

Guide to *Healthy Pregnancy*





Congratulations!

You are going to become a mother soon.

This indeed is your moment of joy and anticipation as you eagerly countdown the days to meet your little munchkin. To help you through your pregnancy and childbirth, we have prepared this handbook. This document consists of all the important and easy-to-follow tips on diet, exercises during pregnancy, and baby care to help you bond with your child before he/she is born. You may refer to this handbook even post childbirth for a few quick tips.

Knowing what to expect and what to do at the same time, will greatly help in reducing your anxiety and boost your confidence, whilst you are experiencing the pregnancy journey.

Happy reading!

Team Cordlife



DIET IN PREGNANCY



FIRST TRIMESTER



- 🍏 Morning sickness is very common—try some dry crackers or muri (puffed rice) before leaving bed.
- 🍏 You require only 1gm extra/day than your normal requirement; so don't worry, only 1/2 tsp sugar or 1gm of butter can meet that extra need.
- 🍏 Only 2.5kg weight gain is satisfactory.
- 🍏 To cope with heartburn, avoid sweet foods. Homemade curd with a pinch of salt can give you relief.
- 🍏 Avoid taking fruit or fruit juice on an empty stomach.

DON'T HURRY. REMEMBER SLOW BUT STEADY WINS THE RACE.

SECOND TRIMESTER



- 🍏 You require only 90kcal extra/day than your normal requirement.
- 🍏 Need not eat double the amount.
- 🍏 Include healthy snacks, like fruit punch, yogurt, raita, sprouts in between meals.
- 🍏 Reduce your intake of tea, coffee, soft drinks etc.
- 🍏 Say no to alcohol & smoking—even passive smoking is not good for your baby.

NEED NOT EAT FOR TWO. ENJOY YOUR PREGNANCY WITH HEALTHY SNACKING.

THIRD TRIMESTER



- 🍏 You require 300kcal extra per day than your normal requirement.
- 🍏 Increase the intake of cereals and pulses.
- 🍏 Include seasonal fruits and vegetables in your diet.
- 🍏 The chances of having gestational diabetes are high. So, avoid sweet foods.
- 🍏 Say no to table salt and highly salty items like chips etc. to protect yourself from pregnancy-induced hypertension.

HEALTHY AND WELL-BALANCED DIET IS THE FIRST GIFT TO YOUR BABY.

Early Morning



Dates



Dinner



Roti, Dal, Vegetables,
Salad, Protein *(Fish/Chicken
for Non-Vegetarian & Paneer/Soya
for Vegetarian), salad*



Breakfast



Breakfast Cereals (*Dalia,
Suji, Cornflakes etc.*) & Milk



Mid Morning



Fruits (Seasonal)



Evening



Any Health Drink
(appropriate for pregnancy)

GENERAL DIET PLAN



Snacks



Muri (Puffed rice)



Late Afternoon



Curd/Lassi



Lunch



Rice, Dal,
Vegetables,
Salad, Protein
*(Fish/chicken-for
Non-vegetarian) (paneer/
soya-for Vegetarian), Salad*

N.B. – The amount of food intake varies for individuals considering their caloric needs, etc. Above is a generalised diet plan for a normal healthy pregnant mother. It is suggested to consult your dietician for your detailed diet chart during your course of pregnancy.

OTHER DIETARY ADVICES

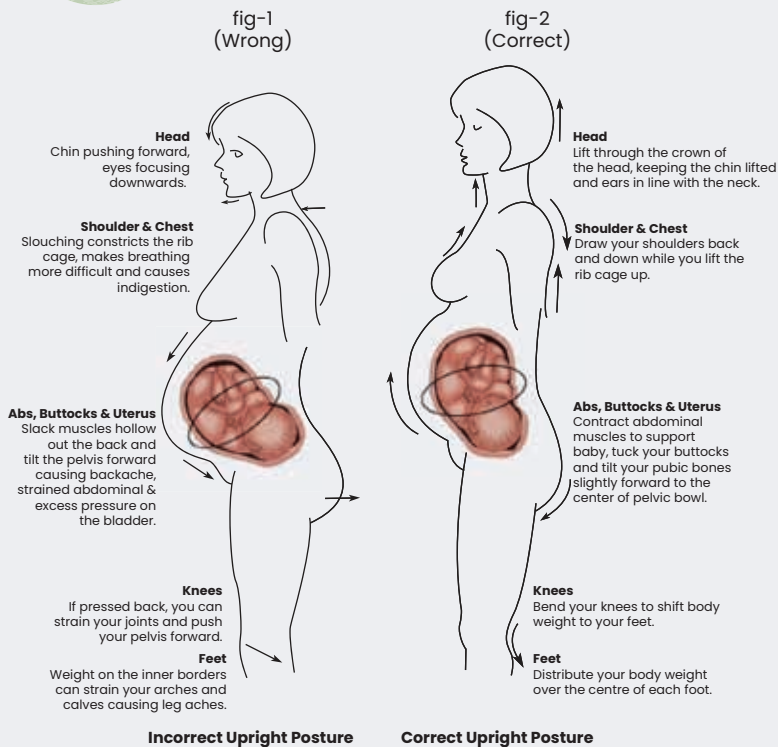
- Try to eat small and frequent meals.
- Avoid long gaps between meals and snacks.
- Avoid any food that can produce gas or acid.
- 12–14 glasses of water or fluid intake in a day is ideal.
- Don't starve or skip meals.
- Avoid overly spicy, fatty, rich, and fried foods.
- Avoid excessively seasoned or strongly flavoured foods.
- Restrict junk food and foods with preservatives.
- Take fluids in between meals rather than along with them.
- Have milk and milk products as a healthy snack.

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M.SC IN DIETETICS | DIABETIC EDUCATOR





RIGHT POSTURES IN PREGNANCY



EXERCISES IN PREGNANCY

Thigh Exercises

- Begin seated with your legs extended in front of you. Sit up tall with abs in and shoulders down. Slowly bend your knees out to the sides and slide your feet towards your body until the soles of your feet are touching the ground.
- Maintaining good posture, lower your knees down to the floor (without pushing on them) as far as you can, comfortably. Also try pulling your heels closer to your body. You should feel a stretch in your inner thighs. Hold for 15-30 seconds.
- Repeat 2 times.

Kegel Exercises

- Contract your pelvic floor muscles for 3 seconds then relax for 3 seconds. Do it 10-15 times at once and repeat it several times in a day. Do it while lying down or while sitting.
- Helps prevent urinary incontinence by strengthening the pelvic floor.
- Helps to keep the vaginal canal tight and to prevent damage while the baby passes through.



SIMPLE & SAFE EXERCISES

Breathing Exercises

- Improve oxygenation
- Relieve stress and tension
- Good relaxation technique that helps reduce anxiety
- Practice Deep Breathing



! Never hold breath in pregnancy

Neck Exercises

- Help to correct your posture
- Relieve upper back tension
- Help you to get relief from headache
- Look up, down, and to the sides to perform neck movements

STANDING AND SITTING

While Standing

- Support your elbows in a high place
- Don't lean backward while standing
- Place one foot on a low stool for support

While Sitting

- Take back support
- Rest your feet completely on the ground
- Sit up straight

Standing in one place for prolonged periods - as when you're lifting weights or doing yoga poses - can decrease blood flow to the uterus and cause blood to pool in your legs, making you dizzy. Keep moving by switching positions or walking in place

BENEFITS OF EXERCISES

Exercise programmes during pregnancy should be directed towards muscle strengthening to minimise the risk of joint and ligament injuries.

- Reduction in pregnancy aches and pains e.g. backache, and cramps
- Creates a sense of well being
- Improved posture and body awareness
- Aids post natal recovery
- Improves the ability to cope with labor and childbirth





When not to Exercise

- ✗ If you have very High Blood Pressure.
- ✗ If you are at the risk of pre-term labor.
- ✗ If you have persistent 2nd/3rd trimester vaginal bleeding.
- ✗ If you have a placental problem.

Do's and Don'ts

- ✓ Work up to 5 to 10 repetitions per day.
- ✓ Hold each position or stretch for 20-30 seconds.
- ✓ Sustain aerobic activity for 15-20 minutes as long as you are able to talk comfortably and are not short of breath.
- ✓ Always consult a specialist before starting any exercises.
- ✗ Never try to copy another pregnant woman's exercises; get your own, since each pregnancy is different.
- ✗ Because joints are more supple during pregnancy, avoid stretching to the point of discomfort.
- ✗ Don't exercise beyond the point of moderate perspiration.



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BREASTFEEDING YOUR NEWBORN

Breastfeeding helps you develop a strong bond with your baby.

Breastfeeding your newborn within the first hour of birth, not only helps to switch on your breast cells for milk secretion but also brings about a number of health benefits for both the mother and the baby.

Breastfeeding benefits for the Mother:

- Natural contraction of the uterus
- Reduced post-delivery bleeding
- Healthy reduction in weight post pregnancy
- Probability of lowering the risk of breast and ovarian cancer

Breastfeeding benefits for the Baby:

- Healthy weight gain and proper growth
- Decrease in malnutrition since the mother's milk contains all the nutrients in the proper concentration as required by the baby
- Development of baby with higher IQ
- Provides immunity to the baby and lowers risk of allergies, till their own immune system is developed.

THE DO'S OF BREASTFEEDING YOUR NEWBORN

- For the first few days after birth, your baby would demand to be fed at least once every 2 to 3 hours.
- Early feeding can take anywhere between 15 to 30 minutes, depending on the needs of the newborn.
- You might feel a tingling sensation in your breast while feeding, but make sure it does not feel painful. If you face any problems while feeding, consult your doctor.
- Your baby has a unique way of telling you when he or she is hungry and you need to feed him/her. Some of your baby's cues are making sucking sounds with their mouth, waking up and acting restlessly, licking their lips, moving their heads side ways with an open mouth, and more active movements.
- Always burp your baby after feeding.

How to burp your baby?



Place your baby on your shoulder and pat your newborn's back.



Place your baby sideways & pat the back while holding the chin steady with one hand.

MYTHS AND FACTS ON BREASTFEEDING

Myth 1: Many women do not make enough breast milk

Fact: The majority of women produce enough milk to nourish their newborns. Early frequent feeding gives you the best start to establish your supply.

Myth 2: Breastfeeding involves food restrictions

Fact: It is important to have healthy meals to breastfeed your newborn but it does not mean you have to reduce or increase consumption of certain foods.

Myth 3: Don't wake a sleeping baby to breastfeed

Fact: In the first couple of days after birth, your newborn will sleep a lot. You need to wake up your newborn to create a regular breastfeeding habit. If your baby goes to sleep just after getting a little milk, you may need to encourage your baby to continue the feeding by loosening or removing his/her coverings, tickling the feet, jiggling arms or legs.

Myth 4: Breastfeeding will make breasts sag

Fact: Breastfeeding doesn't induce your breasts to sag. Wearing a well-fitting bra supports your breasts while regular exercise and staying hydrated firms your breasts and prevents sagging.

COMMON BREASTFEEDING POSITIONS

Cradle Position:

- Sit straight on a comfy chair with arm rests.
- Support your baby with the arm that is on the same side of the breast you are going to feed.
- Cradle your baby in your arm so that the head rests comfortably in the crook of your elbow.
- Make sure that your baby is not turned to the side.
- Support the head of the newborn with an open hand.



Football Hold Position:

- Hold your baby beside you with your elbow bent.
- Support your baby's head with an open hand and face him/her towards your breast.
- The Baby's back will rest on your forearm.

Side-Lying Position:

- Lie on your side and let your baby face towards your breast.
- Support the head with an open arm.
- Use the other arm to support yourself.



Cross-Cradle Position:

- It is similar to Cradle hold but hold your baby in the crook of your arm opposite the breast you're going to feed from.
- Use the left arm for right breast and right arm for the left one.
- Support the head with an open hand.

Laid-Back Position:

- Lay on your back and hold your newborn facing towards your breast.
- Support the head with an open hand.












Tips:

- Choose a position which will keep both you and your newborn comfortable.
- Place a pillow behind you to support your body while sitting or lying during breastfeeding.
- Make sure that your baby's body is properly aligned while breastfeeding.

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MBBS | PGDMCH | MSc. | MPhil

KEY NUTRIENTS FOR BABIES

Iron	<ul style="list-style-type: none"> • Helps to build the blood and the immune system and its proper function. • Deficiency can lead to less blood and decreased resistance to infections. • Spinach, egg yolk, pulses, red vegetables and non-vegetarian products contain iron. 	
Zinc	<ul style="list-style-type: none"> • Provides immunity against infectious diseases during the first year of life, cell formation, tissue growth and repair. • Deficiency results in low immunity and increases chances of infection and diarrhoea. • All pulses and lentils contain zinc. 	
Selenium	<ul style="list-style-type: none"> • Helps in the protection of body tissues and maintenance of defence against infections, also acts as an antioxidants. • A trace element required in very minute quantities. • All vegetables contain sufficient amounts of Selenium. 	
Vitamin A	<ul style="list-style-type: none"> • Very essential for vision, especially night vision and for the functioning of the immune system. • Deficiency leads to night blindness, increased vulnerability to infections, particularly respiratory and diarrhoea. • Reddish and orange coloured vegetables (carrot, pumpkin, ripe papaya, etc) and fruits are abundant source of Vitamin A. 	
Vitamin B6	<ul style="list-style-type: none"> • Essential for the effective functioning of the immune system, nervous system and red blood cells. • Deficiency leads to decrease in the antibody production and weakening of the immune system. • Germinating gram, lentils and pulses are rich sources of Vitamin B6. 	
Vitamin C	<ul style="list-style-type: none"> • Essential for the formation of the immune system and building a cell's strength to fight infection and wound healing. • It is very important for absorption of iron. • Deficiency leads to poor wound healing, capillary fragility & scurvy. • Citrus fruits and tomatoes are rich in Vitamin C. 	
Vitamin E	<ul style="list-style-type: none"> • An antioxidant vitamin helps in proper development of the immune system. • Deficiency contributes to various co-morbid conditions. • Green leafy vegetables, germinating lentils contain abundant Vitamin E. 	
Essential Fatty Acids	<ul style="list-style-type: none"> • Very important for the formation and maintenance of all cells, internalisation of fat soluble vitamins and immunity. • Cannot be formed by the body so has to be supplied in the diet. • Deficiency leads to vitamin deficiency and phrynoderma. • Butter, ghee and edible oils contain essential fatty acids. 	
Others	<ul style="list-style-type: none"> • Copper: Pulses like Soya beans, rajma (Kidney beans). • Iodine: Iodized salt. • Calcium: Milk and milk products, beans and dark green leafy vegetables. • Vitamin D: Fortified milk and exposure to sunlight. • Vitamin B1, B2, B12, Niacin, Folic Acid: Puree made from vegetables, spinach, apples, pulses, peas, tomatoes. • Choline: Mashed oranges, boiled and mashed potatoes, whole wheat products. 	

STEM CELL BANKING

What are Stem Cells?

Stem Cells are the body's 'master/mother' cells because they can differentiate into various types of cells hence repair damaged parts of the body. The stem cells found in umbilical cord and cord blood are the building blocks of your blood and immune system which are primarily responsible for replenishing blood and regenerating the immune system.

What is Cord Blood?

Cord Blood is the blood that remains in the umbilical cord and placenta after the cord is cut. Routinely discarded as a medical waste, your baby's umbilical cord blood is a valuable source of Haematopoietic stem cells (referred to as cord blood stem cells here) that are mainly responsible for replenishing blood and regenerating immune system.

Why bank your baby's Umbilical Cord Blood?

Cord blood is a rich source of Haematopoietic Stem Cells (HSCs) that can be used to treat many diseases, including certain cancers and blood disorders, and has shown promising results in the treatment of Autism and Cerebral Palsy. In the event of a critical situation when a transplant is required, having a readily available supply of stored Haematopoietic Stem Cells can save time and money. A guaranteed match for Autologous transplant (donor and recipient are the same individual).

What is Umbilical Cord and what are Umbilical Cord Tissue Stem Cells?

Umbilical Cord functions as a lifeline between mother and child during pregnancy. After a baby is delivered, the umbilical cord is cut and normally discarded with the placenta as medical waste. This procedure is painless due to the lack of any nerves on the umbilical cord. Cord tissue provides a greater number and variety of stem cells, which increases the potential to treat a broad range of diseases with regenerative therapies. Some of these are Mesenchymal (MSC) and Epithelial stem cells (EpC). MSCs are expected to play a critical role in the treatment of various diseases and are being studied in great detail for their regenerative properties in cartilage, bone, muscle, and nerve cells. In clinical trials, they're being studied as possible treatment for spinal cord injuries, brain trauma and cartilage damage. EpCs form the soft tissues that connect, support, or surround other structures and organs of the body including cornea, skin, and liver.

Who can use my Baby's Cord Blood?

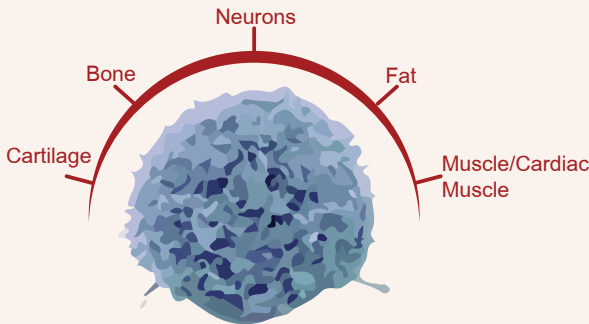
The stem cells from the cord blood you store will be a perfect match for your baby. It is also a ready-to-use source of genetically related stem cells for someone else in the family. Compared to bone marrow or other sources of the stem cells, the likelihood of locating a matching cord blood unit is 60% higher between siblings.

What are the benefits of Stem Cells?

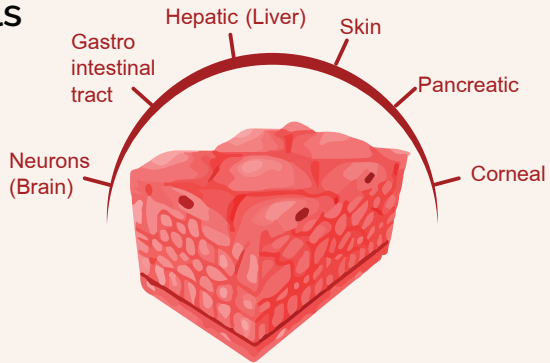
Stem Cells are a breakthrough in modern regenerative medicine due to their huge potential and ability to generate cells and tissues. Given the right environment, these stem cells can give rise to a number of tissues that constitute different organs. Stem cells are a renewable source of replacement cells and tissues and have the potential to treat diseases such as Thalassaemia, Leukaemia, Blood Disorders, Alzheimer's Disease, Parkinson's Disease, Spinal Cord Injury, Stroke, Burns, Heart Disease, Diabetes, Osteoarthritis, Rheumatoid Arthritis and many other ailments in the future.

What are the sources of Stem Cells?

Stem Cells can be derived from various sources such as the bone marrow, embryos obtained by in-vitro fertilization, amniotic fluid, umbilical cord blood and menstrual blood. Breakthrough medical research has now shown that the umbilical cord is the richest source of stem cells and they have the potential to treat many ailments through the process of stem cell therapy.



**Mesenchymal
Stem Cells**



**Epithelial
Stem Cells**

For more information on stem cell banking
& free presentation contact:

Toll free number: **1800 121 6200**

Hotline number: **(+91) 98301 66200 | SMS CL to 56677**

or visit us at: **www.cordlifeindia.com**

or mail us at: **info@cordlifeindia.com**

CHOOSE THE CORD BLOOD BANKING EXPERT FOR YOUR FAMILY

A.

LISTED IN SGX

Listed on the Main board of the Singapore Exchange and amongst the first private cord blood banks in Asia.

ACCREDITATIONS & RECOGNITIONS

From quality standard organizations including the AABB, CAP, DCGI, WHO-GMP and also recognised by renowned entities like Forbes Asia, SIAS and World Economic Forum.

B.

AXP®II

FDA approved, cGMP and cGTP compliant, automated, functionally closed processing system that ensures higher MNC (98.7%)^[1] and viable CD34+(97.3%)^[2] stem cell recovery, as compared to conventional processing systems.

CellOptima™

Patented in 40 countries including US and India, which can expand and differentiate Epithelial and Mesenchymal Stem Cells from the cord lining.

C.

QUALITY WARRANTY

Worth INR 2 million if the viability or potency of the Stem cells are deteriorated during storage.

CORDLIFE TRANSPLANT PROGRAMME (AIA)

A medical assistance of INR 25,00,000 is provided to your family to offset cord blood stem cell transplant expenses. The risks are underwritten by Insurance company.

D.

WORLDWIDE FREE TRANSPORT

Free transportation of your stem cells to the transplant centre anywhere in the world.

COMPLETE TRANSPORTATION LIABILITY

Worth INR 2 million if the stem cells are damaged during transportation from the storage facility to the transplant centre.

References:

1. David T. Harris. Collection, Processing, and Banking of Umbilical Cord Blood Stem Cells for Clinical Use in Transplantation and Regenerative Medicine. LabMedicine 2008 March;Volume 39;3.

2. Christy Kim et al. Meta-analysis of the AXP® and SEPAX® automated cord blood processing systems. CESCA Therapeutics White Paper; 2015.

CLIENT TESTIMONIALS

Families that believe Health is Wealth



"Thank you Cordlife for securing my baby's stem cells. I would like to thank Cordlife for being there for my baby."

- Kannu Priya & Chetan Kaushal

"Cordlife has given us the peace of mind. At least now we know that our precious little baby is protected for life. The entire experience has been amazing right from day one and hats off to the Cordlife Professionals for making this entire experience a remarkable one."

- Mrs Savitha & Harish Rao (Mumbai)



"The Umbilical Cord is the link between a mother and her baby, and the same is useful to cure diseases for the entire family, if required. So hat's off to Cordlife for preserving the Cord blood and ensuring that the link between the mother and the baby is extended to the entire family and maintaining the link forever."

- Sarika Parakh (Kolkata)

"Cordlife offers Quality in every aspect. Their approach is ethical, transparent and scientific. I wish them well in their future endeavours."

- Sahil Lachuria (Bengaluru)



"My family means everything to me. Having a baby meant a big pause in my career and social life as me and my hubby mutually decided to raise the child ourselves and inculcate the best values in her. Being a microbiologist myself and my husband too having a scientific background, we decided to avail this once-in-a-lifetime opportunity for our baby and decided to bank her cord blood with Cordlife."

- Loveleen Sarao & Dr. Loveleen Zorawar Singh

Disclaimer

The content in this handbook is supported by Cordlife India as a Pro-Bono gesture of its kind. The aim of the write-up herein is to provide basic insights and tips for expecting parents, which they might find handy during the precious course of nine months of pregnancy. Although sufficient care has been adopted while compiling this document and the same has been validated by experts, Cordlife India shall not be held responsible or in anyway be held liable for any errors, omissions, or inaccuracies of any nature, whether arising from negligence or otherwise, however, or for any consequences arising therefrom.

This handbook has been written and published as an educational guideline towards pregnancy, for the people in India and does not claim to be a substitute for the counseling and/or advice of any competent person(s) or authorities. The information and reference materials contained herein are intended solely for general information and reading and should not be considered to be used for any treatment purposes. The information presented herein is also not intended to diagnose any health issue(s)/problem(s) nor to take the place or act as a substitute for professional medical assistance.

Cordlife India strongly recommends all expecting parent(s) to consult appropriate and competent personnels of the medical fraternity prior to adopting the suggestions provided herein in this handbook.

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