

NUTRITIONAL REQUIREMENTS DURING PREGNANCY

-- By Saleema Khan

Pregnancy causes special nutritional demands which are crucial for both mother and child. An understanding of what a pregnant woman needs to eat is therefore of extreme importance for a healthy and risk free pregnancy. A balanced diet for a pregnant woman would be one that contains adequate amounts of all the necessary nutrients - carbohydrates, proteins, fats, vitamins and minerals - required for healthy growth and activity.

Vitamins and Minerals

Food items that are rich in vitamins and minerals are essential for the [pregnant woman](#) as there is an increased need of certain vitamins and minerals.

- Folic acid is important for the healthy growth of an unborn baby's spine, brain and skull, especially during the first four weeks of pregnancy. It can decrease the risk of certain birth defects. It is generally recommended that the pregnant woman should eat a diet rich in folate - one of the B vitamins found in dark green vegetables, beans, lentils. Other foods rich in folic acid include papaya, mushrooms, corn, carrots, cauliflower, spinach and brinjal.
- Iron is extremely important for pregnant women. They need twice the amount of iron than normal. Iron is the building block of cell formation; it is important for the growth of the baby. Iron helps in the physiological changes during pregnancy, it is also responsible for increasing the volume of blood. Lack of iron can lead to premature birth and a low weight baby. Hence pregnant mothers are regularly checked for iron.

Liver and other meat, eggs, fish, beans, lentils and leafy green vegetables are all good sources of iron. Other sources include pumpkin, tomatoes, asparagus, beetroot, mushrooms, beans and lentils, watermelon, grapefruit, oranges, apples, and the humble banana.

- Calcium and vitamin D are also essential for maintaining healthy bones and teeth and fighting chronic diseases. Food sources of calcium include dairy products (milk, yogurt and cheese), fortified juices and fish canned with the bones. Vitamin D sources include milk and fish like tuna.
- Iodine is an essential nutrient that humans need in very small quantities. The thyroid uses iodine to produce hormones vital to ensure normal development of the brain and nervous system before birth, in babies and young children. For this reason, it is very important that pregnant and breastfeeding women get enough iodine.
- Vitamin A prevents poor vision at night or when light intensity is low and helps to prevent blindness in children. A woman needs to eat plenty of vitamin A-rich food during pregnancy and while breastfeeding.

Protein

Protein is one of several essential nutritional requirements during pregnancy because it provides the amino acids needed for adequate bone and muscle development. Eating enough protein is essential for healthy development of new cells in the placenta

and maternal tissues and encourages healthy blood production.

Protein consumption during pregnancy has also been linked to a lower risk of neonatal death and the occurrence of certain birth defects. The protein requirement increases in the second and third trimester and therefore it is important to include protein rich foods in the diet. Sources of protein include meat, poultry, beans, and eggs, dairy products like cheese, milk, yoghurt, and butter.

Carbohydrates

Carbohydrates are basically sugars. These provide fuel for the body to burn up. They also play a role in other bodily functions such as [blood clotting](#), cell communication, development and the immune system. Foods rich in carbohydrates include vegetables like potatoes, and also pulses, cereals & nuts and foods such as breads, pastas, beans, cereals.

Fats

Fats can help to nourish a developing brain, build the immune system, and synthesize vital hormones. They are a key macronutrient the body needs in order to develop properly. Understanding the role and importance of fats is central to sustaining a healthy pregnancy as both women and growing foetuses need a steady supply of fats. If fats are not abundantly present, the growing baby will take precedence and the mother will end up with deficiencies that can lead to serious health problems, which include postpartum depression, compromised immunity, and insufficient breast milk production.

Energy

Energy is required by various bodily functions like functioning of heart, breathing, brain functioning, digesting food, physical activity, growth and development. Energy is derived primarily from carbohydrates, proteins and fats, which are found in easily accessible cereals, pulses, dairy, fats and oils.

Eating healthy does not mean eating more, but rather eating right. The most important outcome of pregnancy is a healthy baby of adequate birth weight. In order to achieve this one needs to realize the importance of a balanced and nutritional diet to lay the foundation for a healthy pregnancy.
