

# **NEW BEGINNINGS**

## Patient Information







#### **NEW BEGINNINGS**

Having a baby is an important milestone in your life and is a life-changing experience.

At the Aga Khan University Hospital our team of doctors, midwives, nurses and support staff are committed to making this experience safe and happy, for you and your baby.

As you plan on how to proceed, you are likely to have a lot of questions. The more you know about your pregnancy, the more prepared you will be to carry it to delivery and enjoy this special time in your life.

This booklet brings together the information you need to know before you become pregnant, during pregnancy, labour and delivery and then the time after your baby is born also known as postpartum.

#### BEFORE BECOMING PREGNANT

If you are thinking about becoming pregnant, first select your doctor (obstetrician) and make an appointment. There are some lifestyle considerations that you should keep in mind for a healthy pregnancy:

- Talk to your doctor if you are on any medication or have any chronic health issues.
- Talk to your doctor about getting your and your husband's blood group tested, if you don't already have this information. It is important in order to anticipate and manage any potential complications.
- Talk to your doctor about ensuring you have had the right vaccinations to protect you and your baby during pregnancy. These include but are not limited to, whooping cough, flu, rubella etc.
- Start taking Folic Acid, which helps in the development of your baby's brain and spine.
- Exercise regularly to maintain a healthy weight.
- If you or anyone in the house smokes, now is the time to quit. Smoking can be very harmful to the baby before and after birth.

## **CONGRATULATIONS YOU ARE PREGNANT!**

## What should you do?

Select your doctor (obstetrician) if you haven't already done so.

Call for an appointment and keep a list of all your questions ready.

**Register at the hospital for the baby's delivery.** Registration for delivery at The Aga Khan University Hospital must be completed latest by 22 weeks of pregnancy.

**Enrol in the Pregnancy and Childbirth Education Programme:** The Aga Khan University Hospital offers Pregnancy and Childbirth Education Programmes to assist expectant couples during pregnancy, labour and delivery, childbirth and in the adjustment to the parental role. You are invited to actively participate in identifying your learning needs and interests.

This is a four-session programme. Each session is held on a Saturday morning and includes teaching and discussion on multiple topics.

**Session 1:** Physical and emotional changes during pregnancy, their management and body toning exercises.





**Session 2:** Benefits of breastfeeding, related problems and their management; nutrition during pregnancy and while breastfeeding.

**Session 3:** Signs and symptoms of labour, identification of true and false labour pain, breathing exercises during labour, care of episiotomy, self-care after delivery of the baby and family planning.

**Session 4:** Pain relief options available during labour, the role of the father in delivery and afterwards, a tour of the labour room, private, semi-private and general ward area. Fathers are especially invited to attend this session.

## **HEALTHY MOM, HEALTHY BABY**

The health of the mother-to-be plays an important role in the health of her baby. A pregnant woman should look after her own medical and emotional needs to give her baby the best chance for a healthy start in life. Following are some important questions related to your basic health that a pregnant woman should be aware of.

## Do I need to follow a special diet during my pregnancy?

What you eat and drink during pregnancy is your baby's main source of nourishment. You should choose healthy foods to provide the important nutrients a baby needs for growth and development. Compared to a woman who is not expecting, a pregnant woman needs more:

- Calcium
- Folic acid
- Iron
- Protein

**Calcium:** Calcium is needed to build a baby's bones and teeth.

Major food sources include milk, yoghurt, cheese, other dairy products, almonds and okra.

**Folic Acid:** Folic acid, also known as folate, is important in helping prevent birth defects in the baby's brain and spinal cord.

Major food sources include leafy green vegetables, fortified cereals, bread, pasta, beans and citrus fruits.

**Iron:** Pregnant women need double the amount of iron than women who are not expecting. Iron is needed to make more blood to help supply the baby with oxygen. Getting too little iron during pregnancy can lead to anaemia.

Major food sources include meat, poultry, fish, dried beans, peas, iron-fortified cereal and spinach.

**Protein:** Women who are pregnant need to eat more protein. Protein helps to build important organs in the baby, such as the brain and heart.

Major food sources include meat, poultry (chicken), fish, dairy products, dried beans, lentils, eggs, nuts and peanut butter.

There are certain foods that you will need to avoid when you are pregnant because they may contain bacteria, parasites or toxins that could harm your baby. These include:

- Unpasteurized or fresh milk and foods made from it (including cheese, shakes, desserts).
- Raw or undercooked meat including chicken, beef, mutton, lamb or organ meat.
- Raw eggs and raw fish.

## Can I drink tea, coffee and/ or sodas?

If you feel like you must have caffeinated drinks then limit yourself to 200 mg of caffeine a day, which is about 1 cup of coffee or 2-3 cups of tea. Try and avoid drinking caffeinated sodas.





#### Which supplements should I take during my pregnancy?

During the fifth or sixth week of your pregnancy, the baby's neural tube (a hollow structure from which the brain and spinal cord form) starts to develop. This is before most women know that they are pregnant. Ideally to start taking your prenatal vitamins, primarily folic acid, before you start trying to conceive. Always talk to your doctor before taking any additional supplements or medication. As the pregnancy develops, your doctor may recommend that you switch over from just folic acid alone to a vitamin that contains other minerals and nutrients such as iron and calcium.

## Can I exercise during my pregnancy?

The simple answer to this question is, yes! In fact, the more active and healthy you are during your pregnancy, the easier it will be for you to adapt to your changing shape and weight gain. It will also help you to cope with labour and to get back in shape once the baby is delivered.

Keep up your normal daily physical activity and exercise for as long as you feel comfortable. However, remember not to engage in activities that may leave you too tired and exhausted. You should also avoid those exercises which have risk of falling and injury e.g horse riding, cycling etc. As a general rule, you should be able to hold a conversation as you exercise. If you become breathless as you talk, you are probably exercising too strenuously.

## Can I travel during my pregnancy?

It is relatively safe to travel up until 24 weeks of pregnancy. However, it is always a good idea to discuss your travelling plans with your doctor. Long distance travel (longer than 5 hours) carries a minor risk of thrombosis (blood clots) in pregnant women. During your travel drink plenty of water to stay hydrated and do any exercises recommended by your doctor. Some airlines may ask for a medical certificate indicating the due date and any medical conditions you may have.

## HOW YOUR BODY CHANGES DURING PREGNANCY

As your baby grows, it occupies more and more space inside your body. As well as expanding outward and developing the pregnancy bump, your internal organs are put under a significant amount of pressure, which can cause some discomfort. You should not be alarmed as the discomfort you feel is common and the more you are aware of what to expect, the better you will be able to manage.

**Backache** is a common complaint, especially in the second half of pregnancy. As your baby grows, the increasing weight may put strain on your lower back and cause backaches. These can also be caused by changes in hormones and body postures. If you did not experience back pains before pregnancy there is a high possibility that the backache symptoms will go away after the delivery. Different ways to ease your backache include regular exercise, applying heat and cold pads to your back, improving your body posture especially when picking up things from the ground and sitting. Avoid sleeping on your back.

**Bleeding, tender, red and swollen teeth and gums** is experience by about 50% of women who are pregnant. This mild form of gum disease known as pregnancy gingivitis is caused by the hormonal changes in the body. During pregnancy, it is important that you maintain good oral hygiene. Brush your teeth thoroughly and gently at least twice a day, floss daily and visit a dentist for a check-up.

**Constipation** is a very common problem during pregnancy and happens due to hormonal changes in the body. To prevent and ease constipation, include high fibre foods in your diet e.g. whole grains and wheat found in breads, cereals and oats, fruits such as pears and melon, vegetables such as carrots, broccoli, peas, beans and pulses, nuts and seeds. Drink plenty of water and exercise regularly.

**Cramping** during pregnancy occurs when the uterus expands to accommodate the baby's development. Cramping is felt at both sides of the abdomen as a pulling sensation. This is a normal part of pregnancy. Bloating, constipation, or having sexual intercourse may also cause cramping.





**Dizziness/ feeling faint** is more common in the first trimester. To avoid episodes of feeling faint, try getting up slowly from either sitting or lying down; do not stand for long periods; wear loose, comfortable clothing and eat regularly.

**Genital infections** are more common during pregnancy due to the rising levels of hormones in the body, which changes the pH levels. It is very important to keep your genital area clean to prevent infections. Wash your genital area regularly but not excessively (twice a day). After washing, dry the area to prevent accumulation of moisture, which may breed bacteria. Use cotton towels and do not wear tight undergarments.

**Heartburn and indigestion** is the feeling pain and discomfort, along with a burning sensation in the chest area or stomach, which may extend up to your neck after eating or drinking. To avoid this common symptom, eat several small meals instead of three large meals a day, eat slowly and stay away from fried, spicy or fatty foods. If the heartburn or indigestion starts to interfere in your daily activities, your doctor can recommend medicines that will ease the symptoms.

**Incontinence** is when you have issues with bladder control and experience urine leakage. Due to the body and hormonal changes during this time, many women urinate when they sneeze, cough, or laugh. To minimize such incidences, try to schedule your bathroom breaks and practice the pelvic floor exercises. In most cases, this condition will improve after delivery of the baby, however if it does not, then seek help from your doctor.

**Nipple discharge** is very normal. The first leakage is the first thick, creamy milk (colostrum) that your breasts make before producing breast milk. If the leakage becomes bothersome you can place absorbent tissues or nursing pads (easily available from pharmacists) in your bra.

**Nosebleeds** can happen more often in dry weather or when you have a cold or sinus infection. If your nose starts to bleed, sit down and place your head higher than your heart and apply pressure on the bleeding nostril. Applying ice can also help. Do not lie down or tilt your head back to avoid swallowing blood, which could cause nausea or even vomiting.

**Passing urine often** begins around 9-16 weeks of pregnancy and later as the growing baby puts pressure on your bladder. Drinking less caffeinated beverages including coffee, tea and soft drinks may help. Drink plenty of fluids during the day but cut back in the hours before you go to bed to avoid making frequent visits to the bathroom at night.

**Piles** also known as haemorrhoids, are enlarged and swollen veins in or around the lower rectum and anus. These become relaxed during pregnancy due to your changing hormone levels, and may cause itching, soreness and pain in and around the anal region. Constipation can also cause piles. To prevent piles, do not sit for long periods of time and talk to your doctor about using laxatives or other remedies if you are getting constipated.

**Skin**, hair and nails may change throughout your pregnancy. You may get stretch marks on your belly, breasts, hips and buttocks. This is because these regions of the body are growing and making your skin stretch. Pregnant women may also notice a dark line on the midline of their lower abdomen. This is called the linea nigra. Along with these changes, many women also notice brownish or yellowish patches around their eyes, on the cheeks and nose. All of these skin changes should fade away once the pregnancy is over. The texture of your hair and nails may grow faster and break more easily after the baby comes.

**Swollen ankles, feet and fingers** are a very normal experience during your pregnancy as your body starts retaining water. After you deliver your baby this will subside.

**Tiredness/Fatigue** is as a result of the hormonal changes and the work your body is doing to accommodate the needs of the growing baby during pregnancy. This is especially common during the first and third trimesters.

To cope with fatigue during pregnancy make sure you get enough rest, ask friends and family to help you out with your chores, eat a balanced diet and exercise moderately.

**Vaginal discharge** is very common during pregnancy. This is called leucorrhoea, an odourless or mild-smelling milky discharge. This increases as you approach your due date. There is nothing you can do to





stop the discharge. However, if it becomes bothersome you can use sanitary pads and replace them every few hours. Avoid wearing tight undergarments and keep your genital area clean.

**Varicose veins** are a condition that occurs in your legs where the veins swell and bulge near the surface of the skin. They may cause discomfort (itching, heaviness in the legs and pain) or no symptoms at all. Being overweight, carrying twins, and standing for long periods are common causes of varicose veins. To help prevent varicose veins exercise daily, try to eat healthy foods and not gain unnecessary weight. Do not stand for long periods. Sleep on your left side.

## THE THREE TRIMESTERS

A normal full-term pregnancy is 40 weeks long but can range from 37-41 weeks. Pregnancy is divided into 3 time frames called *trimesters* (beginning with the first day of your last menstrual period and ending with delivery). The first trimester of pregnancy is week 1 to the end of week 13. The second trimester is week 14 to the end of week 23. The third trimester is week 24 to delivery.

Each trimester comes with its own specific changes to your body. These changes can cause discomfort in various ways. Being aware of these changes as they happen and knowing what to expect will help you take care of yourself in the way you need to. It is also helpful to be aware of the risk factors and associated medical tests for each of the three trimesters.

#### First Trimester: Week 1-13

## What can I expect during my first trimester?

During this time, you may experience the following early pregnancy symptoms.

**Morning sickness**: This term refers to the nausea women feel during pregnancy. This usually begins around the fifth or sixth week of pregnancy. Despite its name, nausea can affect a pregnant woman at any time of day.

**Breast tenderness:** It is normal for your breasts to be sore and sensitive at first. This discomfort often decreases with time. You will also notice your breasts increasing in size as the pregnancy progresses.

**Fatigue:** Most women feel very tired during early pregnancy. This is due to the changes that are taking place in your body and is normal. Rest as much as you can. A healthy diet and exercise may help boost your energy.

**Food aversions:** When you are pregnant, you may become more sensitive to certain smells and your sense of taste may change. Listen to your body and eat those foods that you enjoy and can tolerate.

**Constipation:** During pregnancy, food may travel more slowly through the digestive system. This can lead to constipation (infrequent, hard bowel movements). Iron supplements and pregnancy vitamins can add to the problem. To prevent or relieve constipation, include lots of fibre in your diet and drink lots of water. Regular physical activity like walking can also help.

**Increased urination:** You may find yourself urinating more often. This is no cause for worry unless it is accompanied by pain. If there is pain with urination make sure to see your doctor.

**Mood swings:** This is a normal part of pregnancy and due to the hormonal changes that are going on in your body. Take care of yourself and look to your loved ones for understanding and support.

## How much weight gain can I expect?

During the first trimester, usually there is no significant weight gain. If you are suffering from appetite loss (likely due to nausea), you might even lose some weight. This is usually not worrisome as long as you are following up with your doctor for regular antenatal checkups and the doctor is reassured that the weight loss is not too great. Regular visits to your doctor will ensure that your pregnancy is progressing in a healthy manner.





### Will morning sickness do my baby or me any harm?

Morning sickness usually has no effect on you or your baby. However, rarely it can progress to the extent that you may require hospitalization.

## What can I do to minimize morning sickness?

Eat frequent small meals, about 5-6 times a day. Eat whenever you feel like eating. Never go with an empty stomach for long periods. Lie down right after eating. Do not drink water soon before or immediately after meals.

Have some dry bread or cereal by your bedside to eat when you get up early in the morning.

Get up very slowly, taking 5-6 minutes. Avoid sudden movements when you are feeling nauseous.

Sniffing lemons, drinking lemonade, or eating watermelons or eating aniseed (sonf), cumin (zeera) or cardamom (elaichi), or ginger may relieve nausea.

Drink enough fluids during the day to prevent dehydration (drink small amounts each time especially if you are vomiting).

If your nausea and vomiting do not subside, talk to your doctor. Avoid taking any medication unless prescribed by your doctor.

#### What symptoms should I be concerned about?

Please note that during the first trimester your chances of a miscarriage are the highest. Contact your doctor immediately if you experience the following symptoms:

- Vaginal bleeding
- Abdominal pain
- Painful urination
- Fever

#### Which medical tests will I need?

During your first trimester you may be asked to undergo the following blood tests to:

- Screen for anaemia (low red blood cell level).
- Check for immunity to rubella (German measles).
- Test for hepatitis B and C.
- Know your blood type and Rh (rhesus) factor Women, whose blood group is Rhesus negative, can
  carry a baby who is Rhesus positive if the baby's father is Rhesus positive. Rhesus negative mothers
  are offered anti-D injections at 28 weeks or after the birth of their baby. This helps prevent any
  reaction in case the blood of mother and baby mixes.
- Screen for red blood cell antibody.

In addition to these blood tests, you may also be asked to get your urine tested for any signs of infection and undergo an ultrasound to confirm your due date.

## Second Trimester: Week 14-23

## What can I expect during my second trimester?

The second trimester (weeks 14-24) is the most comfortable period of time for most pregnant women. Most of the early pregnancy symptoms, like nausea, will slowly disappear. You will also likely notice a return of your energy.





However, some new symptoms may appear. Remember that these symptoms are very common and are experienced by most women during their pregnancy. These include:

**Heartburn/ indigestion:** Burning pain or sensation in the chest due to acid in the stomach that travels upward and sometimes into the throat.

Nasal congestion (stuffy nose): Some pregnant women may have trouble breathing through their nose.

Constipation: Please see the first trimester section for details.

**Dizziness/ lightheadedness:** Your blood pressure will be lower during this time of your pregnancy than at any other time. This is not a problem but it may make you feel light-headed or dizzy if you get up quickly. Be sure to take your time and move slowly when getting out of bed or standing up from a chair.

**Haemorrhoids (piles):** This is a painful swelling or lump in the anal region due to swollen veins often caused by constipation. To prevent piles, try methods and remedies that ease constipation.

**Painful swelling of the ankles and feet:** Putting your feet up and elevating them when you can help with some of the swelling.

Forgetfulness: Be patient with yourself.

**Skin changes:** Brown patches on the forehead, cheeks and neck.

**Fetal movements:** At around 16 weeks you will start to feel a slight fluttering in your belly – that is the baby moving around. Fetal movement is the term used to describe this sensation. From here on you will become more aware of this as the baby increases in size.

If you ever notice a decrease or absence of fetal movements, see your doctor right away.

## How much weight gain can I expect?

In the second trimester, your baby bump may start to show. This is because the baby inside the womb starts growing more quickly during this time. In addition, you may experience a significant weight gain because of your appetite returning. If you started out your pregnancy at a normal weight, expect to gain around half a kilogram per week.

#### Which medical tests will I need?

Usually, between 18-22 weeks of pregnancy, you will be asked to have an ultrasound to assess the development of the baby's organs and to detect any abnormalities.

## How often should I get my pregnancy check-up (antenatal care)?

In your second trimester, you will most likely have a check-up with the doctor every 4 weeks (unless the pregnancy demands otherwise). At each visit you will be checked for your weight, your blood pressure, the height of your fundus (top of your uterus) and the baby's heartbeat to ensure everything is progressing normally.

## Third Trimester: Week 24-40

#### What can I expect during my third trimester?

The third trimester begins in week 25 of pregnancy and lasts until you give birth, which is usually around week 40 of pregnancy.

During this time your belly will get noticeably bigger as the baby starts to grow at an increasing pace. The third trimester of pregnancy can be physically and emotionally challenging. Your baby's size and position might make it hard for you to get comfortable. Some of the symptoms you experience may include:





**False Labour/ Braxton Hicks contractions:** As the due date nears, you may experience false labour or Braxton-Hicks contractions. This is when it feels like your uterus (womb) is cramping in attempt to deliver the baby. This may occur weeks or even months before the actual due date. At times you may not be able to differentiate false labour from true labour. To differentiate between the two, you need to know that unlike true labour, the false cramps are usually felt as painless tightening of your belly that happens irregularly and do not increase in intensity. Resting or shifting your body's position may help to ease the cramping.

Fatigue: Some women feel more tired than usual again, during the third trimester.

**Heartburn/ indigestion:** The burning pain or sensation in the chest experienced in the second trimester may continue into third trimester.

**Varicose veins**: The veins in the legs become swollen, enlarged and even painful. Elevating your legs may offer relief. Regular exercises such as walking, rocking your legs or lifting your legs up and down, may also help reduce the pain.

**Haemorrhoids (piles):** The painful swelling or lump in the anal region may continue into the final trimester.

**Stretch marks:** As the belly grows, the skin stretches resulting in long, narrow stripes or lines on the skin

**Backache:** As your body gains the extra weight you begin to experience lower back pain. When you sit, choose chairs with good back support. At night, sleep on your side with a pillow tucked between your legs. Try applying a heating pad or ice pack for relief. Regular exercise and stretching will also help.

**Urine leakage (incontinence):** This occurs as your growing baby moves lower down in the uterus and as a result puts extra pressure on your bladder. This extra pressure can cause you to leak urine, especially with laughing, coughing, sneezing, bending and lifting. If this is a problem, consider using an undergarment liner or pad.

**Colostrum leakage:** This is a creamy milky discharge from the breast that is high in protein, made by your body in preparation for feeding your baby.

## How much weight gain can I expect?

Most women put on between 10-12.5 kilograms in pregnancy and most of it after the twentieth week.

#### Which medical tests will I need?

Between 25-28 weeks of pregnancy, you will be advised to take an Oral Glucose Tolerance Test for screening and diagnosis of gestational diabetes (condition in which a woman without diabetes develops high blood sugar levels during pregnancy). If the tests indicate that you have gestational diabetes then your doctor may advise diet control, oral medicine and/or insulin. Complete Blood Count (CBC), a blood test, may be ordered to check for any disorders including anaemia or infection, or other health markers.

If you were found to be Rh negative, then at 24-28 weeks you will be recommended for antibody testing again.

An ultrasound called fetal growth scan will be offered in the third trimester of pregnancy. This will be done between 28 and 32 weeks of pregnancy and will show your doctor how your baby is growing.

Your doctor will discuss with you details about a tetanus vaccination. The first dose is administered at 28 weeks of pregnancy. This is followed by a second dose at 32 weeks. This will help protect you and your baby from tetanus, which is a life-threatening infection.





#### How often should I get my pregnancy check-up (antenatal care)?

In your early third trimester, you will most likely have a check-up every 4 weeks followed by 2-3 weeks from 28-36 weeks, which will then switch to once-a-week visits until you deliver.

#### When should I be concerned?

Contact your doctor immediately if you experience the following symptoms:

- Vaginal bleeding
- Fever
- Abdominal pain
- Sudden weight gain
- Decreased or absent fetal movements
- Contractions that increase in intensity and get closer and closer together.

If these symptoms occur or if you are worried about anything else that does not feel normal, call the Labour Room (+92 21 3486 4302/4303) or visit Labour Room triage for medical advice immediately.

#### TYPE OF DELIVERY

All our doctors are highly trained in managing different types of deliveries. We have 24-hour consultant coverage to ensure the safety of you and your baby. Kindly note, that whilst **your primary doctor may not be present at the time of delivery**, all decisions for your labour are supervised by your primary doctor and the doctor on duty.

### Normal vaginal birth

A normal labour and vaginal delivery is when the baby passes from the uterus, through the vagina and delivered out without any medical intervention. Many women who are having their first baby will have an episiotomy, where the doctor will make a small cut at the opening of the vagina, to prevent the tissues from tearing as the baby comes out. After the birth, the doctor will stitch up (suture) the cut. A normal vaginal delivery is the most common type of birth.

## Caesarian section birth

A caesarian or C-section delivery is when the doctor makes a cut through the lower abdomen and uterus, and then lifts the baby out. A C-section can be planned/ scheduled known as an *elective* surgery or it can be in emergency. The reasons for having a C-section are usually based on medical findings and any potential risk of a normal delivery, to you or your baby's health. A C-section is major surgery and providing there are no complications, it takes up to six weeks to heal and recover.

## Pain management during delivery

There is pain during labour and delivery, and every woman's experience is different; depending on your level of physical fitness, health status and own ability to deal with pain.

There are three main medical pain-relieving options for labour:

## **Entonox (Nitrous oxide + Oxygen)**

Entonox is nitrous oxide, also known as 'laughing gas', mixed with oxygen and you can receive it through a face-mask or a tube held in the mouth. Nitrous oxide does not stop the pain entirely, but it helps reduce the intensity felt with each contraction. It does not interfere with the contractions and it does not linger in either your or your baby's body. It may cause some nausea and vomiting. Entonox does not give the





same pain relief to every woman and in some cases, it may not work at all.

## Injection

Nalbuphine is a strong pain reliever, usually injected directly into a muscle in the buttock. It may also be administered intravenously (directly into a vein). Depending on various factors, the effect of the injection can last anywhere from 4-6 hours.

## Epidural anaesthesia

Epidural injection is an effective form of pain relief. It is used for vaginal birth and also for caesarean section, because it allows you to stay awake and alert during the baby's birth. The anaesthetic is injected into the lining of the spinal cord through the back, which makes you feel numb from the waist down. Your baby's heart rate will be monitored continuously.

Possible side effects and complications of epidural anaesthesia include:

- The anaesthesia may not be complete and you may still experience some pain. This may require the procedure to be repeated.
- After the epidural has been inserted, your blood pressure may drop, causing you to feel faint and nauseated. This may also cause stress to your baby. This is treated by giving intravenous fluid.
- An epidural often causes some muscle weakness in the legs, so women who have had an epidural anaesthetic may be confined to bed.
- The lack of sensation in the lower body means that you will not be able to tell when you need to urinate. A urinary catheter will be inserted in most cases.
- · Epidurals can lengthen the second stage of labour.
- The likelihood of assisted vaginal delivery is increased. If you are unable to push effectively, due to altered sensation and reduced muscle strength, the baby may have to be delivered by forceps or vacuum cup.
- Some women experience pain or tenderness where the epidural was injected or ongoing numbness.
- Very rare complications include infection, blood clots and difficulty breathing.

During your check-up visits, you will discuss with your doctor which type of delivery/ birth is safest for you and your baby, as well as which pain relief you may opt for, if any.

## **8 SIGNS THAT YOUR LABOUR IS COMING**

- 1. Your baby drops. This usually occurs one to four weeks before your due date. This is when your baby comes down into your pelvis (area between the abdomen and thighs) and gets into position to make his/her final exit.
- 2. Your cervix dilates. As your cervix (narrow passage from the uterus to the vagina) prepares for birth it starts to open up and thin out in the days or weeks leading up to the impending birth. Your doctor may track the progress of both during your final check-ups through an internal exam but don't worry if little progress is made, every pregnancy is different.
- **3. More cramps.** You can expect cramps to increase, more pain in your lower back and pain in the groin area. This is due to your joints and muscles preparing and stretching for birth.
- **4. Joints feel looser.** Throughout your pregnancy, the hormone relaxin makes all of your ligaments soften and loosen. Before you go into labour, you may notice your joints feel a bit looser this is just nature's way of opening up your pelvis for your baby to make his or her way into the world.





- **5. Diarrhoea.** This is usually a strong sign that the baby is on its way. Remember to drink lots of fluids and keep well hydrated.
- **6. Stop gaining weight.** Your weight will begin to level out in the last few weeks of your pregnancy. You could even lose a few pounds.
- **7. Feel extremely tired.** Feeling extremely tired is normal and you should rest as much as possible before the baby is born.
- **8. Vaginal discharge.** In the last week or so expect a change of colour or more frequent vaginal discharge.

## WHAT SHOULD I PREPARE TO BRING TO THE HOSPITAL?

You may have a due date or planned C-section date in mind but it is always best to be prepared, at least a couple of weeks before your expected delivery date. Keep a small bag ready with the following:

- 1. Personal clothing to wear when you leave the hospital.
- 2. Slippers and basic toiletries can be obtained from the hospital, however, if you have your own preference, bring them along.
- 3. Clothing, blanket and carrier for your newborn baby when you are ready to leave the hospital.
- 4. Your antenatal card and any other documents, as advised.

#### **GOING INTO LABOUR and DELIVERY**

## What is Labour and Delivery?

Labour and delivery are the terms used to summarise the changes that your body goes through, including contractions that open up your uterus, cervix and vagina, to help the baby move from your uterus through the cervix, through the vagina and come out into this world and be born. Another term for delivery is childbirth.

**Labour and Delivery** involves **three stages**: **First stage**: Begins from the onset of *true* labor and lasts until the cervix is completely dilated to 10 cm. **Second stage**: Continues after the cervix is dilated to 10 cm until the delivery of your baby. **Third stage** is the delivery of the placenta and is the shortest stage.

#### What is labour induction?

Induced labour is when you are given medical treatment to start your labour. Induced labour may be recommended by your doctor if:

- You are overdue (more than 41 weeks pregnant).
- There is a medical concern for you or your baby's health.

#### How long can labour last?

Every labour experience is different and it is very hard to predict how long it will take. It depends on how many babies you have delivered previously. It will also depend on how far along your labour has progressed when you came to the hospital.

## Will I be allowed to have anyone with me in the delivery room?

Your husband is allowed to accompany you in the delivery room to provide you with the support and care you need.





### What happens when I arrive at the hospital?

If you have registered, you may go straight to the labour and delivery ward, where you will be first required to present your antenatal card to the staff.

A medical team that includes doctor, midwife and or nurse will be assigned to care for you and support you through the childbirth process. Before getting settled in the labour room, you will be asked to empty your bladder and change into a hospital gown. The baby will be monitored and a duty doctor will examine you. Your consultant doctor will be informed about your examination findings, upon which the decision to admit you will be made.

#### What can I expect during a normal delivery?

If you are in labour, you will be assessed at regular intervals and your consultant will be kept informed on your progress. If required, certain tests maybe ordered:

**Blood tests:** to check your level of haemoglobin (for blood typing and cross-match), to check your liver and kidney function, ability of your blood to clot and screen for infection.

**Cardiotocography (CTG):** similar to an ECG; a belt is tied around your waist to monitor your baby's heart beat and your uterine contractions.

As the contractions get stronger and more painful, you should take a deep breath and push down. Try to remember the relaxation and breathing exercises you learned if you attended the childbirth education programme. You may push multiple times during each contraction and you should rest between every contraction. Your midwife and or husband can help support you through this phase.

Once your cervix is completely dilated, the medical team will guide you on when to push and they will be ready to receive your baby as you push it out. When your baby is born, you will hear the cry and providing everything is normal, your baby's nose and mouth will be suctioned and your baby will be placed on your chest. The umbilical cord will be clamped and cut. You and your husband will meet your baby for the first time.

The medical team will then take your baby for cleaning, a head to toe assessment and perform the Apgar test (a score which helps determine whether your newborn is ready to meet the world without additional medical assistance). The baby's measurements will be recorded.

Meanwhile, your uterus will continue contracting and you will deliver the placenta. This completes the delivery.

After delivery, you will be kept in the labour room for 45-60 minutes to assess your blood pressure and bleeding. When the doctor has determined you are safe to be moved, you will be taken to your ward or room

Most women will have a vaginal delivery as planned, however, if your or your baby's wellbeing becomes a concern, then a Caesarian section (C-section) may be recommended.

## What can I expect during a C-section delivery?

If you are having a planned or unplanned C-section, the anaesthesiologist will give you a proper assessment to ensure that you are given the painkillers that are safe for you specifically. It is usually regional (spinal), however, in some cases, it may be general anaesthsia.

An intravenous needle will be inserted into a vein in your hand or arm to allow for the administering of fluids and medications during your surgery. Your lower abdomen will be washed and shaved. The anaesthesiologist will administer the spinal . After you have been given the spinal, you will begin to feel numb from the waist down. A catheter will be inserted into your bladder to collect the urine and drain it into a bag. You will remain awake, alert and should be fully aware of your surroundings.





You will be taken to the operating room and your doctor will check to ensure that you cannot feel any pain, in your abdomen, before beginning the C-section surgery.

A screen will be placed above your abdomen blocking your view of the surgery and keeping the surgical area sterile. As the doctor makes the incision (cut) through your skin in the lower abdomen to reach your uterus and placenta, you should not feel any pain, just pressure. The doctor will ease your baby out through the incision and if necessary, a suction pump or forceps may be used. The doctor will give your baby to another nurse or doctor who will be responsible for your baby's health and well-being from then on. Your doctor will clamp and cut the umbilical cord and proceed to remove the placenta.

Meanwhile, your baby's medical team will suction your baby's nose and mouth, clean and perform a head to toe assessment including the Apgar test (a score which helps determine whether your newborn is ready to meet the world without additional medical assistance). The baby's measurements will be recorded.

#### What can I expect immediately after labour and delivery?

You will probably be exhausted from the physical effort and emotional excitement and want to rest. You will remain in the recovery room where the nurses can check on your progress. Your newborn baby be taken to the nursery and will also be tired from the birth, and may fall asleep.

You will be moved from the recovery room to the ward or room when the medical staff determines it is safe to do so. Your baby will be brought from the nursery to join you.

#### **DEALING WITH POST PARTUM**

## What is postpartum?

Postpartum is the term used to describe the time after the birth and the weeks following. It commonly lasts for six weeks after childbirth and is a very important time for both you and your newborn baby as you adjust to each other and live in your expanded family.

In the first few hours and days after childbirth, you will experience many changes, both physically and emotionally. If you had a caesarean section, your physical recovery will be different from that of a normal or vaginal delivery.

#### When can I breastfeed my child?

Your breasts, which began enlarging during pregnancy, will be filled with a special clear fluid called colostrum for the first few days after childbirth. As this happens, your breasts may become enlarged, firm, and painful. This is called breast engorgement, and it should disappear after a few days.

You can begin breastfeeding your baby as soon as you wish after the birth. Breastfeeding for the first time can be easy or it can be challenging. Place a pillow behind your waist (to support your lower back) and another pillow on your lap to rest your baby on so he or she is at the right height to reach your nipple. Some babies latch on to the nipple and breastfeed more easily than others. If you are having trouble, feeling pain or discomfort, talk to your doctor, midwife or nurse. They can help you improve your technique. Try to persevere with breastfeeding during this time, as breast milk is the ideal food for your newborn baby.

Allow your baby to feed whenever he or she demands. Let the baby feed on one breast for the first 5 minutes and then on the other for the next 5 minutes. Feeding duration will increase with time; make sure to alternate breasts with each feed. During the first few days, your baby will want to be fed every two hours. This interval increases as your baby settles down to his or her required needs.





#### How long does the bleeding last after delivery?

A blood stained discharge for 3-4 weeks, on and off, after childbirth is normal. It will gradually reduce and change colour from red to yellow and then to white. If your bleeding is heavy, i.e. 2 to 3 pads are soaked every 2 to 3 hours or clots are passed, go the Emergency Department immediately.

#### How should I care for the episiotomy or abdominal stitches?

You may have received a cut and then stitches at the entrance of your vagina (episiotomy) during the delivery or in your lower abdomen during the C-section. Either way, it is important that you pay attention to the stitches and keep the area clean to avoid infection.

Clean the stitches and area around them with soap and clean water, every time you go to the bathroom or 2-3 times a day. Dry the area carefully.

The area where the cut was made may result in a throbbing and sharp pain for the first week or so. Wrap some ice in a cloth and place it on your vagina to help sooth the soreness. Take the pain medicine regularly or as prescribed by your doctor. Walking, standing and sitting for long periods may be uncomfortable, so lie down. If you have severe pain and redness, or a foul smelly discharge, go the Emergency Department immediately.

The episiotomy stitches should dissolve in about 2 weeks time whereas the abdominal stitches have to be removed at a specific time as advised by your doctor.

#### Will I need the Rubella vaccination after the delivery?

If you were found to have no immunity against rubella, you will be offered the vaccination after delivery. Rubella infection during pregnancy has serious consequences; it can cause miscarriage and birth defects. Ideally you should get this vaccination before getting pregnant. However, getting the vaccination afterwards, will at least help prevent infection in any future pregnancy. You should get this before you leave the hospital.

## What other type of problems can I expect during post partum?

Physical problems after childbirth can include infections, difficulty urinating, constipation, hemorrhoids, or other conditions. Make sure to get prompt and appropriate treatment from your doctor to avoid unnecessary prolonged discomfort and have the problem treated.

Sudden mood swings, feeling irritable, indecisive and anxious after childbirth is normal and it can last just a few days or a couple of months. Some women experience a depression that is so pronounced and continuous that it disrupts their normal functioning. This is called major depression or postpartum depression, and should not be left untreated. Talk to your doctor if you feel this way. Early diagnosis and treatment is very important to your wellbeing and that of your baby.

#### How long will I have to stay in the hospital after the baby is born?

If the delivery was normal, not complicated and, you and your baby are doing well, then you can go home within a day or two after the baby is born.

If the delivery was a C-section, not complicated, and you and your baby are doing well, then you can go home within 3-4 days after the baby is born.

#### When should I follow up with my doctor (obstetrician) after leaving the hospital (discharge)?

Your first follow-up visit with your doctor usually 2 weeks after discharge from the hospital. During this visit the doctor will assess how you are progressing through the post partum period and is there to answer





answer any questions or refer you to any other specialist, should you need any other health specific consultations.

Your final post partum checkup with your doctor should be 6 weeks after the delivery. During this visit, the doctor will check on your physical recovery from the pregnancy and delivery, see how you are doing emotionally, and address your needs going forward. It is very important for you to have this final checkup, please do not miss this appointment.

## When should I follow up with my baby's doctor (paediatrician) after leaving the hospital (discharge)?

Your baby's first follow up visit with his or her doctor should be within 3-5 days after leaving the hospital. At the Aga Khan University Hospital, we have a wide range of specialty doctors specifically trained in child health. Make sure to schedule this appointment before you leave the hospital.

## CARING FOR YOURSELF AFTER CHILDBIRTH

After your child is born, you may feel a little nervous or frightened and have many questions. The more you know about what to expect as a mother, the more confident you will feel, and the more you can enjoy this important and special time in your life.

#### Which services are offered by the hospital to help me recover from childbirth?

The Aga Khan University Hospital offers various support services to help you adjust to this new chapter in your life. Ask your doctor or nurse about our nutrition, physiotherapy, psychiatry, rehabilitation and other specialized clinics.

#### How much can I do after delivering a baby?

For the first month it is normal to feel weak and tired. Your strength will gradually return. Try to rest as much as possible during the day; if possible, sleep when your baby sleeps. Eat healthy and nutritious foods and get help from your family and friends.

Generally you should move slowly and carefully. Avoid making sudden movements.

Do not do anything that makes you strain or grunt such as lifting heavy objects or reaching for something high above your head.

Hold the railing when climbing any stairs. If you are tired, stop and rest midway.

You should bathe or shower everyday as usual. Do not lock the bathroom door in case you feel weak and need to call for help. Keep yourself clean and make sure to change your sanitary pad at least every 4 hours to lower the risk of infection.

As you begin to heal physically, go out for short walks to get some fresh air and a change of scenery. It will help if you are feeling stressed and overwhelmed.

## What type of nutrition do I need during this time?

You need a nourishing diet to build up your strength and recover. If you are breastfeeding you will feel hungry and thirsty often. Eat when you feel hungry.

Select nutritious foods from all the five food groups:

**Grains:** Foods that are made from wheat, rice, oats, cornmeal, barley, or another cereal grain are grain products. Examples include whole wheat, brown rice, and oatmeal.





**Vegetables:** Vary your vegetables. Choose a variety of vegetables, including dark green, red, and orange vegetables, legumes (peas and beans), and starchy vegetables.

**Fruits:** Any fruit or 100 percent fruit juice counts as part of the fruit group. Fruits may be fresh, canned, frozen, or dried, and may be whole, cut-up, or pureed.

**Dairy:** Milk products and many foods made from milk are considered part of this food group. Focus on fatfree or low-fat products, as well as those that are high in calcium.

**Protein.** Go lean on protein. Choose low-fat or lean meats and poultry. Vary your protein routine--choose more fish, nuts, seeds, peas, and beans.

**Oils** are not a food group, yet some, such as nut oils, contain essential nutrients and can be included in the diet. Others, such as animal fats, are solid and should be avoided.

Water. Drink at least 8-10 glasses of water and 2-3 glasses of milk each day.

## When can I start exercising and what should I do?

Do not begin intense exercises until the doctor has given you permission to do so.

You can begin walking as soon as you are feeling a little better and not experiencing any pain. Begin a daily routine, starting with 5 times a day and then progressing to 10 times a day, unless otherwise recommended. Practice on a firm surface. Do not exercise when you are tired. When you are lying down or sitting, make sure that your back is well supported with a pillow.

Aside from walking, there are several areas of the body you may want to focus on after childbirth. Pelvic floor and abdominal muscles exercises can help:

- Decrease your pregnancy weight.
- Speed up your metabolism.
- Strengthen your pelvic floor and prevent urine leakage.
- Strengthen your abdominal muscles.
- Strengthen your back and relieve back pain.
- Improve your posture.
- Give you more energy.

There are several different ways to exercise your pelvic floor and abdominal muscles. Other areas of the body that are easy to exercise are your neck and shoulders, and your thighs and buttocks. Some exercise options that you can try are described below.

#### Pelvic floor muscle exercise

Sit up straight on a chair, with your feet slightly apart and touching the ground. Keep your hands by your side, be comfortable and relax. Tighten the ring of muscles around your front and back external passages (the holes from where you urinate and excrete stool) drawing the inside muscles together and upwards. Hold the squeeze for a few seconds, relax and repeat about 10 times in one session. You may repeat the sessions 3-5 times a day. To check that you are exercising your pelvic floor muscles, try squeezing them midstream when you are urinating. If you are able to stop the flow, you are reaching the right muscles, although if your muscles are already very weak then this test may not work for you.

#### **Curl-up abdominal exercise**

Lie on your back with your knees bent and both feet on the ground. Bend your arms and place your hands behind your neck. Tuck in your chin and slowly lift your head and shoulders towards your abdomen as far as you can go. Breathe out as you do this. Hold for 10 counts, slowly lower your head and shoulders to the ground and relax. Repeat 10 times. You may repeat the sessions 3-5 times a day.





#### **Curl-back abdominal exercise**

Sit on the ground with your knees bent, feet on the ground and hands on your abdomen. Breathe out and curl back about half way. Hold for 10 counts. Return to the sitting position and relax. Repeat 10 times. You may repeat the sessions 3-5 times a day.

#### Neck stretch exercises

These exercises can be done while sitting, standing or lying down. Keeping your back straight, bring your chin towards your chest, bend your head forward, and hold in this position for 5 counts. Bring your head back to the resting position and relax. Repeat 10 times. You may repeat the sessions 3-5 times a day.

Keeping your back straight, turn your head to the right, and hold in this position for 5 counts. Bring your head back to the resting position and relax. Repeat 10 times. Now, do the same except this time, turn your head to the left. You may repeat the sessions 3-5 times a day.

#### Shoulder exercises

These exercises can be done while sitting, standing or lying down. Put your hands on your shoulders and make a slow, large circular movement anti-clockwise with your elbows sticking out towards your sides. Repeat 5 times and then relax. Now perform this exercise moving clockwise. Repeat 5 times and then relax. You may repeat the sessions 3-5 times a day.

#### Thighs and buttocks exercise

Lie on your back with your knees bent and your arms at your side. Lift your hips off ground but do not arch back. Hold for 10 counts. Slowly lower your back down and relax. Repeat 10 times.

## MAJOR HEALTH PROBLEMS YOU MUST BE AWARE OF

It is very important that throughout the course of pregnancy you immediately report any form of discomfort or abnormality you experience. Some major health problems you may develop during pregnancy that require immediate medical attention include preterm labour, placenta previa and high blood pressure.

**Preterm labour** is when you go into the labour stage prior to 37 weeks of pregnancy. You may experience ruptured membranes (breaking of water) with or without any pain which may lead to the early birth of your baby.

Look out for symptoms like cramping, backache, contractions (that do not subside with changing positions or drinking water); fluid leaking from the vagina or vaginal bleeding.

**Placenta previa** or a low-lying placenta is when the placenta is attached in the lower part of the uterus, near to or covering the cervix. If the placenta is low in the uterus, there is a higher chance that you could bleed during your pregnancy or at the time of delivery (birth). Placenta previa can be diagnosed with an ultrasound. In case of bleeding, you need to go to the labour room for evaluation immediately.

**High Blood Pressure:** Your blood pressure will be checked at every doctor check up (antenatal appointment). This is because a rise in blood pressure can be the first sign of a condition known as pre-eclampsia – also called pregnancy-induced hypertension (PIH) or Pre-Eclamptic Toxaemia (PET). It affects 10% of pregnancies. Symptoms of pre-eclampsia include:

- Headaches.
- Blurred vision or lights flashing before the eyes.
- Severe pain just below the ribs.
- Vomiting.
- Sudden swelling of the face, hands or feet.





However, you can have severe pre-eclampsia without any symptoms at all. Although most cases are mild and cause no trouble, it can be serious for both mother and baby. It can cause fits (seizures) in the mother (called eclampsia) and affects the baby's growth. It can be life threatening if left untreated. This is why your routine doctor checkups (antenatal appointments) are very important and should not be missed.

## WHERE SHOULD I GO IN CASE OF AN EMERGENCY?

Come straight to the labour room at *The Aga Khan University Hospital*, if you are already registered for delivery and your pregnancy is more than 24 weeks or 6 months.

Go straight to the *Emergency Department at The Aga Khan University Hospital* if your pregnancy is before 24 weeks or if you have not registered with the hospital.

If you would like to learn more about being pregnant or have any questions, do not hesitate to ask your doctor or nurse. We are with you in this journey every step of the way.

