

Chapter 1

Pre-Pregnancy Preparation



*Before you were conceived, I wanted you.
Before you were born, I loved you.
Before you were here an hour, I would die for you.
This is the miracle of Mother's love.'*

Maureen Hawkins

Pregnancy is an exciting and rewarding experience for any woman. Pre-pregnancy preparation is essential in the journey of pregnancy. Being well prepared would optimize your chance of a smooth pregnancy and healthy baby. It prepares you both physically and emotionally.

Now that you have decided to embark on the journey of motherhood, let us see how you can prepare yourself for a healthy pregnancy. Ideally, you should start at least three months before you conceive, but it is never too late either.

Start Young

The prime of your fertility is when you are 20–24 years old, with a sharp decline from 35 years old onwards. On average, there is a drop of 3% in fertility with each increasing year of the woman's age (Figure 1.1). The chance of genetic abnormalities like Down syndrome as well as complications in pregnancy like miscarriages, high blood pressure and diabetes, increase as you grow older, particularly beyond 35 years of age. So, start young when you are in your prime!

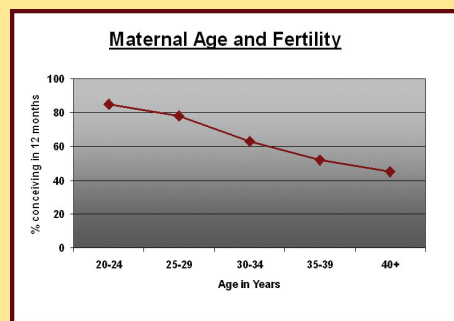


Figure 1.1 Pregnancy rate and mother's age.

Pre-pregnancy Supplementation

It is important to take a diet balanced in calories, carbohydrates, proteins and fibers. Folic acid is a type of vitamin B that is needed for the formation of blood cells and the development of baby's nervous system. It has been shown to reduce the chance of a baby having neural tube defects (spinal cord and brain abnormalities) (Figure 1.2). A simple way is to take a folic acid supplement of 5 mg at least three months before conception and continue for the first 12 weeks of pregnancy.

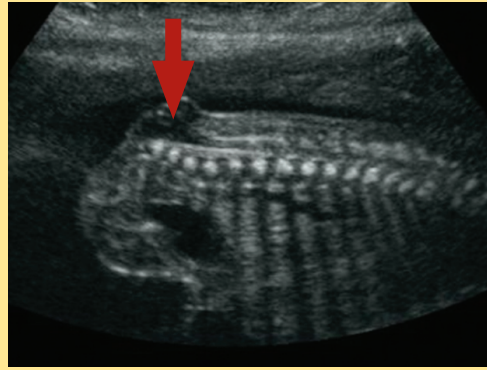


Figure 1.2 Defect at lower spine (arrow).

Pre-conception Check-up

Visit a gynecologist to discuss your chance of conception, previous medical problems that may affect your pregnancy, family history of genetic problems and immunization history. Your check-up may include a PAP smear test, thalassemia (genetic blood disorder) test and rubella (German measles) screening. A pelvic ultrasound scan can also be performed to check for ovarian cysts or fibroids in the womb.

Optimize Your Medical Conditions

Controlling your medical conditions such as diabetes mellitus and hypertension improves the prognosis for you and your baby. Consult your obstetrician early as pregnancy could be complicated with such medical conditions. If the medical conditions are well-controlled before you conceive, you are more likely to have a smooth pregnancy and a healthy baby.

Other existing medical conditions that could affect or be affected by pregnancy include:

- Auto-immune diseases such as systemic lupus erythematosus and rheumatoid arthritis
- Epilepsy
- Thyroid disorders
- Asthma
- Anemia such as iron-deficiency anemia or thalassemia

- Kidney disease
- Heart disease
- Deep vein thrombosis or pulmonary embolism (blood clots in legs or lungs)
- Depression

It is possible to have a successful pregnancy if you have one of these chronic conditions, but it may be considered a *high risk pregnancy* and you will have to take some special precautions.

If you are on chronic medication for these conditions, your gynecologist will want to assess them in terms of their effect on you and your developing baby. For example, if you are a known diabetic on oral medication, you will need to change to insulin injections once your pregnancy is confirmed.

Avoid High-risk Activities

It is advisable to stop smoking. Substance abuse and smoking are associated with miscarriages, slowing of baby's growth in the womb, pre-mature delivery and bleeding in the placenta. Avoid excessive alcohol and binge drinking. This can lead to congenital malformations and mental impairment of your baby.

FREQUENTLY ASKED QUESTIONS

What are some problems that older mothers may face during pregnancy?

It is important to reiterate that most pregnancies in older mothers **have a good outcome**. Traditionally, an older mother is defined as any expectant mother who is 35 years old or more at her expected date of delivery.

There is an increased incidence of chromosomal problems as the quality of the egg may deteriorate with advancing maternal age. In particular, there is an increased risk of Down's Syndrome when compared to a younger age group. There is also an increased risk of twin pregnancy (see Chapter 22). In addition, older mothers have an increased risk of miscarriages.

Overall, there is an increased tendency to medical conditions such as pregnancy-induced hypertension and gestational diabetes. It is important for any mother with an advanced maternal age to see an obstetrician early so that proper follow-up and tests can be performed.