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# The addition of prebiotics in infant formula alters the GI microbiota resembling that of breastfed infants<sup>1</sup>

GOS is one of the most common prebiotics<sup>2</sup>

Prebiotics “GOS” supplemented formula shows a spectrum of benefits:



Better stool consistency.<sup>1,3</sup>



Higher concentration of bifidobacteria compared to infants on a non-supplemented standard formula.<sup>1</sup>

GI: Gastrointestinal; GOS: Galacto-oligosaccharides.

1. Vandenplas Y, De Greef E, Veereman G. Prebiotics in infant formula. *Gut Microbes*. 2014;5(6):681-687.
2. Davani-Davari D, Negahdaripour M, Karimzadeh I, et al. Prebiotics: Definition, Types, Sources, Mechanisms, and Clinical Applications. *Foods*. 2019;8(3):92.
3. Giovannini M, Verduci E, Gregori D, et al. Prebiotic Effect of an Infant Formula Supplemented with Galacto-Oligosaccharides: Randomized Multicenter Trial. *J Am Coll Nutr*. 2014;33(5):385-93.



# alters the GI microbiota resembling that of breastfed infants<sup>1</sup>

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Higher concentration of bifidobacteria compared to infants on a non-supplemented standard formula.<sup>1</sup>



Lower risk rates of colic and regurgitation.<sup>3</sup>

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**Nuralac<sup>®</sup> advanced formula supports gut comfort by offering...**



GOS: Galacto-oligosaccharide.

1. Nuralac<sup>®</sup> Labeling Information.





# omega-3 PUFAs “DHA” participates in regulating gut immunity and in maintaining gut homeostasis<sup>1</sup>

## Role of omega-3 PUFAs “DHA” in improving intestinal immunity:

Influencing the gut microbiota by: <sup>1</sup>



- Modulating the type and the abundance of gut microbes.
- Altering the levels of proinflammatory mediators.
- Regulating the levels of short-chain fatty acids or short-chain fatty acid salts.



Omega-3 PUFAs exert their beneficial effects on health, brain functions, and behavior by influencing gut microbiota composition and, thus, gut-brain axis functionality.<sup>2</sup>

PUFAs: Polyunsaturated fatty acids; DHA: Docosahexaenoic acid.

1. Fu Y, Wang Y, Gao H, et al. Associations among Dietary Omega-3 Polyunsaturated Fatty Acids, the Gut Microbiota, and Intestinal Immunity. *Mediators Inflamm*. 2021;2021:8879227.

2. Costantini L, Molinari R, Farinon B, Merendino N. Impact of Omega-3 Fatty Acids on the Gut Microbiota. *Int J Mol Sci*. 2017;18(12):2645.



# mega-3 PUFAs “DHA” participates in regulating gut immunity and in maintaining gut homeostasis<sup>1</sup>

## Role of omega-3 PUFAs “DHA” in improving intestinal immunity:



and, thus, gut-brain axis functionality.<sup>2</sup>



Reducing the intestinal epithelial cell damage.<sup>1</sup>



Increasing intracellular mitochondrial activity and cell membrane integrity.<sup>1</sup>

PUFAs: Polyunsaturated fatty acids; DHA: Docosahexaenoic acid.

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**Nuralac<sup>®</sup> advanced formula supports immunity by offering...**

Higher  
concentration of  
**DHA**  
(~70% more).<sup>1</sup>

# Immunity

Higher  
concentration of  
**GOS**  
(20% more).<sup>1</sup>



Adding the  
most **abundant**  
**HMO** in breast  
milk (**2'-FL**).<sup>1</sup>

Almost the highest level of GOS+2'-FL  
combined vs. competitors (0.43 g/100 ml)

DHA: Docosahexaenoic acid; GOS: Galacto-oligosaccharide; HMOs: Human milk oligosaccharides; 2'-FL: 2'Fucosyllactose.

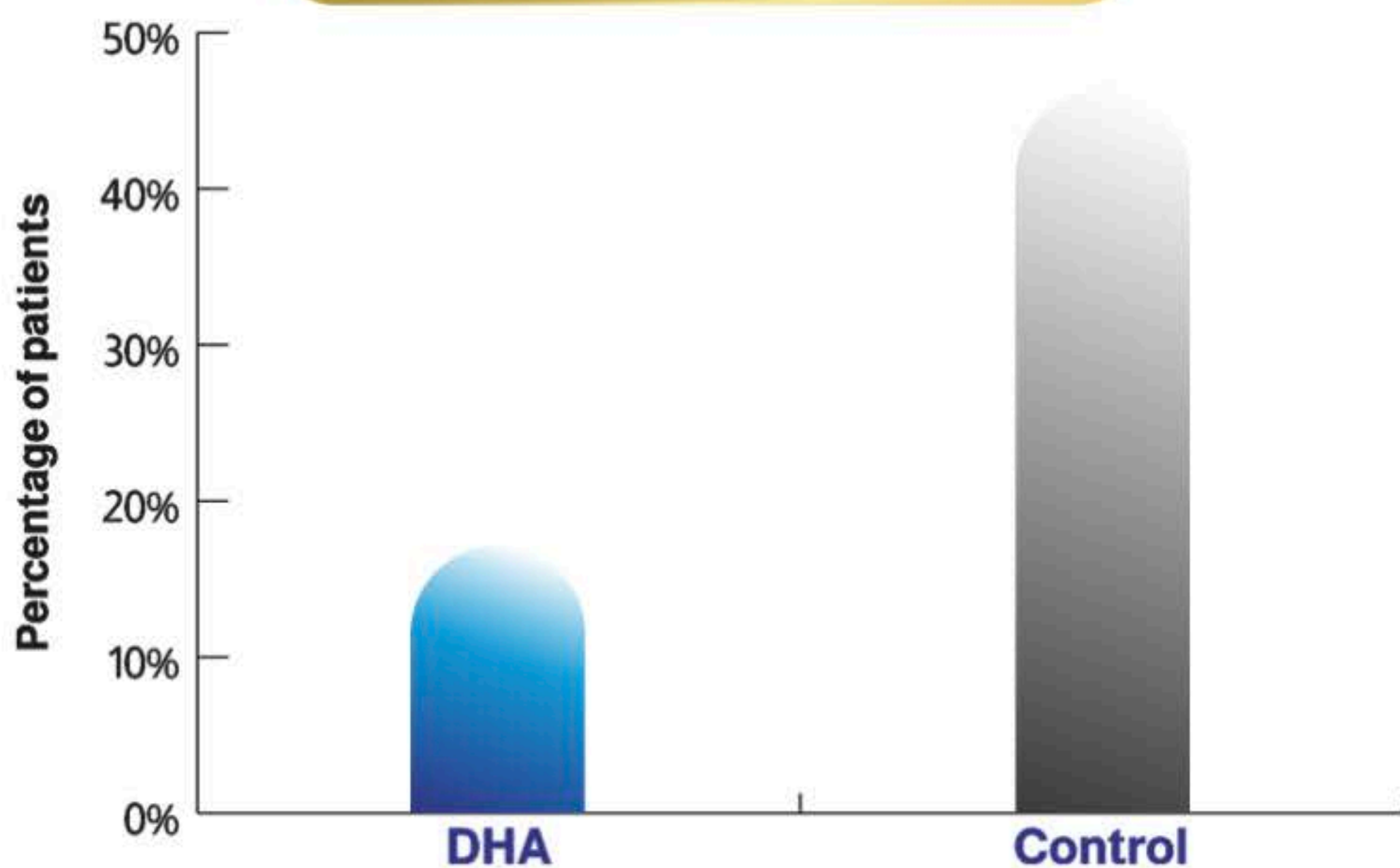
1. Nuralac<sup>®</sup> Labeling Information.





# Infant formula with DHA supplement significantly decreases respiratory illness<sup>1</sup>

Participants with  $\geq 1$  respiratory illness



Adapted from ref. 1



DHA: Docosahexaenoic acid.

1. Minns LM, Kerling EH, Neely MR, et al. Toddler formula supplemented with docosahexaenoic acid (DHA) improves DHA status and respiratory health in a randomized, double-blind, controlled trial of US children less than 3 years of age. *Prostaglandins Leukot Essent Fatty Acids*. 2010;82(4-6):287-93.





# Nuralac<sup>®</sup> advanced formula supports growth by offering...

Higher  
concentration of  
**DHA**  
(~70% more).<sup>1</sup>

## Growth

Higher  
concentration of  
**GOS**  
(20% more).<sup>1</sup>



Adding the  
most **abundant**  
**HMO** in breast  
milk (**2'-FL**).<sup>1</sup>

Almost the highest level of GOS+2'-FL  
combined vs. competitors (0.43 g/100 ml)

Optimized  
**protein** level

DHA: Docosahexaenoic acid; GOS: Galacto-oligosaccharide; HMOs: Human milk oligosaccharides; 2'-FL: 2'Fucosyllactose.

1. Nuralac<sup>®</sup> Labeling Information.





**Nuralac<sup>®</sup> advanced formula is brought to you by quality makers “Almarai” with the highest quality standards**



## First National Formula

- GMO free.
- Free from heavy metals and insecticides.
- Highest hygienic standards with consistently low microbial count.
- Quality control with 4,500 steps of quality checking.

GMO: Genetically modified organism.



Gut  
Comfort

Immunity

Growth

Trusted  
Quality

Summary



# Nuralac<sup>®</sup>: Nurturing growth with every scoop

- Got closer to **breast milk** content.
- Offers **superior gut comfort**.
- Enhances the **immunity** by a blend of components.
- Supports optimum **growth** and **development**.



Gut  
Comfort

Immunity

Growth

Trusted  
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Summary

AA



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