

Léo Désilets' NEW BABY IMMUNITY Probiotic Drops provide potent immune support to infants, babies, and children with a synergistic blend of probiotics and vitamin D. BABY IMMUNITY is the ideal formula to promote optimal gut health and boost immunity.

CONTEXT

Probiotics are non-pathogenic strains of bacteria that live inside the human body and provide multiple benefits to health¹. A growing area of interest in probiotic research is the impact these healthy bacteria can have on immune function – especially in babies².

IMMUNE FUNCTION FROM BIRTH

The immune system protects the body against foreign invaders by producing various antibodies. Seventy to eighty percent of the body's immune cells are located in the gut, illustrating how critical optimal gut health is to our overall immune function³. However, a baby's immune system is not yet fully developed at birth. It is, therefore, much less robust than that of an adult, making them especially vulnerable to diseases, viruses, and other pathogens⁴.

A child's immunity builds as they grow, starting with the mother sharing her antibodies with her baby through the placenta during the third trimester of pregnancy. During childbirth, the healthy bacteria in the vaginal tract are also transmitted to the baby. These bacteria go on to colonize the baby's gut and help strengthen his immune system.

Unfortunately, babies born via caesarean section do not get this beneficial transfer of antibodies. It's important to note that breastfeeding also helps boost immune function considerably – the longer it is maintained, the more significant the impact on immune health⁴.

THE IMPORTANCE OF A HEALTHY GUT MICROBIOTA IN BABIES

The intestinal microbiota is home to more than 1000 bacterial species representing more than 9 million genes, the exact number of cells that make up the human body. This collection of non-pathogenic bacteria, viruses, parasites, and fungi makes up our gut microbiota (or intestinal flora) and is integral to our immune system throughout life. The intestinal microbiota protects young and old individuals against pathogens that cause infections and diseases⁵.

The composition of our microbiota evolves throughout life, both in terms of the quantity and quality of bacteria that it houses. Many factors, such as diet, lifestyle hygiene, environment, and the use of antibiotics (either by the mother during pregnancy or early life), affect our microbiota balance. A robust diversity of healthy bacteria in the gut is especially critical in the first months of a child's life⁴.

Clinical studies have shown that a distinct strain of healthy bacteria, "Lactobacillus rhamnosus," provides powerful immune benefits when given to infants, babies, and children, whether breastfed or formula-fed⁶.



Lactobacillus Rhamnosus HN001 & Immune Health

Lactobacilli are bacteria present in the intestinal tract, along with bifidobacteria, both of which play essential roles in maintaining health throughout life. These beneficial bacteria are also found in probiotic supplements. Lactobacillus rhamnosus (L. rhamnosus) is a unique lactic acid bacteria resistant to bile and acid, so it isn't readily destroyed by digestion⁸. As such, it can easily pass through the digestive tract and go on to colonize the gut environment to help develop a healthy intestinal microbiota. One strain of L. rhamnosus in particular – HN001 – is one of the most studied probiotic strains, and has been shown to offer particularly robust immune-boosting properties in babies⁶.

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GENERAL HEALTH BENEFITS OF PROBIOTICS⁷

- Boost immunity
- Help balance good bacteria in the digestive tract
- Optimize gut health
- Help prevent and treat diarrhea
- Promote healthy digestion
- Support skin health (eczema, acne, etc.)

HN001 is a patented probiotic strain that has been shown to support the immunity of infants, babies, and young children in several important ways⁶:

Blocks Pathogens⁹ -

HN001 inhibits the growth of pathogenic bacteria by competing for nutrients and attachment sites on the intestinal mucosa. As a result, pathogenic bacteria are deprived of food and die.

Regulates Immune Response¹⁰ -

HN001 probiotics can bind to immune cell proteins, which, in turn, activates the immune system. Once bound to these cells, a signal is sent to the body to release chemicals that influence other immune cells to regulate the host's overall immune response.

Strengthens & Restores Microbiome diversity¹¹ -

Several factors contribute to destroying the good bacteria in our gut, including the use of antibiotics and multiple repeat infections. Supplementing with *Lactobacillus rhamnosus* HN001 has been shown to help rebuild a healthy microbiome and strengthen and boost overall immunity.

Studies on the HN001 probiotic strain have shown that supplementation is effective in helping to prevent^{6, 9, 10, 11}:

- Gastrointestinal infections, such as infectious diarrhea, antibiotic-associated diarrhea (AAD), *Escherichia coli* infection, and *H. pylori* bacteria.
- Upper respiratory tract infections (URTIs)
- Yeast infections (CANDIDA)
- Autoimmune conditions caused by an overactive immune response, wherein the immune system attacks

the body's tissues and organs.

VITAMIN D & CHILDREN'S HEALTH

Léo Désilets' Baby IMMUNITY formula provides a hefty dose of vitamin D - a nutrient essential from birth and during every life stage. Vitamin D plays a key role during childhood by supporting the growth and development of strong bones and teeth. In fact, without vitamin D, the body cannot effectively absorb calcium, which is essential for proper bone formation. Newborns, babies, and young children who are vitamin D deficient can suffer from rickets, resulting in bowed legs and other skeletal deformities¹². Additionally, since peak bone mass is reached between the ages of 25 and 30, supplementing with vitamin D from birth helps ensure optimal bone mass and may prevent severe bone loss later in life. Indeed, it's important to remember that osteoporosis is often referred to as «a geriatric disease with a pediatric cause»¹³.

Beyond bone health, however, adequate vitamin D intake is also essential throughout infancy and childhood to modulate immune function, build resistance to many common childhood infections, and prevent the development of autoimmune diseases and allergies later in life¹³.

BENEFITS OF LÉO DÉSILETS' NEW BABY IMMUNITY

Each serving of Baby IMMUNITY provides 6 billion CFUs of *Lactobacillus rhamnosus* HN001 + 400 IU of vitamin D3 (cholecalciferol)

- Provides immune support to infants, babies, and children of all ages
- Provides beneficial bacteria for healthy immunity
- Promotes a healthy intestinal flora
- Source of vitamin D to support a baby's health, development, and growth
- Ensures the healthy mineralization of bones and teeth
- Maintains robust immune function
- Source of probiotics for optimal gut health

BABY IMMUNITY

Léo Désilets' **Baby IMMUNITY** comes in liquid form. It provides 6 billion CFUs (Colony Forming Units) per dose, along with 400 IU (International Units) of vitamin D3 (cholecalciferol), in a base of medium chain triglycerides (MCT). Baby IMMUNITY offers robust immune support for infants, babies, and toddlers of all ages. And like all Léo Désilets products, the formula is Non-GMO and has no added flavours or colours. It is also free of the most common allergens, including wheat, gluten, peanuts and other tree nuts, eggs, dairy, fish or shellfish, and soy.

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