

# How to Ensure a Healthy Microbiome for your Baby



The microbiome is a group of healthy microbes that live on our skin and inside our body including our gut. They are an important factor in our health, immune system, and controlling inflammation. It develops at birth and these are the steps you need to follow to ensure a healthy microbiome and baby.

## Maternal Stress

- Psychological stress, pregnancy complications, environmental tobacco smoke, air pollution, and alcohol.
- Can create inflammatory responses by disrupting the gut and vaginal microbiome.
- Learn to manage stress and create a nutritional strategy to promote a healthy microbiome.

## Mode of Delivery

- Vaginal Delivery - Bacteria colonized in the infant's gut is the same as the mother's vaginal microbiome, mostly the beneficial Lactobacillus. Giving the infant a healthy start in life.
- Ceasarian Section - The infants develop colonies of Staphylococcus that are similar to those found on the skin. They are associated with immune problems, infection, allergies, asthma and inflammatory disorders.

## Breast Feeding

Bottle vs Breast.

- Breast milk is rich in hormones, antibodies, and bacteria that protects your baby from infections, digestive problems, and diseases.
- Lower mom's risk of breast/ovarian cancer, diabetes, and heart disease
- Recommended for at least 6-month but some is better than none.
- Formula contains NO immunoglobulin, no passive immunity, it causes increased digestive problems for baby, and it is costly.

## Antibiotics

Try to avoid at all costs.

- Unnecessary antibiotics expose individual children to potential side effects, including diarrhea, vomiting, rashes and allergic reactions.
- Overusage of antibiotics can alter the microbiome, increase the risk of bacterial resistance, and render them ineffective making it difficult to treat some infections.
- Researchers are finding that long-term exposure to antibiotics early in life, may increase the risk of infection, obesity, and asthma.

## Probiotics

Infant formula and breastmilk with probiotics.

- Creates a protective internal environment in your babies gut.
- Helps develop your baby's microbiome and immune system which are a strong foundation for a lifetime of good health.
- Significantly reduces the amount of harmful bacteria thought to be responsible for the development of eczema, allergies, diabetes, and obesity.
- Assists in capturing nutrients otherwise indigestible by the baby.

## Introduction of solid foods

- When to start solids and what to feed to develop the microbiome.
- Begin solid foods at 6-months of age but continue to breastfeed.
- Introduce one solid food at a time.
- Begin with single-grain cereals.
- Continue with fibre rich foods such as vegetables & fruits, include fermented vegetables such as cucumbers and carrots.
- Fermented dairy such as Kefir provides beneficial bacteria & yeast.
- Broth from meat/bone provides protein & simple fats.

## Environment

- Factors contributing to the baby's microbiome development: geographic location, air quality, pet and animal exposure, daycare.
- immediate skin to skin contact for optimal microbial colonization.
- newborn daily bathing & removal of vernix is not necessary.
- read ingredients in body products, wipes, and diapers.
- change diapers every 1-3 hours.
- limit handling of a baby by non-family members.

Follow These Steps for a Healthy and Happy Baby

## References:

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