



Health
**IMPORTANCE
 OF GOOD
 BACTERIA
 DURING
 PREGNANCY**
 An Insight



Pregnancy is a beautiful yet complex biological process that sees a multitude of both developmental and physiological changes. Fetal development and adaptations in a pregnant mother's body; physical, hormonal and metabolic, are all often discussed. However, an additional important factor that both affects and

influences the above mentioned multi-processes is- MICROBIOME.

The human body is home to trillions of microbes and majority of those- approximately a 100 trillion, reside in the gut. Our gut and microbiota have a symbiotic relationship, the bacteria are provided with a home and our bodies are

aided with food digestion. 'Good bacteria' are additionally present in other parts of our body and play a major role in our health by affecting metabolism, hormones, body functioning and immunity.

It was previously believed that the placenta and baby were both sterile and hence bacteria free until delivery. However, recent studies indicate presence of microbiota in the placenta & meconium (first faeces of new born). Although, it is true that the baby is dependant on their mother's good bacteria to kickstart their own microbiome synthesis prior to birth. This makes it essential for the pregnant mother to maintain high levels of healthy bacteria in her gut so as to provide a blue print of future health to her baby.

Healthy pregnancy is characterised by an increase in bacterial load, from the first to the third trimester- the gut bacteria composition changes dramatically.

Vaginal microbiota plays a key role in serving as a defence mechanism against infections and diseases in the mothers body. During a vaginal delivery, the baby gains the same microbiota as it makes it' way to the outside world through the birth canal.

Interestingly, research states that the





placenta too has a certain degree of both aerobic and anaerobic microbiota, which is similar to the bacteria found in the oral cavity. This finding is believed to have a correlation with women who have periodontal issues and them being at a higher risk of pregnancy complications.

Studies have also revealed that the baby's exposure to the mother's healthy microbiome during pregnancy, help to prevent allergic diseases such as eczema,

asthma, atopic dermatitis etc. in them post delivery. The baby's immune system is believed to be trained during pregnancy to respond appropriately to the respective disease's pathogens post birth.

Breastmilk too has been found the be an integral source for establishing healthy microbiome in the baby. The composition of the good bacteria in breastmilk changes over the lactation period. Colostrum (first milk produced right after birth)



is the richest source for providing good microbiota to the baby along with all the other super nutrients.

Prebiotic (foods that feed and maintain the good intestinal bacteria: garlic, onions, asparagus, leeks, bran) and probiotic (fermented foods that have live bacteria within them: yogurt, miso, kefir, kimchi) addition to the mother's diet is a beneficial change, that will drastically help improve gut health during pregnancy and beyond. Probiotics are of special importance



when antibiotics are being administered, as antibiotics wash out not just the bad bacteria but even the good ones. Probiotics aid in increasing the gut microflora and thus aid the mother in combating pregnancy and birth complications like pregnancy hypertension, gestational diabetes and preterm labor. It has been found that maternal use of probiotics during pregnancy reduces the child's risk of allergies by 50% post delivery.

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