

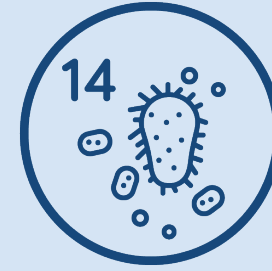
# Immunity is key in early life



**Infants** and young children are most susceptible to infections in the first 3 years of life<sup>1,2</sup>



**Infection** peaks around 1 year of age with a slight decline in the third year<sup>3</sup>



**14** the average number of infections during the first 3 years of life<sup>3</sup>



**25%** of infections are treated with antibiotics<sup>3</sup>

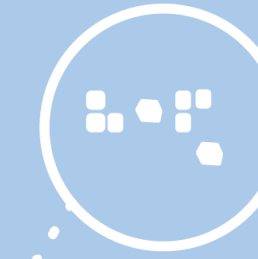
## Immunity is the #1 reason of breastfeeding longer during Covid

### REFERENCES

1. Wald et al. J Pediatr, 1991;118(4, pt 1):509-514 2. Grüber et al. Pediatr Allergy Immunol, 2008;19(6):505-512 3. Vissing et al. Pediatrics, 2018;141:e20170933. 4. Danone COVID-19, Tracker Dashboard, DEC 2020 5. Lönnerdal B J Nutr, 1986; 116(4):499-513. 6. Pereira PC Nutrition, 2014; 30(6), 619-27. 7. Agostoni C et al. J Pediatr Gastroenterol Nutr, 2009;49:112-25. 8. Zivkovic AM et al. Proc Natl Acad Sci USA, 2011(15):108 Suppl 1:4653-8 9. Coppa GV Int. Conf. on Breast milk and Lactation, 1991 USA. 10. Brandmiller J et al. J Pediatr, 1998;133:95-8. 11. Gyorgy P et al. Eur J Biochem, 1974;43:29. 12. Wickramasinghe S et al. BMC Microbiol, 2015;15:172. 13. Eiwegger T et al. Pediatr Res, 2004;56(4):536-40. 14. Bode L et al. Thromb Haemost, 2004;92(6):1402-10. 15. Eiwegger T et al. Pediatr Allergy Immunol, 2010;21(8):1179-88. 16. Boehm G et al. In: Mattia-Sandholm T(ed): Funct. Dairy prod. Woodhead Publ Ltd, 2002. 17. Newburg D et al. Glycobiology, 2004;14(3):253-6 18. Wang S et al. Neuroscience and biobehavioral reviews, 2018. 19. Gomez-Gallego C et al. Nutrients, 2018;10:1355. 20. Boix-Amorós A et al. Front Microbiology, 2016:492. 21. Aguilar-Toala J et al. Trends in Food Science & Technology, 2018; 75: 105-114. 22. Van 't Land et al. In: Watson, R.R., Zibadi, S. and Preedy, V.R. (eds.), 2010. Dietary components and immune function. Springer, Berlin, Germany, pp. 25-41. 23. Newburg DS et al. The Lancet, 1998. 351(9110), pp.1160-1164.998

# BREAST MILK

plays a vital role in supporting the development of a healthy gut microbiota and immune system<sup>5-8</sup>



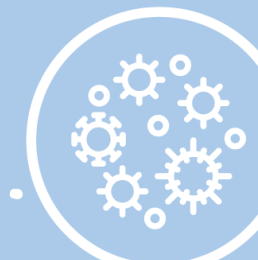
### Human Milk Oligosaccharide (HMOs)

- PREBIOTIC effect<sup>9-13</sup>
- Direct effect on immune cells<sup>14-16</sup>
- Blocking the route of infection<sup>17-19</sup>
- Brain building blocks<sup>20</sup>



### Bacteria and their metabolites

- PROBIOTIC and POSTBIOTIC effects, for gut and immune benefits<sup>19-21</sup>



### Antibodies/immune cells for direct protection<sup>19-21</sup>

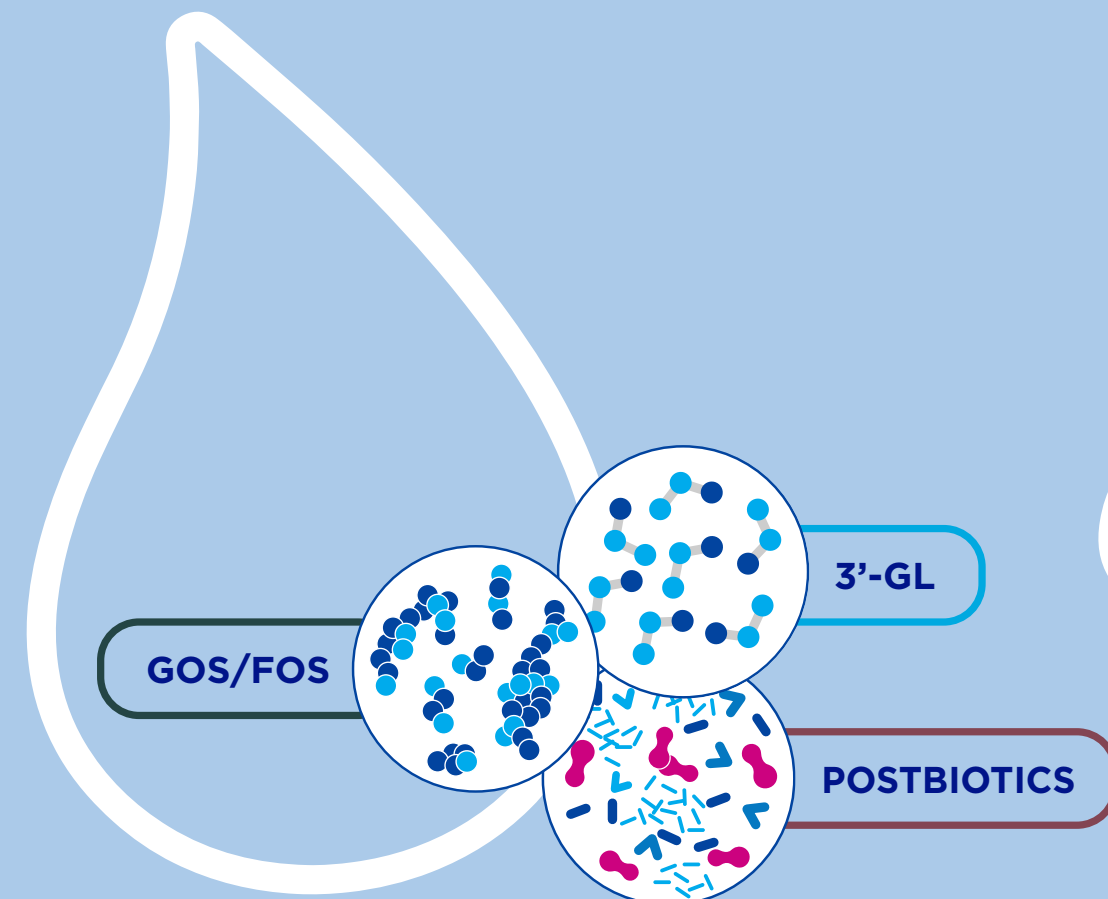




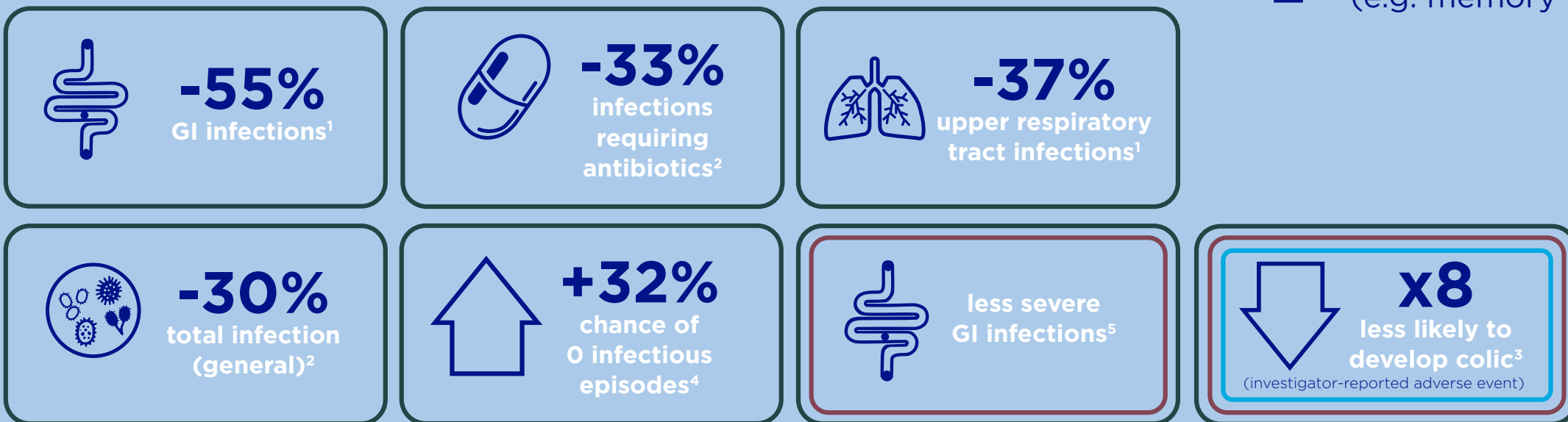
# Aptamil's unique biotics\* have been scientifically proven to support healthy immune system development

>40\*  
clinical trials

>90\*  
publications



- 1 STIMULATES** the growth and activity of **beneficial bacteria** (e.g. bifidobacteria)<sup>6-9</sup>
- 2 SUPRESSES** growth of **pathogens** by creating an unfavourable gut environment for them (low PH, antimicrobial)<sup>1,8,10,11</sup>
- 3 STRENGTHENS** the **gut barrier** (mucosal layer) and blocks pathogen adhesion<sup>12-14</sup>
- 4 SUPPORTS** adequate **immune responses** (e.g. memory response)<sup>1,2,14-16</sup>



**Aptamil NutriBiotik**, nutritionally complete\*\* formulas for infants with unique mix of prebiotics, postbiotics & HMO 3'-GL acting on 4 levels of defense, to support healthy immune system development

Inspired by  
**50 years**  
of advanced Breast Milk research

**Aptamil**  
NUTRI-BIOTIK

## REFERENCES

1. Bruzzese E et al. Clinical Nutrition, 2009;28:156-161. 2. Arslanoglu S et al. J Nutr, 2008;138:1091-5. 3. Rodriguez-Herrera A et al. Nutrients 2019, 11(7), 1530. 4. Chatchatee P et al. J Pediatr Gastroenterol Nutr, 2014 Apr; 58(4): 428-437. 5. Thibault H et al. J Pediatr Gastroenterol Nutr, 2004; 39(2):147-52. 6. Knol J et al. British Journal of Nutrition, 2005;94:783-90. 7. Moro G et al. J Pediatr Gastroenterol Nutr, 2002;34:291-5. 8. Béghin L et al. Clinical nutrition, 2020 (11). 9. Sotoya H et al. Microbiology (Reading), 2017 Oct;163(10):1420-1428. 10. Knol J et al. J Pediatr Gastroenterol Nutr, 2003;36:566-32. 11. Indrio F et al. Pediatr Res, 2007;62:98-100. 12. De Kivit S et al. J Innate Immun, 2013;5(6):625-38. 13. Campeotto et al. Br J Nutr, 2011;Jun 28;105(12):1843-5. 14. Varasteh S et al. J Pediatr Gastroenterol Nutr, 2019;68(S1):N-P-016:1049. 15. van Hoffen E et al. Allergy, 2009;64(3): 484-7. 16. Lehmann S et al. PLoS One, 2015;10(7):e0132304.

**NUTRICIA**  
LIFE-TRANSFORMING NUTRITION

\*Studies with scGOS/lcFOS (9:1) alone or scGOS/lcFOS (9:1) in combination with other biotics

\*\*As required by legislation

**IMPORTANT NOTICE:** Breastfeeding is the best for babies.

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