **Think positive.** A positive outlook in life is another key to handling postnatal blues. Know that change is part and parcel of life and accept them. This will help to keep you in control of the situation and leave you feeling confident. Do not compare yourself to other mothers. You are unique and so is your baby.

- **Take time for yourself.** Recharge by doing things that relax you. Plan a quiet time for yourself even if it is only for 15 minutes a day, such as taking a stroll around the block or simply closing your eyes and listening to music. Or invite a friend over for a chat. Remember, when you are revitalised and relaxed, you can take better care of your newborn.

- **Organise and prioritise.** Delegate and let others in the family take over household chores, including grocery shopping and letting them take care of the newborn, so that you do not have to manage everything by yourself and stress yourself out. Learn to prioritise by completing tasks that need immediate attention. Take one step at a time and do not set unrealistic expectations for yourself.

- **Join a support group.** Consider joining mothers’ support groups to get to know other mums who are in a similar situation. You can learn from their experiences and exchange tips on caring for your baby as well as to alleviate stress.

- **Stay healthy.** Eat well-balanced meals. Eating well provides you with a constant flow of energy to last you through the day. Add a little exercise to your routine – short walks around the block is a good start. Also, stay smoke-free and abstain from alcohol.
Symptoms of postnatal blues can last for a few hours, or days and usually fade away without the need for treatment. However, there are instances when postnatal blues last for more than two weeks and worsen to postnatal depression. Some of the tell-tale signs of the condition include:

- Feelings of self-blame
- Withdrawal from family and friends
- Thoughts of harming yourself or the baby

Should these symptoms be recognised and if you suspect that you may be suffering from postnatal depression, speak with your doctor who may recommend counselling. Refer to Page 99 for helplines.

**Confinement**

“Confinement” is an Asian concept observed by the Chinese (30 days after birth), Malays (44 days) and Indians (40 days) here in Singapore. The new mum is confined at home and has a strict diet aimed at boosting her milk supply as well as to help her recover from childbirth. There are taboos regarding the confinement period, including a belief that eating some foods will help with blood circulation, remove wind, and so on. But are these practices myths or are there truths in them? The answers:

**Myth:** You should not bathe or touch water to prevent “wind” from entering your body.  
**Fact:** Bathing in warm water is encouraged for good personal hygiene and comfort in the hot weather.

**Myth:** Mother and baby must avoid breeze and the use of a fan or air-conditioner.  
**Fact:** There is no harm in switching on the fan or air-conditioner as long as it

> Symptoms of postnatal blues can last for a few hours, or days and usually fade away without the need for treatment.”
Fact: Just having meat and liver will not allow you to meet all your nutritional needs, especially for breastfeeding mothers. Meat and liver also contain fats and cholesterol and should be consumed moderately. A well-balanced diet should also consist of food from the four food groups, i.e. Brown Rice & Wholemeal Bread, Meat & Others, Fruit and Vegetables.

Myth: Drinking alcohol keeps the body warm and improves blood circulation.
Fact: Alcohol may be transmitted through breast milk to your baby. It has also been shown that it prevents oxytocin release and reduces the production of breast milk. There are also adverse effects on the baby’s growth and development. Alcohol should be avoided during pregnancy, confinement and if you are breastfeeding.

Myth: Traditional recipes such as liver and spinach soup, black chicken and wine are thought to increase milk production.
Fact: There is no proven benefit that these will increase milk supply. The best way to increase milk supply is to latch your baby on when needed and to express milk regularly. Studies have shown some benefits with the use of fenugreek to aid milk production. However, this herb should be used with caution as it may have side effects. Speak with your doctor or lactation consultant if you are concerned.

Family planning

How soon should you have the next child? It depends on what you and your spouse prefer, but remember that pregnancy and childbirth can take a toll on the body. Studies have shown that when mothers conceive their second
child within six months, a greater percentage of the babies are born premature and have low-birth weight. It is best to let your body recuperate so that you can be in the best health possible for your next pregnancy.

Do not count on breastfeeding as a form of contraception. Some mums do not get their period till nine months or a year after delivery as exclusive breastfeeding will delay the menstrual cycle — the baby’s suckling stimulates the hormones that suppress ovulation — but it does not mean it is foolproof. This is especially so when your baby starts to take solid food and suckles less.

**Do not forget postnatal check-ups**

Your doctor will usually schedule a postpartum check-up 4–6 weeks after delivery. He will check your breasts, weight and blood pressure and examine your vagina, cervix and uterus to make sure you are healing well. A Pap smear will also be performed. It is a simple procedure to detect abnormal cell changes in the cervix.

This is a good time to talk to the doctor about your birth control preferences, breastfeeding and how you are adjusting to life with your new baby. You can also ask about exercises and steps to getting back in shape.
Daddy know-how

Being a new dad is an exciting, yet challenging experience. Here is how you can work with the changes that come with fatherhood.
Pregnancy is a major milestone for any family. Often, the focus and attention are on the mum to ensure her well-being and the baby’s development. However, the importance of dads cannot be underrated as they play a crucial role too. As the pillar of support for the family, it is important that you stay emotionally and physically healthy, so that you are able to manage the challenges when the baby arrives. Here are some tips for dads-to-be:

**Meeting personal needs**
Your wife is pregnant and seems to be focusing more on the baby, and you are feeling a little jealous and somewhat neglected. Do not be. These are natural responses and will soon pass. Remember, you are still her pillar of support and now, you have an equally important role – that of father to the baby. Be open with your wife, talk to her about your feelings and find time to inject romance into the relationship.

**Dealing with changes**
Pregnancy will result in changes to your lifestyle, and you may have to make adjustments and sacrifices. Whether these adjustments are big or small, what is crucial is that you equip yourself with knowledge so that you can manage the changes. Read and talk to experts on pregnancy and child care, or research on managing family finances. Most importantly, stay positive and adopt healthy coping strategies to manage the changes effectively and smoothly.
“Taking her to the doctor for every visit. Just being there means a lot of support for her.”  
– Tan Wing Onn, dad to twins Kai Ming and Kai Li, 7 months.

“My wife had cravings. So I always have to be ready to get them for her! It makes her happy.”  
– Greg Lim, dad to Yen Yen, 3 months.

“I cabbed to Yishun to get my wife her favourite food at night. Twice. Haha.”  
– Dennis Yin, dad to Christian, 6 months.

Managing stress and anxiety
With changes to come when your baby arrives, you may feel overwhelmed, have doubts about being a good dad, or be worried about the health of your wife and baby. Do not despair. Talk to friends and family, or even a counsellor (see page 99). It will help you to see your anxiety in a different light and increase your confidence in managing them. Set aside short breaks for personal time; take a few minutes off each day for yourself by listening to music or getting some rest. Plan a little getaway with your wife while she can still travel. Do not let work and duties overwhelm you, learn to organise your schedule and set priorities for things you need to do first.

Managing expectations from others
Learn to be practical and be realistic about your expectations. Talk to your wife and family on the duties and responsibilities e.g. the household chores, care arrangement if there is another child, etc. to avoid unnecessary stress and pressure on each other as both of you are dealing with this transition at the same time.

Juggling work and family
You may want to spend more time with your wife, or accompany her for antenatal appointments and classes. This can be challenging if your job does not allow much flexibility. Inform your boss of your wife’s pregnancy and negotiate with your boss for the possible need to take time-off or urgent leave. At the same time, speak to your wife and let her know that you might not be able to get off work at times to accompany her for antenatal appointments or classes. That way, you will not feel trapped in between and be frustrated.
- **Dealing with additional financial expenses**
  Planning ahead in the area of finance is important, especially if you have a baby coming. The following are steps that will help you in your planning. Additionally, you can seek help from professionals to plan your finances.

- **Know your baby expenses**
  Ask your doctor for a chart of estimated fees that you can expect to spend during each antenatal appointment and for the delivery. Compare the cost of the various delivery packages and discuss together how much you are willing to spend on the room.

- **Check your finances**
  Do a stock-take of what you have in the bank. Decide whether to seek help from a trusted family member, a friend or if you can afford a confinement lady. Having a money management plan will help you spend within your limits.

- **Track your monthly income and expenditure**
  From diapers to wet wipes and visits to the doctor, these expenses can add up to a hefty sum. Work out your combined income and expenditure. You and your wife may decide to contribute a small sum every month to a “baby fund” for expensive purchases such as a car seat.

- **Set a goal**
  You may opt to cut out certain expenses such as having just one meal in a restaurant every month instead of your usual weekly treat. This is also a good time to relook some habits that may be draining your wallet. Spell out your goal and start working towards it!

- **Preparing for the big day**
  As the delivery date gets nearer, anxiety levels may get higher for some of you. In order to be well prepared, make a checklist of the things to bring and to do with your wife. If you are driving to the hospital, familiarise yourself with the different routes to the hospital in the event of a traffic jam. Keep important numbers in your phone or address book and have the necessary items in the car for your wife that would make her comfortable.

**Staying healthy**
A healthy lifestyle helps you de-stress, makes you feel positive, confident and builds up your energy and stamina as you keep up with the changes and challenges. Engaging in physical activity is a great outlet for coping with stress and to recharge yourself. Selecting healthier food options, avoiding alcohol and being smoke-free not only benefits you, but also go a long way when it is your turn to teach your child healthy lifestyle practices. As children model after their parents, start building healthy lifestyle practices for your children.
Pregnancy is a journey you take with your beloved. This is the best time to strengthen the relationship and build a strong family life.
As pregnancy and childbirth are shared experiences between husbands and wives, it is important that you and your spouse work hand-in-hand and support each other. Here are some tips on how dads-to-be can be more involved and supportive during your wife’s pregnancy:

**Rekindling the fire**
While the baby is the focus, husband and wife should still spend quality time together. Start with small steps such as making it a point to ask about each other’s day or go on dates regularly to focus on yourselves as a couple. If you have children, get parents, a helper or a friend to help babysit them while you enjoy these couple-times. Spending time together and talking to each other can reduce tension, stress, jealousy and insecurity you may face along the way. Most importantly, take this time to nurture and strengthen your relationship, and build a strong family foundation before your baby’s arrival.
Helping your wife to manage her emotions

Pregnant women have to cope with many changes, including the possibility of antenatal depression, mood swings due to raging hormones, a loss of confidence or insecurity. The best way for you to help your wife is to recognise the changes she is going through, be understanding and provide a listening ear. Be aware of her emotions and if you suspect that she has antenatal blues and is not coping well with the pregnancy or is emotionally unstable, suggest she sees a doctor or a counsellor. Most importantly, be there for her.

“I was prepared to get scolded a lot, because my instinct is just not the same as my wife’s, and therefore I was not as responsive and good for me to be ready to adapt and work on being a more caring husband.” – Greg Leow, husband to Cristin, 8 months pregnant.

“It was strange going to antenatal class with my wife. But then there were other dads-to-be there. So it was not so bad. But it was important for me to be there with her.” – Tan Wing Chong, husband to Amanda, 5 months pregnant.

“My wife was feeling a little ansty (anxious), so I was worried she might have depression. So I have been making efforts to spice things up, such as going to the movies, taking walks with her after dinner and on weekends. It is all good for her and the baby.” – Alex Raja, husband to Gwen, 6 months pregnant.
Communicating and making decisions together
When dealing with difficult issues, talk to each another and work together to find a solution. Openly share about your preferences, for example, in the areas of health and child care; but be ready to take note of your wife’s concerns and provide her with your full support. Couples who are open and willing to discuss and make joint decisions can better weather the stressors of life and create a strong and stable environment for baby to grow up in. Making decisions together will also reduce your wife’s stress during pregnancy so that she will enjoy a greater sense of well-being and be less likely to suffer from depression.

Doing things together

Antenatal care visits
When possible, accompany your wife for her antenatal appointments. Keep close tabs on her progress. Watching your little baby during a scan, kicking away on a screen as you hear the rhythm of his little heartbeat with your wife can be a wonderful bonding exercise. Make sure she keeps to her appointments and follows the doctor’s instructions.

Antenatal classes
Attend antenatal classes with her and prepare yourself for the baby’s birth. You can pick up tips on babycare and meet other parents to form support groups. You can also learn to spot the signs of
labour — regular contractions, a “show” and her water bag breaking — so that when these happen, you will know what to do.

**Reading and discussing**
Share interesting information and help each other learn more about the journey ahead. Keep track of the pregnancy, including creating a scrapbook of different milestones and the feelings felt during pregnancy. Use the journal pages on page 105 as a fun way to share special moments.

**Help during labour and delivery**
Your presence at the delivery is your wife’s best emotional support. You will also get to witness the birth of your baby with her. Discuss how you can help during labour. Here are some things that you can do:
- Provide reassurance, moral support and encouragement
- Hold her hand, wipe her face, give her sips of water, listen and attend to her needs
- Give her a back rub
- Soothe her with a massage
- Assist her in changing positions
- Remind her how to use the breathing techniques during contractions
- If she is too exhausted to speak during childbirth, be her spokesperson

With the birth of your newborn, you and your spouse will be turning a new chapter in your lives and become parents to your new baby. Fatherhood is going to be an exciting experience. Enjoy the ride!
### Where to get help

Here are some references to get you started if you think you need some assistance or just a listening ear

**ANTENATAL CLASSES / LACTATION CONSULTANT SERVICES / PARENTCRAFT SERVICES**

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<td>National University Hospital</td>
<td>6772 2255 / 9722 0152</td>
<td>9722 0376 (NUH Breastfeeding helpline - 8am to 11pm)</td>
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<tr>
<td>Parkway East Hospital</td>
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<td><a href="http://www.womenandchild.sg">www.womenandchild.sg</a></td>
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**Services, Support Groups and Helplines**

- **Gleneagles Hospital**
  - Antenatal classes: 6470 5715 / 5716
  - Lactation consultant services: 6470 5852
  - Parentcraft services: 6470 5852
  - Website: [www.womenandchild.sg](http://www.womenandchild.sg)

- **KK Women’s and Children’s Hospital**
  - Antenatal classes: 6394 1268
  - Lactation consultant services: 6225 5554
  - Parentcraft services: 6394 1268
  - Website: [www.kkh.com.sg](http://www.kkh.com.sg)

- **Mount Alvernia Hospital**
  - Antenatal classes: 6347 6641
  - Lactation consultant services: 6347 6641
  - Parentcraft services: 6347 6641
  - Website: [www.mtalvernia-hospital.org](http://www.mtalvernia-hospital.org)

- **Mount Elizabeth Hospital**
  - Antenatal classes: 6731 2313 / 9646 8308 / 9651 4076
  - Lactation consultant services: 6731 2313 / 9646 8308 / 9651 4076
  - Parentcraft services: 6731 2313 / 9646 8308 / 9651 4076
  - Website: [www.womenandchild.sg](http://www.womenandchild.sg)

- **National University Hospital**
  - Antenatal classes: 6772 2255 / 9722 0152
  - Lactation consultant services: 9722 0376 (NUH Breastfeeding helpline - 8am to 11pm)
  - Parentcraft services: 6772 2255 / 9722 0152
  - Website: [www.nuhgynae.com.sg](http://www.nuhgynae.com.sg)

- **Parkway East Hospital**
  - Antenatal classes: 6340 8738
  - Parentcraft services: 6340 8681
  - Website: [www.womenandchild.sg](http://www.womenandchild.sg)
Services, Support Groups and Helplines

Raffles Hospital
- Antenatal classes: 6311 2350
- Lactation consultant services: 6311 1516 / 1517
- Parentcraft services: 6311 2350
- Website: www.rafleshospital.com

Singapore General Hospital
- Antenatal classes: 6321 4516 / 6326 5923
- Lactation consultant services: 6321 4530 / 4531
- Parentcraft services: 6321 4530 / 4531
- Website: www.sgh.com.sg

Thomson Medical Centre
- Antenatal classes: 6350 8818
- Lactation consultant services: 6251 4090
- Parentcraft services: 6251 4090
- Website: www.thomsonmedical.com

BREASTFEEDING RESOURCES

Breastfeeding Mothers’ Support Group (Singapore)
- Counselling Hotline: 6339 3558
- Workshop: 6337 0508
- Email: counselling@breastfeeding.org.sg
- Website: www.breastfeeding.org.sg

Joyful Parenting and Breastfeeding
- 6488 0286

Association for Breastfeeding Advocacy Singapore
- Email: abas.sec@gmail.com
- Website: www.abas.org.sg

COMMUNITY SERVICES

Counselling and Care Centre
- 6536 6366
- www.counsel.org.sg

Family Service Centre Hotline
- (Find your nearest counselling centre)
- 1800 838 0100

HELPLINES

Association of Women for Action & Research
- 1800 774 5935
- www.aware.org.sg

ComCare Hotline
- 1800 222 0000

Institute of Mental Health
- 6389 2200
- www.imh.com.sg

Samaritans of Singapore
- 1800 221 4444 (24 hours)
- www.samaritans.org.sg

ParentLine (For parents with parenting and child care issues)
- 6289 8811

CHILD DEVELOPMENT CO-SAVINGS (BABY BONUS) SCHEME
For queries relating to the Baby Bonus Scheme, visit www.babybonus.gov.sg or call 1800 253 7707.

CHILD CARE SERVICES
For one-stop portal to child care information and services, visit www.childcarelink.gov.sg or call 6258 5812.

HEALTH PROMOTION BOARD

HEALTHLINE
For more information or advice on general health issues, call HealthLine at 1800 223 1313* to speak to the experienced Nurse Advisers.

QUITLINE
For advice on how to quit smoking or how to help someone quit, call QuitLine at 1800 438 2000* to speak to the Quit consultants.

QUITLINE SMS
Text your questions or concerns on quitting smoking to +65 9463 3771. Standard connection charges apply.

- Operating hours
  - Monday to Friday: 8.30am to 5.00pm
  - Saturday: 8.30am to 1.00pm

For more information, visit www.hpb.gov.sg/pregnancyparenting/
Fun reads to prepare you and your older child for the baby’s arrival

**Little Rabbit’s New Baby**
*Author*: Horza, H  
*Publisher*: Atlanta, Peachtime, 2008  
*Call Number*: JP HOR

Little Rabbit is upset that his parents are always thinking about his baby sibling. One night, he decides to help his tired parents and realises how special it is to be a big brother. A lovely story to show older kids that they play an important part in baby’s life.

**Supersister**
*Author*: Cadena, B  
*Publisher*: New York, Clarion Books, c2009  
*Call Number*: JP CAD

A little girl helps her pregnant mother with many household chores so that she is ready to be a super sister when the baby comes along.

**When the New Baby Comes, I’m Moving Out**
*Author*: Alexander MG  
*Publisher*: Watertown, Charlesbridge, 2006, c1979  
*Call Number*: JP ALE

Oliver does not like that his mum is going to have another baby. He wants to throw his mum in the garbage can and run away to live in his tree house. But when his mother reminds him that big brothers get to do lots of special things, he changes his mind.

**Nobody Asked Me If I Wanted a Baby Sister**
*Author*: Martha Alexander  
*Publisher*: Watertown, Charlesbridge, c2006  
*Call Number*: JP ALE

Oliver resents the attention lavished on his new baby sister, and tries to give her away to his neighbours. But it all changes when his mum takes her away and his baby sister begins to cry for him.

**The Parent’s Success Guide to Baby Planning**
*Edited by P Weverka*  
*Call Number*: 618.2 PAR--[FAM]

Provides straightforward advice, hands-on information and practical tips on pregnancy.

**Mum to Mum: Pregnancy Guide**
*Author*: Azza Pawanchik  
*Publisher*: Selangor Darul Ehsan: Buku Prima, 2009  
*Call Number*: 618.24 AZZ--[FAM]

A colourful and simple read written by a mother for other mothers to help them through this exciting and significant period of their lives.
Making It Better

The Healthy Start For Your Pregnancy guide has been designed to help you make informed choices on giving your baby a healthy start to life. Help us make this guide better so that it can further benefit others. Please be assured that all information gathered will be kept strictly confidential. The collected information will be aggregated and may be used by the Health Promotion Board for programme planning, official reports, publications and enhancement of this guide.

Please complete the survey and mail it to the Health Promotion Board using the return envelope attached at the back. You will receive a token of appreciation from us. Completed survey must reach us before 30 June 2015.

Part I
How far do you agree with these statements? Place a tick in the appropriate box.

BEFORE reading the Healthy Start For Your Pregnancy guide

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My current lifestyle habits before and during pregnancy (e.g. unhealthy diets, smoking, physical inactivity) may have an impact on the health of my child later in life (e.g. risk of developing diabetes, obesity).</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. I intend to adopt healthy lifestyle practices during pregnancy and beyond to give my baby a healthy start to life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

AFTER reading the Healthy Start For Your Pregnancy guide

<table>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part II
How far do you agree with these statements? Place a tick in the appropriate box.

1. The Healthy Start For Your Pregnancy guide is useful to me.  
2. I would use the journal pages.  
   (See pages 105 - 116)  
3. I would recommend this guide to my friends.  
4. I would buy this guide off the shelf.  
5. I would like to have discount coupons on pregnancy- or baby-related products in this guide.
Part III

1a) What is your biggest concern during pregnancy?

b) Was this addressed adequately in the Healthy Start For Your Pregnancy guide? If not, why?

c) Which topic/s should there be more information on?

2) Where do you get information on pregnancy and child health from? You may tick more than one box.

- Books
- Magazines
- Internet
- Online forums
- Events / fairs
- Friends
- Family / relatives
- Others: _______________________

3) Any other comments about the Healthy Start For Your Pregnancy guide?

________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________

Personal Particulars

Name: ___________________________
NRIC number: ___________________
Age: ___________________________
Nationality: _____________________
Ethnicity: _______________________
Contact number: __________________
Email address: ___________________
Address: _________________________

Stage of pregnancy: _____________ weeks
Baby’s estimated date of delivery: _______________________

Birth order of baby:
- 1st child / 2nd child / 3rd child and above

Would you like to be on our mailing list to receive updates on health-related information and workshops?

- Yes
- No

If yes, what is your preferred mode of receiving such information?

- E-mail
- SMS
- Newsletter

Others: _______________________

Thank you for taking the time to do this survey. Please mail it to the Health Promotion Board using the attached return envelope. You will receive a token of appreciation from us. Completed survey must reach us before 30 June 2015.

* Delete where appropriate.

Terms and Conditions:
Multiple entries are not encouraged as each participant is entitled to one token only. The original copy of the survey must be duly completed and sent to us to qualify for the token.
Parents and Youth Department
Health Promotion Board
3 Second Hospital Avenue Level 4
Singapore 168937
Our pregnancy journey

Use this journal book to record your pregnancy thoughts and experiences throughout this journey
We are expecting a baby!
Our first look at baby.
Sharing the pregnancy news with our family and friends.
You can almost see those little fingers and toes.
We are having a boy/ a girl/ twins/ triplets!
Mummy is getting bigger as baby grows!
Getting things ready to receive our baby.
Choosing a baby name.
A letter to our baby.
Baby has arrived!