

# Safety is our most important ingredient

HiPP ORGANIC COMBIOTIC®  
Now rounded off with Metafolin®



Science and nature  
hand in hand

Information for healthcare professionals



# Safety through research, innovation and experience

## Our milestones in developing our formulae:

- **2002:** pioneering use of **probiotic lactic acid cultures** originally obtained from human milk\*\*
- **since 2011:** development of **HiPP ORGANIC COMBIOTIC®** – with a unique combination of *Limosilactobacillus fermentum* and GOS
- **2021:** new and only from HiPP – **HiPP ORGANIC COMBIOTIC®** now rounded off with **Metafolin®**



### UNIQUE

a unique composition of pro- and prebiotics inspired by nature



### TRIED-AND-TESTED

a concept to support intestinal microbiota, tried-and-tested for 10 years



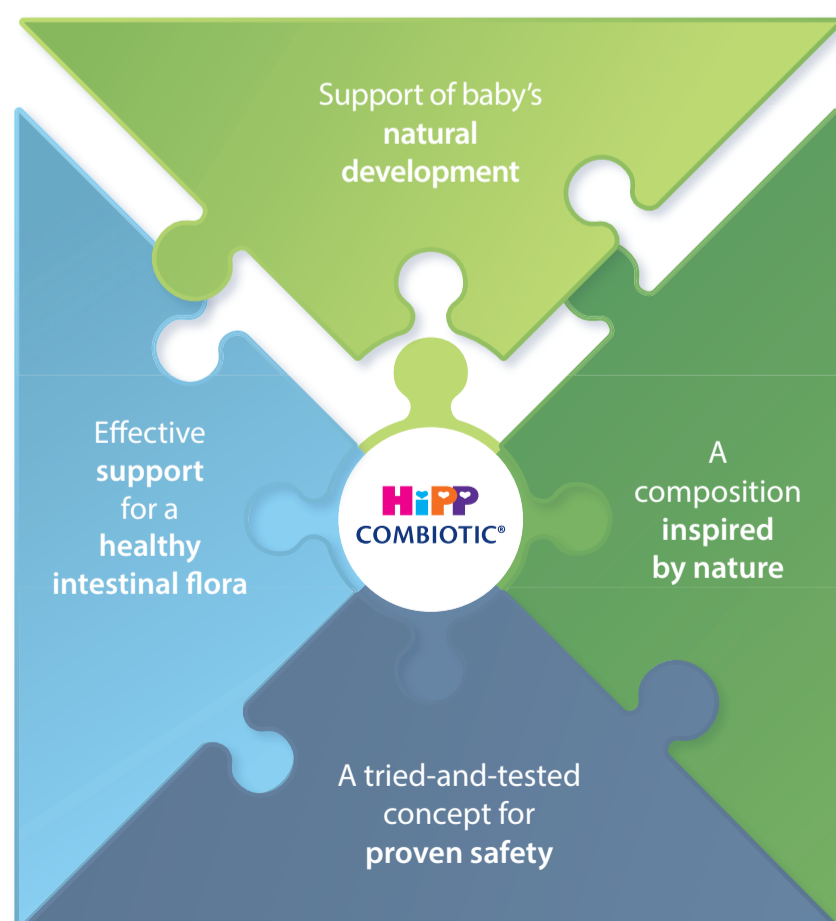
### ROUNDED OFF

with a bioactive folate form that is also found in human milk

\* Metafolin® is a registered trademark of Merck KGaA, Darmstadt, Germany.  
\*\* Human milk contains a large number of natural lactic acid cultures that can vary from mother to mother.

## A safe and proven composition

### HiPP ORGANIC COMBIOTIC® Science and nature hand in hand



**HiPP**  
Research Group  
on Human Milk

### HiPP Research Group on Human Milk: understanding nature's example.

- Running for over 10 years
- In partnership with specialists from around the world
- 2007: pre- and probiotics identified as key factors influencing intestinal health

For more information, including reports from the research group, visit [hcp.hipp.com](http://hcp.hipp.com)

Section: Studies



Support of baby's natural development

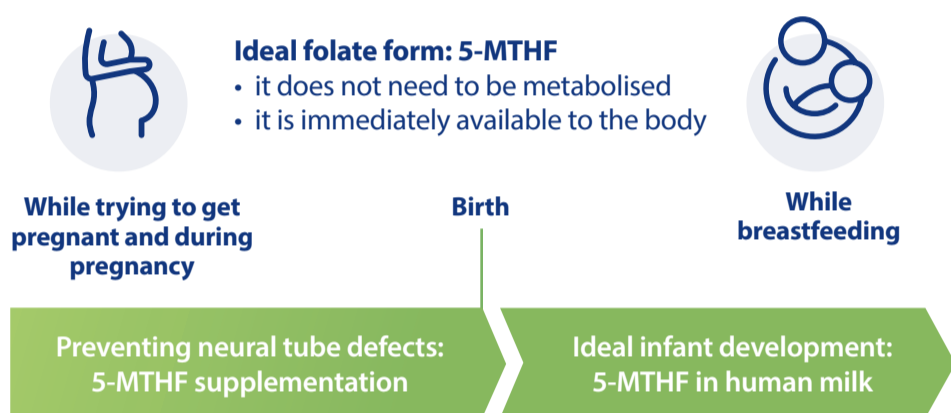
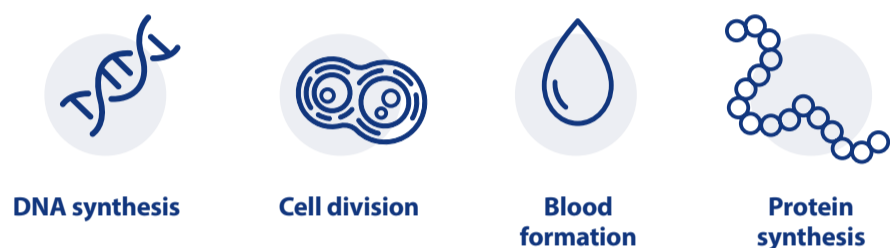
**HiPP**  
COMBIOTIC®



## The safe next step in our human milk research

**Folate: crucial for cell division and tissue growth<sup>1</sup> ...**

**... and therefore indispensable, especially in the early stages of development!**



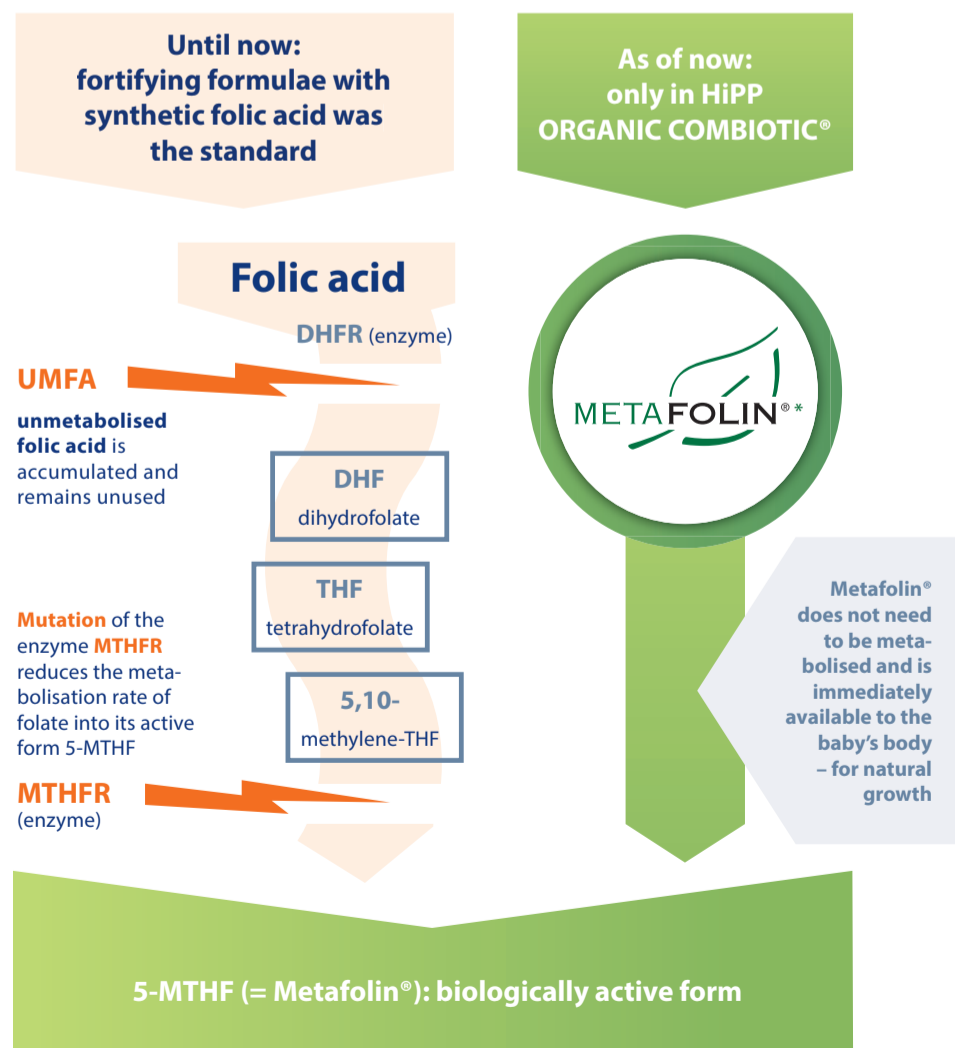
## NEW: HiPP ORGANIC COMBIOTIC® with Metafolin®

**Natural folate form (5-MTHF) as found in human milk: immediately available and safe.**

**Safety is the top priority at HiPP: Metafolin® is safe for use in formula<sup>2</sup>!**

**For our HiPP ORGANIC COMBIOTIC® we use the most advanced folate form – Metafolin®:**

- ✓ a calcium salt of 5-MTHF
- ✓ it is a bioactive form of folate
- ✓ it corresponds to the main folate form in human milk, making it ideally suitable for use in formula<sup>3</sup>



\* Metafolin® is a registered trademark of Merck KGaA, Darmstadt, Germany.

For more information on Metafolin®, scan:



# The safe choice for a healthy intestinal microbiota

Building up the intestinal microbiota from day one is vital, as over 90% of immunocompetent cells are located in the intestine.

## A well-developed intestinal microbiota provides optimum protection:

- promotes the development of the immune system<sup>4,5</sup>
- protects against intestinal infections<sup>4</sup>

## What influences the intestinal microbiota?

- type of birth (vaginal or caesarean section)
- whether the child is breastfed or bottle-fed
- composition of formula (standard, prebiotic, probiotic or synbiotic)

Caesarean-born infants had an intestinal microbiota that more closely resembled the maternal skin microbiota rather than the maternal vaginal flora.<sup>6</sup>



As a natural, synbiotic substance, human milk provides your child with everything they need for an ideal composition of their intestinal microbiota.

Effective support for a healthy intestinal microbiota

# A safe and effective composition

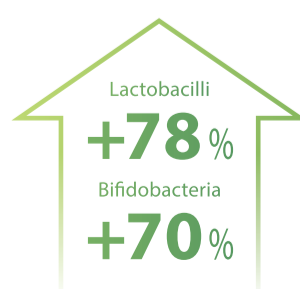
## HiPP ORGANIC COMBIOTIC®

with its synbiotic composition of pre- and probiotics – galacto-oligosaccharides (GOS) and *Limosilactobacillus fermentum* – promotes a healthy intestinal microbiota and increases tolerability.

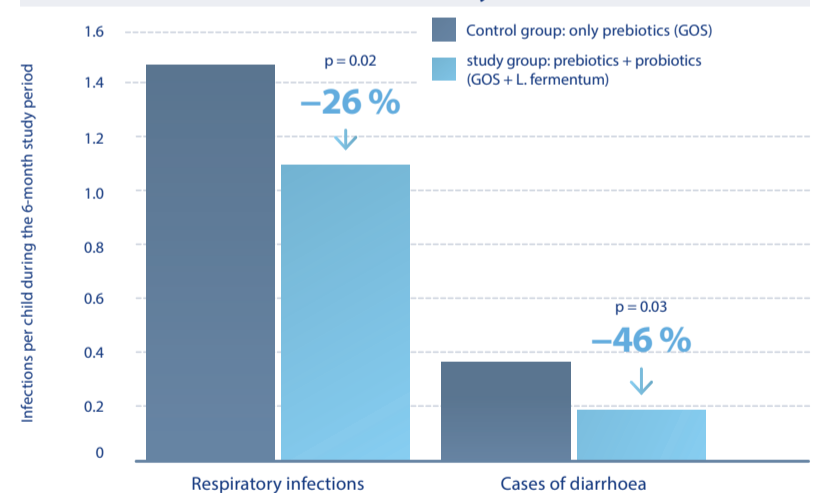


## The prebiotic GOS supports the developing digestive system and leads to:<sup>7-10</sup>

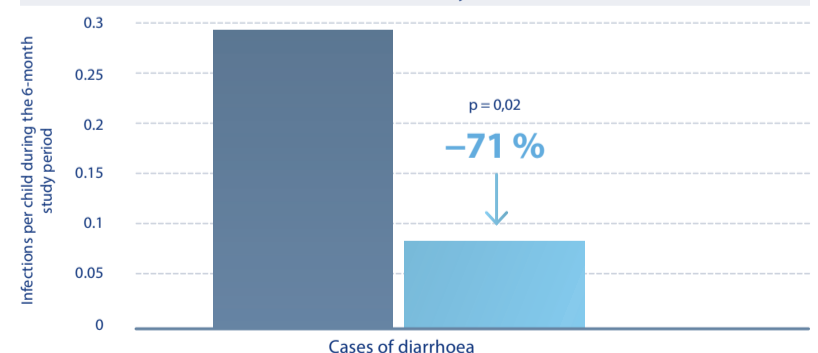
- less colic
- increased stool frequency
- softer stool consistency and a stool colour similar to that of breastfed children



Follow-on formula study (GOLF 1)<sup>11</sup>



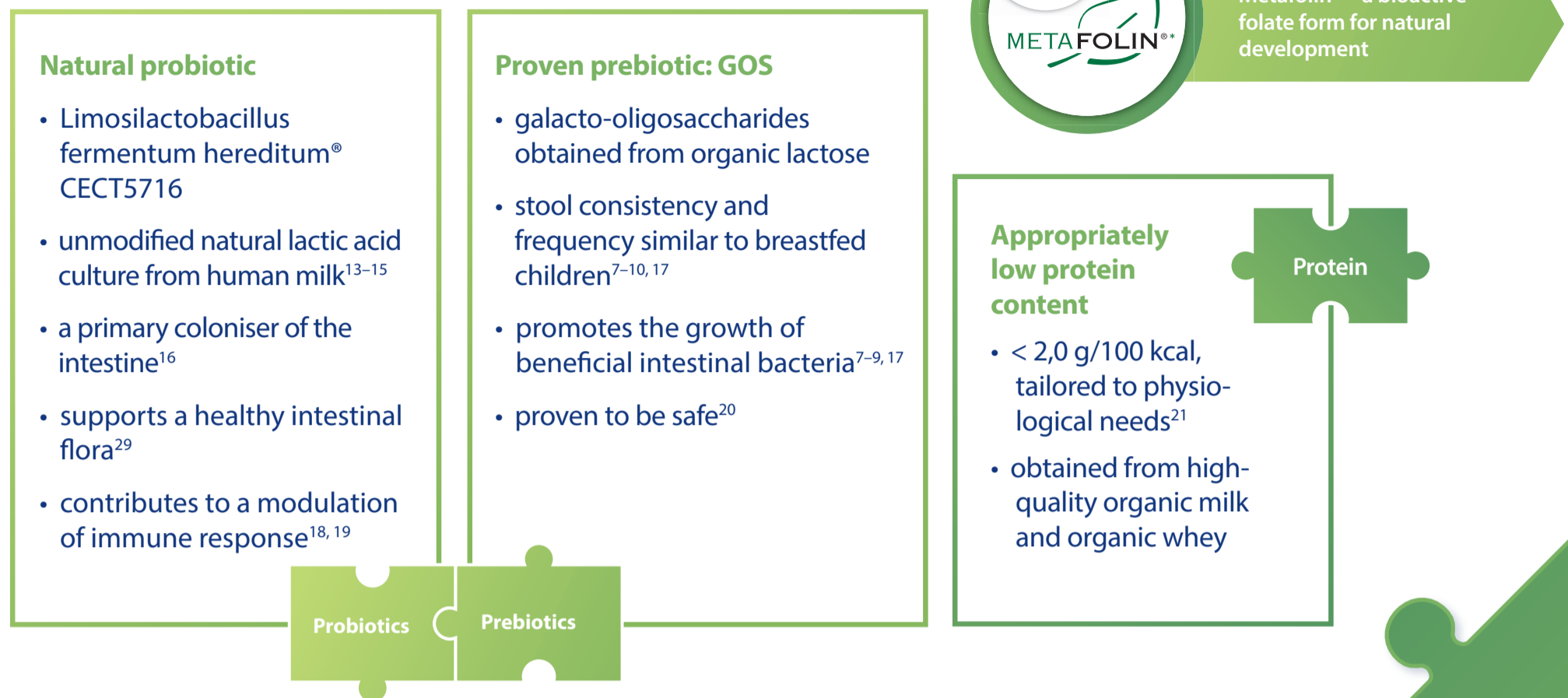
Infant formula study (GOLF 2)<sup>12</sup>



Clinical studies prove that the synbiotic combination of prebiotics and probiotics in HiPP ORGANIC COMBIOTIC®:

- ✓ increases the number of beneficial bacteria in the intestine<sup>11</sup>
- ✓ significantly reduces gastrointestinal infections<sup>11, 12</sup>
- ✓ is significantly better than only using prebiotics (GOS)<sup>11, 12</sup>

# Definitely the ideal combination



HiPP ORGANIC COMBIOTIC® supplies all the key, high-quality macro- and micronutrients in the appropriate quantities.

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A composition inspired by nature

## Fatty acid spectrum inspired by nature

valuable fatty acids

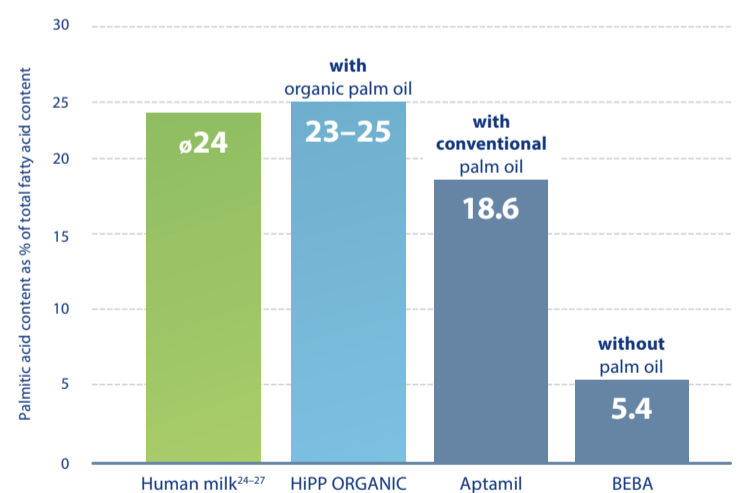
### Important palmitic acid

- the predominant saturated fatty acid in human milk
- important for good tolerability of formula<sup>22</sup>
  - ▶ less watery and more yellowy stools (similar to those of breastfed children)

### Omega-3 and omega-6 LCPs

- evidence-based and recommended<sup>23</sup>
- important for brain and nerve tissue development, as well as visual development
- optimum ratio of omega-3 and omega-6 LCPs (DHA and ARA)

C16:0 palmitic acid content in various infant formulae



Analyses of powdered Pre formulae conducted by independent laboratories. Information as of February 2021.

### Why use palm oil in formulae?

- ✓ Palm oil is the best source of palmitic acid.
- ✓ The aim is to achieve a palmitic acid content similar to that of human milk.
- ✓ ESPGHAN\* confirms that palm oil is suitable for use in formulae.<sup>28</sup>

\* ESPGHAN – European Society für Pediatric Gastroenterology, Hepatology and Nutrition

Our unique mixture of fats in HiPP ORGANIC COMBIOTIC® is made from sustainable and organic sunflower, palm and rapeseed oil in order to produce a fatty acid spectrum close to that of human milk.



Palm oil

# Babies' safety and wellbeing come first

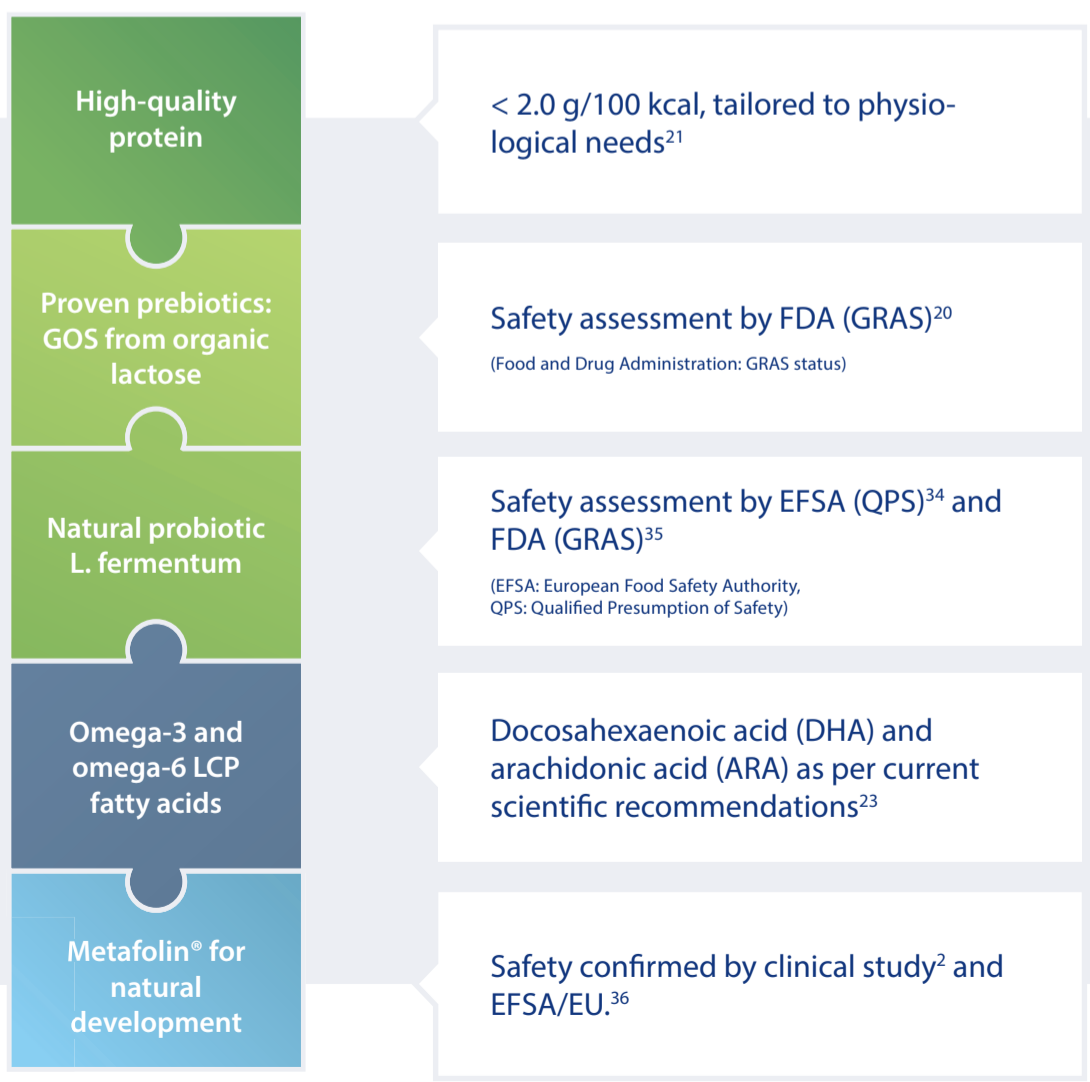
Multiple studies over a number of years prove that HiPP ORGANIC COMBIOTIC® represents the highest quality:

- long-term studies demonstrate that the combination of GOS + L. fermentum is safe<sup>29</sup>
- proven tolerability of the combination of GOS + L. fermentum
- new: with Metafolin® – a bioactive folate source that is inspired by nature

PROVEN BENEFICIAL EFFECT		STUDY
Natural probiotic L. fermentum	can colonise the human intestine	Severin AL et al. 2004 <sup>20</sup> ; Martin R et al. 2005 <sup>14</sup> ; Olivares M et al. 2007 <sup>18</sup>
	strengthens the integrity of the intestinal mucosa	Peran L et al. 2006 <sup>31</sup> ; Olivares M et al. 2006 <sup>32</sup>
	protects against intestinal infections	Olivares M et al. 2006 <sup>32</sup>
	contributes to modulation of immune response	Olivares M et al. 2007 <sup>18</sup> ; Perez-Cano FJ et al. 2010 <sup>19</sup>
Proven prebiotic GOS	promotes the growth of Bifidobacteria and Lactobacilli (bifidogenic effect)	Ben XM et al. 2004 <sup>7</sup> und 2008 <sup>17</sup> ; Fanaro S et al. 2009 <sup>9</sup> ; Sierra C et al. 2015 <sup>9</sup>
	helps produce stool consistency and frequency similar to breastfed children	Sierra C et al. 2015 <sup>9</sup> ; Fanaro S et al. 2009 <sup>9</sup> ; Ben XM et al. 2004 <sup>7</sup> und 2008 <sup>17</sup> ; Ashley C et al. 2012 <sup>10</sup>
	helps reduce the stool pH value	Sierra C et al. 2015 <sup>9</sup>
	has a beneficial effect in preventing infant colic	Giovannini M et al. 2014 <sup>33</sup>
Proven prebiotic GOS + Natural probiotic L. fermentum	positively influences the microbiota by promoting the growth of Lactobacilli and Bifidobacteria	GOLF 1 (follow-on formula) Maldonado J et al. 2012 <sup>11</sup>
	helps reduce the frequency of infections compared to prebiotic (GOS) alone (diarrhoea and/or respiratory problems)	GOLF 1 (follow-on formula) Maldonado J et al. 2012 <sup>11</sup> ; GOLF 2 (infant formula) Gil-Campos M et al. 2012 <sup>12</sup>
Bioactive folate form Metafolin®	Metafolin® is safe for use in formulae. Compared to formulae with synthetic folic acid, infants with Metafolin® develop equally well.	Troesch B et al. 2019 <sup>2</sup>

*i* For more information, see our scientific dossier or visit [hcp.hipp.com](http://hcp.hipp.com)

## A safe and ideal composition



< 2.0 g/100 kcal, tailored to physiological needs<sup>21</sup>

Safety assessment by FDA (GRAS)<sup>20</sup>  
(Food and Drug Administration: GRAS status)

Safety assessment by EFSA (QPS)<sup>34</sup> and FDA (GRAS)<sup>35</sup>  
(EFSA: European Food Safety Authority, QPS: Qualified Presumption of Safety)

Docosahexaenoic acid (DHA) and arachidonic acid (ARA) as per current scientific recommendations<sup>23</sup>

Safety confirmed by clinical study<sup>2</sup> and EFSA/EU.<sup>36</sup>

A tried-and-tested concept for proven safety

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## ! Important information

**Breastfeeding is best for a baby.** A balanced diet during pregnancy and after birth promotes lactation. Women who do not wish to breastfeed should be informed that it is difficult to reverse that decision. It is important for women to know that the complementary feeding of formula could compromise their breastfeeding success.

**Infant formulae should only be given upon the advice of independent experts.** Advise women on how to prepare the formula and note the important information and instructions on the packaging. Incorrect preparation of formula can be harmful to babies' health.

### Sources

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- <sup>3</sup> Page R. et al. Am J Clin Nutr. 2017 May; 105(5): 1101–1109.
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- <sup>5</sup> Gensollen T et al. Science 2016; 352(6285): 539–544.
- <sup>6</sup> Dominguez-Bello MG et al. PNAS 2010 107 (26) 11971–11975.
- <sup>7</sup> Ben XM et al. Chinese Medical Journal 2004; 117(6): 927–931.
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- <sup>9</sup> Sierra C et al. Eur J Nutr 2015; 54(1): 89–99.
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- <sup>11</sup> Maldonado J et al. J Pediatr Gastroenterol Nutr 2012; 54(1): 55–61.
- <sup>12</sup> Gil-Campos M et al. Pharmacol Res 2012; 65(2): 231–238.
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- <sup>20</sup> FDA. 2008; GRAS Notices GRN No. 236.
- <sup>21</sup> Koletzko B et al. Am J Clin Nutr 2009; 89(6): 1836–1845.
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- <sup>23</sup> Koletzko B et al. Am J Clin Nutr 2020; 111: 10–16.
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- <sup>27</sup> Lee et al. Front Pediatr. 2018; 6: 313.
- <sup>28</sup> Bronsky J et al. J Pediatr Gastroenterol Nutr 2019; 68: 742–760.
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- <sup>33</sup> Giovannini M et al. J Am Coll Nutr 2014; 33(5): 385–393.
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- <sup>35</sup> FDA. 2015; GRAS Notices GRN No. 531.
- <sup>36</sup> COMMISSION DELEGATED REGULATION (EU) 2021/571 of 20 January 2021. Official Journal of the European Union, 8 April 2021. EFSA Journal, doi: 10.2903/j.efsa.2020.5947.