For more information visit ISAPPscience.org or follow us on Twitter @ISAPPscience and on Instagram @isappscience

© 2021, International Scientific Association for Probiotics and Prebiotics

Probiotics and Necrotizing Enterocolitis
What Parents Should Know

What is necrotizing enterocolitis (NEC)?
Necrotizing enterocolitis (NEC) is a life-threatening intestinal condition that mostly occurs in premature infants, usually between 2 and 8 weeks of age. Full-term infants with health complications such as congenital heart disease are also at an increased risk of NEC. NEC causes an inflammatory process that can lead to intestinal tissue damage and even death. Many infants with NEC require surgery to remove diseased bowel. NEC survivors may experience long-term problems with cognition, behavior, muscle function, and poor intestinal function.

How can we reduce the risks of NEC?
- Breast milk from the baby’s mother is the most important way to help reduce NEC risk.
- If mother’s milk is unavailable, pasteurized donor milk is the next best option for premature infants.
- Giving probiotics to premature babies, along with breast milk, may reduce the risk of NEC.

What are probiotics?
Probiotics are live microorganisms that, when administered in adequate amounts, confer a health benefit on the host. Probiotics are identified by a genus, species and strain designation, and different strains of even the same species may have different effects. Probiotics support the development of your baby’s gut microbiota, which is an important means to maintain gut health.

What do studies show about probiotics and NEC?
- Certain probiotics can reduce the risks of NEC in premature infants.
- When given prophylactically to premature infants, certain probiotics have been shown to reduce the risk of infections and even death.
- There are different types (strains) of probiotics, which differ in their effectiveness.

What are the risks of giving probiotics to my baby?
There are risks and benefits to every treatment. Based on scientific studies, it appears that the benefits of probiotic administration well outweigh potential risks. In rare situations, probiotic bacteria can get into the blood and cause infections, although such infections can be caused by other bacteria in the gut as well. If babies develop an infection in the blood due to the probiotic bacteria, they are given an antibiotic to kill the probiotic bacteria. When this has happened, the infections are usually cleared with treatment.

How can parents with an infant at risk of NEC advocate for their child?
- Ask your child’s physician about the NICU’s policy and rationale on the use of probiotics.
- You are an important part of your baby’s care team. Ask questions and share your thoughts.
- Learn more about necrotizing enterocolitis at NECsociety.org

Prevention of NEC is preferred over any available treatments once the disease occurs.
While NEC rates vary from hospital to hospital, it is essential for all parents to be aware of the disease and the most effective prevention strategies.