



Healthy
Pregnancy
SUMMIT



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Probiotics for Infants

What is her background and experience with breastfeeding, infant health, and the microbiome?

- She is a nutritional scientist by training.
- She is currently looking at the infant's gut microbiome and the role that microbiome plays in developing the infant's immune system and gut microbiome health.

What are some of the special ingredients in mother's milk that help support the development of the healthy bacteria in the gut?

- Infants are born with a sterile gut.
- As they exit the birth canal, they start requiring microorganisms from the mother and the environment.
- Human milk contains components that are indigestible by the baby but are food for special bacteria in the baby's gut.
- She points out human milk oligosaccharides (HMOs). They are complex carbohydrates which are in human milk.
- Only the bacteria in the baby's gut can break those HMOs and use them. The trick is getting the right bacteria in the baby's gut which can help digest HMOs.
- One specific bacterium that can help digest HMOs is called Bifidobacterium Infantis (B. Infantis).

What does the recent research show?

- Over 90% of babies in the US do not have the B-Infantis anymore.
- Babies born with C-sections bypass the opportunity to get the B. Infantis from their mum during the vaginal delivery. Those children, when they grow up, cannot pass the B-Infantis to their babies as well.



- Women treated with antibiotics right before the delivery will wipe off any B. Infantis that was in the mother's body.
- The issue is cumulative and generational.
- Babies that are fed exclusively with formula do not have the HMOs to feed the B. Infantis enough.

What is the importance of having B. Infantis and what are the consequences of not having it?

- B. Infantis produces short chain fatty acids which change the pH of the intestinal environment.
- Short chain fatty acids bring the pH to the pH of 5.0.
- When the pH is lowered, it suppresses the growth of pathogenic bacteria.
- If you create a protective environment with high levels of B. Infantis, you can allow the baby's immune system to protect itself from autoimmune diseases.
- They also reduce the rate of food allergies.

What is the difference between the infants who have been colonized with B. Infantis and those who have not?

- Clinical studies are still early on.
- Babies who are fed with B. Infantis as a probiotic show a significantly reduced abundance of pathogens in their microbiome, a significant reduction in markers of inflammation, less fussiness and gassiness, less colic symptoms, and less diaper rash.
- Babies stool should be more acidic than more neutral or alkaline.

Why do we think it is important to start supplementing when the child is born?

- Most people believe if the baby is born healthy and if you are feeding him human milk, they do not need to do anything else. In theory, that is correct.
- But you should also be aware that the infant body needs to be able to utilize all the benefits of human milk, and that is what needs to be restored.
- It is important to think about when the baby would naturally get the B. Infantis.
- You can repopulate the gut by using the B. Infantis. That is why you need to feed the baby early with B. Infantis, in the first 100 days of life.

What are the strains of B. Infantis?

- The strains of B. Infantis have numbers that indicate what strain it is.
- The strain needs to be a functional difference from any product you are using.
- She points out the B. Infantis EVC001, which is the strain that has been clinically studied more than any other strains.



- She suggests going to the website of the product you are interested in and make sure there is scientific literature which shows clinical studies in humans that show the viability and the function of the strain you are choosing.

Why are Evolve probiotics special?

- Evolve Biosystems revolutionizes human health by harnessing the unique power of the infant gut in the first 100 days of life.
- It has been a science-lead company from the beginning.

What are her final comments?

- Parents are doing everything they can to start their body off right.
- Having a C-section and being treated with antibiotics are not failures.
- There are things which you can do to offset the penalty of C-section and the exposure to antibiotics.

What is the brand name?

- The company Evolve Biosystem is behind the probiotic that is available, which is called Evivo.
- Evivo is a probiotic for infants, and it contains the B. Infantis EVC001.
- If you want to learn more about the research that has been done, visit <https://www.evivo.com/>.

