

HiPP COMBIOTIC® Growing-up Milk meets the current recommendations:^{13,14}

- Calcium, potassium, magnesium, vitamin B₂ and B₁₂ content replicate that of whole milk and energy content replicates that of semi-skimmed cow's milk
- No flavourings or sweeteners used
- Protein content lower than in cow's milk

Composition of HiPP COMBIOTIC® Growing-up Milk for children aged 1 and over and aged 2 and over compared to recommendations from the Early Nutrition Academy (ENA)



Nutrients/criteria	ENA recommendations ¹⁴	HiPP COMBIOTIC® Growing-up Milk from 1 year	HiPP COMBIOTIC® Growing-up Milk from 2 years
Flavouring	no flavouring	no flavouring ✓	no flavouring ✓
Preparation	prepared in a cup	prepared in a cup ✓	prepared in a cup ✓
Composition per 100 kcal			
Energy (kcal/100 ml)	45 – 70	51 ✓	51 ✓
Fat (g)	4.4 – 6.0	5.5 ✓	5.5 ✓
- DHA (% of fat)	ideal value min. 0.3	0.3 ✓	0.3 ✓
Carbohydrates (g)	9 – 14	9.8 ✓	10.0 ✓
Protein (g)	1.6 – 2.7	2.0 ✓	1.9 ✓
Vitamin D (µg)	1.5 – 4.5	4.5 ✓	5.7* ✓
Calcium (mg)	min. 200	235.3 ✓	235.3 ✓
Iron (mg)	1 – 3	2.4 ✓	2.4 ✓
Iodine (µg)	12 – 36	27.5 ✓	27.5 ✓

*Higher vitamin D content based on clinical study⁶

HiPP COMBIOTIC® Growing-up Milk



✓ Composition meets current recommendations

- Reduced protein and fat content to suit the needs of children
- Specially adapted amounts of critical nutrients
 - + Iron
 - + Iodine
 - + Vitamin D
 - Protein
 - Saturated fatty acids

✓ Benefits demonstrated in study*

- Improved nutrient supply from drinking growing-up milk
 - Significantly improved vitamin D levels in winter and safe to consume in summer
- ### ✓ Contains proven ingredients
- Lactic acid culture L. fermentum (originally obtained from breast milk)**
 - Valuable GOS fibres***



* HiPP COMBIOTIC® Growing-up Milk 2+ with 2.9 µg/100 ml vitamin D
 ** Breast milk contains a large number of natural cultures that can vary from mother to mother
 *** Galacto-oligosaccharides obtained from lactose

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References:

- 1 EFSA Panel on Dietetic Products, Nutrition and Allergies. EFSA Journal 2013; 11: 3408
- 2 Claßen M. pädiatrie hautnah 2014; 26: 90–92
- 3 Vandenplas Y et al. Eur J Pediatr 2014; 173: 1365–1371
- 4 Akkermans et al. Am J Clin Nutr 2017; 105(2):391–399
- 5 Chouraqui J-P et al. Nutrients 2019; 11, 2213
- 6 Hower J et al. Eur J Pediatr 2013; 172(12): 1597–605
- 7 Ghisolfi J et al. Public Health Nutr 2013; 16(3): 524–34
- 8 Lovell et al. Br J Nutr 2019; 121(6): 678–687
- 9 Walton J and Flynn A. Food Nutr Res. 2013; 57. doi: 10.3402/fnr.v57i0.21836. eCollection 2013
- 10 Hojsak I et al. JPGN 2018; 66: 177–85
- 11 Land C. Kinder- und Jugendmedizin 2012; 12: 174–180
- 12 Reinehr T et al. Monatsschr Kinderheilkd 2018; 166:814
- 13 Koletzko B et al. Monatsschr Kinderheilkd 2018; 166, 62
- 14 Suthutvoravut U et al. Ann Nutr Metab. 2015; 67(2): 119–132



HiPP COMBIOTIC®

Nutrient supply during toddlerhood

HiPP COMBIOTIC® Growing-up Milk



For healthy growth all the way up to nursery-school age

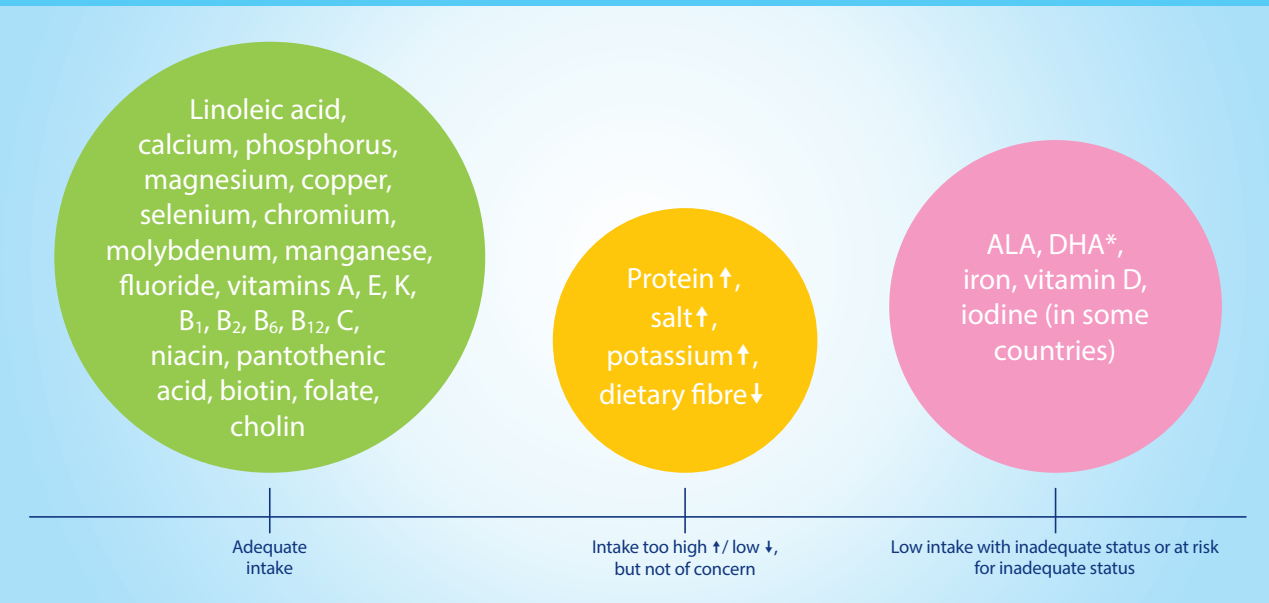
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HiPP COMBIOTIC® Growing-up Milk 1+ and 2+ meet the recommendations of the Early Nutrition Academy (ENA)

Information for healthcare professionals

Nutrient supply in toddlers is often suboptimal

A European Food Safety Authority (EFSA) report has shown that nutrient supply is suboptimal in European toddlers¹



In the EFSA report, the toddlers' diets included:

- **Protein intake** approximately 12 to 19 energy per cent (E%) above average requirements
- Intake of important fatty acids below adequate intake (AI)
 - ▶ Average **ALA** intake below or exactly at recommended 0.5 E%
 - ▶ Average **DHA** intake of 43 mg/d, significantly less than AI of 100 mg/d
- In almost all surveys, **iron intake** was below AI of 8 mg
- Infants and toddlers are at risk of **iodine deficiency**
- Prevalence of **vitamin D deficiency** between 10 and 30%

Experts call for:

- Improved quality of toddler nutrition through appropriate interventions²
 - ▶ Difficult to implement in practice as it requires changes to eating habits³

A simple solution is required that makes it easy for parents to provide their children with a balanced diet.

*Alpha-linolenic acid and docosahexaenoic acid

Growing-up milk improves the supply of critical nutrients

Growing-up milk is developed to meet the specific needs of toddlers:

- Higher amounts of nutrients which are often not consumed in sufficient quantities
- Other nutrients replicate those found in cow's milk
- Reduced protein content to suit children's needs

Various studies on humans have investigated the extent to which growing-up milk contributes to nutrition.

Overview of studies on improved nutrient intake/supply from drinking growing-up milk

	Vitamin D	Iron	Vitamin C	Zinc	Protein	Alpha-linolenic acid	Essential fatty acids	Vitamin A	Vitamin E	B vitamins
Akkermans et al. 2017 ⁴	×	×								
Chouraqui et al. 2019 ⁵	×		×				×	×	×	×
Hower et al. 2013 ⁶	×									
Ghisolfi et al. 2013 ⁷	×	×	×			×				
Lovell et al. 2019 ⁸	×	×	×	×	×					
Walton and Flynn 2013 ⁹	×	×								

Supply status using blood levels (Green) Calculated nutrient supply (Blue)

Multiple clinical studies have shown that nutrient intake/supply is improved by drinking growing-up milk.

This applies in particular to the supply of

- vitamin A, C, D und E,
- omega-3 fatty acids,
- iron and zinc.

European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) thus recommends:

Growing-up milk can be used as part of a strategy to increase the intake of iron, vitamin D, and polyunsaturated fatty acids and decrease the intake of protein compared with unfortified cow's milk.¹⁰

Particularly critical: Vitamin D

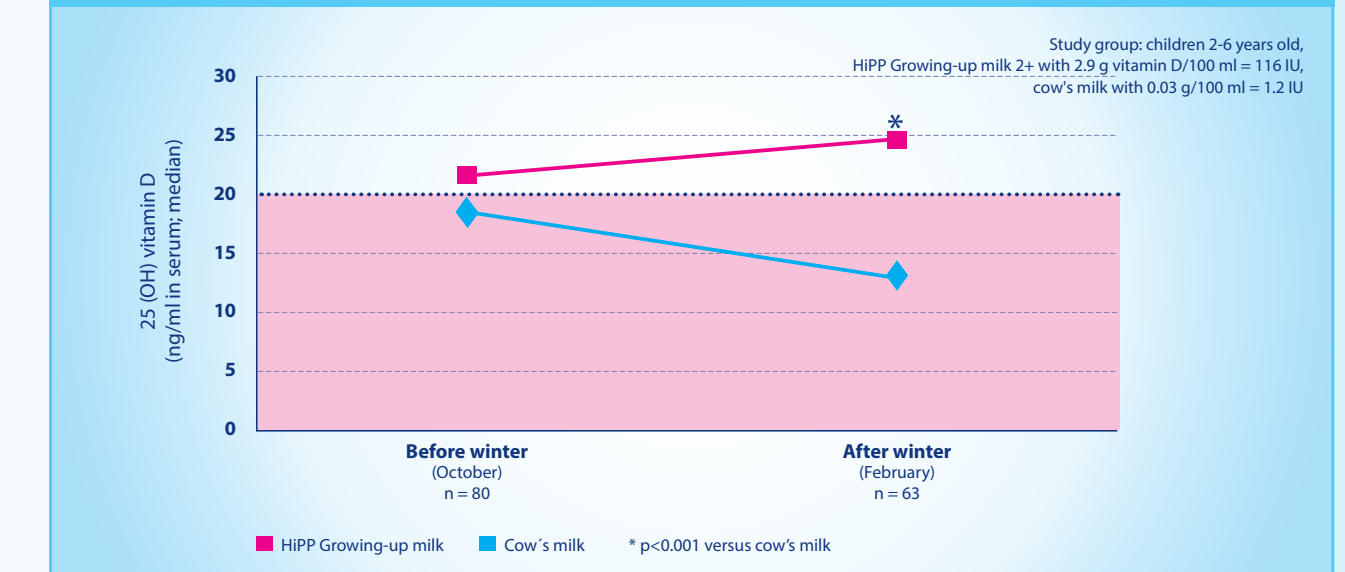
Adequate supply of vitamin D for toddlers is important for:

- Bones and teeth
- The immune system
- Possible protective effects for type I/II diabetes, cardiovascular and autoimmune diseases and tumours¹¹

Why is vitamin D in particular so critical?

- End of supplementation after their second early summer, subsequent supply is inadequate¹²
- Insufficient vitamin D content in food
- Limited self-synthesis due to strong sun protection
- Endogenous synthesis is insufficient to compensate for low intake via diet

Vitamin D supply when consuming growing-up milk versus cow's milk⁶



- ▶ Significantly higher 25(OH)D serum concentrations in the growing-up milk group (with average intake of 7.1 µg or 284 IU/day)

- ▶ The intervention study also showed that growing-up milk is safe to use in summer (median 25(OH)D serum concentrations: 27.6 ng/ml)

Growing-up milk with 2.9 µg vitamin D per 100 ml is a safe and simple way to prevent the decrease in 25(OH)D serum concentration during the winter.