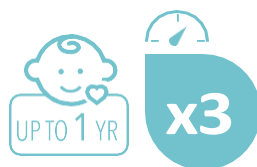


Baby Foods

Baby foods¹ are a targeted and nutritionally balanced option during weaning²

RAPID GROWTH AND DEVELOPMENT TAKES PLACE IN THE FIRST 3 YEARS OF LIFE

Babies undergo extraordinary changes in terms of physical development, organ growth and maturation, as well as the development of **food preferences, which can have an impact on health later in life:**



In the first year of life, birth weight is multiplied by $\approx 3^3$



In the first 2 years of life, birth weight is multiplied by $\approx 4^3$



By the age of 2, a baby's brain reaches $\approx 80\%$ of its adult size⁴



This rapid growth and development leads to specific nutritional needs **during infancy and toddlerhood**

Between 2 and 3 years of age, young children **will reach around half of their adult height³**

Exposure to a variety of foods with different tastes and textures can have a positive influence on **food acceptance** later in life⁵



Introducing the right foods at the right time is key



Introducing baby foods, between **17-26 weeks of age**, is associated with positive health aspects, such as iron status or reduced risk of food allergies, type 1 diabetes, and coeliac disease^{14,15}

The biggest challenge for baby foods is to be able to deliver the **optimal amount of nutrients in a small amount of food** (high nutrient density)



GENERAL FOODS ARE NOT NUTRITIONALLY TAILORED FOR BABIES

Baby foods are a nutritional reference for babies' diets

Baby food categories under EU legislation?¹



Baby foods: baby meals, drinks and desserts from liquid to semi- liquid and solid foods



Processed cereal-based foods for babies: cereals and cereals containing milk, pastas, rusks and biscuits

Baby foods:



Provide adequate nutrient density during the gradual change from liquid diet to a more varied diet



Help babies to learn safely about new tastes and textures



Ensure babies receive appropriate amounts of proteins, carbohydrates, fibre, fat, salt, vitamins and minerals

How are these baby foods regulated?¹

Their nutritional composition is regulated in terms of:



Carbohydrates, including sugars



Fats



Protein



Salt



Vitamins and minerals

Food Safety: What are the main differences between baby foods and general foods?

Baby foods must comply with stricter quality and safety requirements⁶:



Stricter limits for heavy metals



Stricter limits for mycotoxins



Stricter limits for chemical contaminants



Stricter limits for pesticide residues

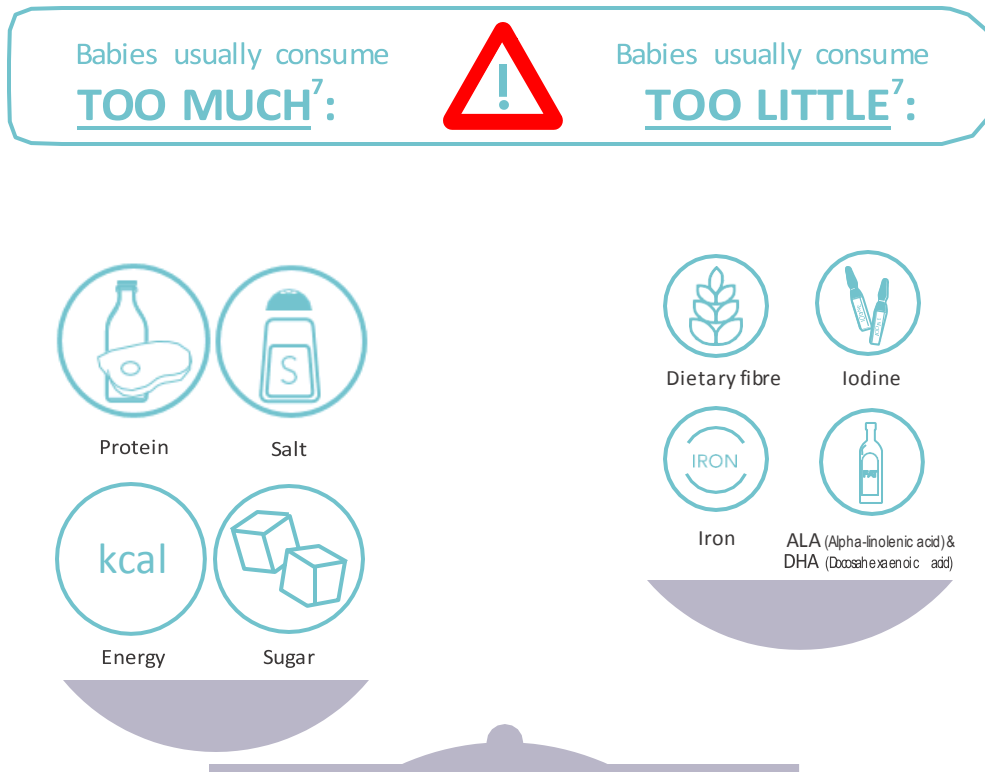


Fewer food additives authorised

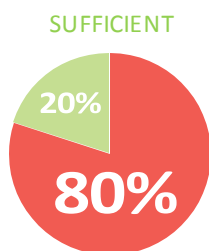


No colouring additives and no sweeteners permitted

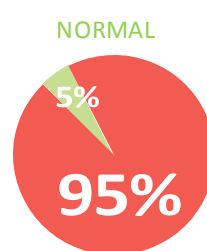
In Europe, babies are at risk of consuming some nutrients in either excessive or insufficient amounts:



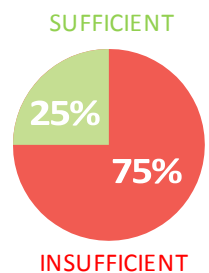
For example, in France⁸



Over **80%** of babies have an **insufficient** intake of fat



95% of babies have an **excessive** intake of salt



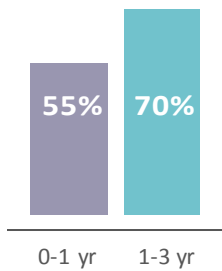
75% of babies have an **insufficient** intake of iron



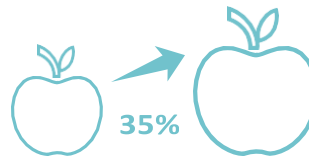
All babies receive **4x** more protein than necessary

Baby foods play a key role in ensuring appropriate nutrient intake

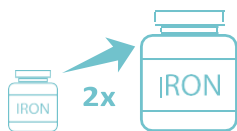
For example, in Germany⁹



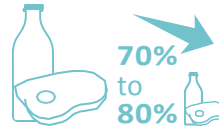
Around **55%** of infants and **70%** of young children are fed with baby foods



Fruit portion intakes are **35% higher** when babies are fed with specific baby foods¹⁰



Iron intake is **twice** as high in processed cereal-based foods¹¹



Protein intakes are **70% to 80%** lower in baby meals and baby fruit-based desserts¹²

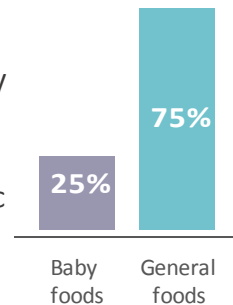
For example, in the UK¹³



Baby foods provide **20%** of iron intake in children aged between **4 and 9 months**



From **12 to 18** months of age, only **25%** of the daily total sugar intake comes from specific baby foods



The specialist nutrition industry represented by BSNA is committed to supporting parents and care-givers by offering a wide range of food products specifically formulated to meet the specific nutritional needs in the first three years of life

¹ For the purposes of this document, the term 'Baby foods' encompasses processed cereal based foods and other baby foods, as defined in Directive 2006/125/EC.

² From 4 to 6 months onwards, according to Fewtrell M et al (2017) Complementary Feeding: a position paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition; JPGN 2017, 64, 119-132)

³ WHO Child Growth Standards: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: methods and development. Geneva: World Health Organization, 2006

⁴ Koletzko B (ed): Kinderheilkunde und Jugendmedizin, ed 13. Berlin, Springer, 2007; Dekaban AS. Changes in brain weights during the span of human life: relation of brain weights to body heights and body weights. Ann Neurol. 1978 Oct;4(4):345-56; Dobbing J, Sands J. Quantitative growth and development of human brain. Arch Dis Child. 1973 Oct;48(10):757-67

⁵ Gerrish CJ and Mennella JA. Flavor variety enhances food acceptance in formula-fed infants. Am J Clin Nutr 2001; 73:1080-5.; Maier AS, Chabanet C, Schaal B et al. Breastfeeding and experience with variety early in weaning increase infants' acceptance of new foods for up to two months. Clin Nutr 2008;27:849-57; Mennella JA, Jagnow CP, Beauchamp GK. Prenatal and postnatal flavour learning by human infants. Pediatrics 2001;107(6):E88.

⁶ Inter alia, maximum levels for certain contaminants in food are set in Commission Regulation (EC) No 1881/2006, while the rules on food additives are defined by Regulation (EC) No 1333/2008

⁷ EFSA NDA Panel (EFSA Panel on Dietetic Products, Nutrition and Allergies), 2013. Scientific Opinion on nutrient requirements and dietary intakes of infants and young children in the European Union. EFSA Journal 2013;11(10):3408, 103 pp. doi:10.2903/j.efsa.2013.3408

⁸ Bocquet A, Vidailhet M. Enquête Nutri-Bébé 2013 Partie 2. Comment les mères nourrissent-elles leur enfant? Arch Pediatr 2015;22(10suppl):1057-10519

⁹ Foterek (2014): Verzehrsanteile von kommerzieller und selbst hergestellter Beikost in der DONALD Studie. Pädiatr. Prax. 2014; 82: 279-380 Hilbig Hilbig A et al.: Home-made and commercial complementary meals in German infants: results of the DONALD study. J Hum Nutr Diet 2015;28(6):613-622. doi: 10.1111/jhn.12325. Epub 2015 Jul 15.

¹⁰ Versus home-made meals, as concluded in the DONALD study (see footnote 9)

¹¹ As in home-made cereal meals, as concluded in the DONALD study (see footnote 9)

¹² Than respectively in home-made meals and home-made fruit-based desserts, as concluded in the DONALD study (see footnote 9)

¹³ Diet and nutrition survey of infants and young children, 2011. (2013) Department of Health. Available at: <https://www.gov.uk/government/publications/diet-and-nutrition-survey-of-infants-and-young-children-2011>

¹⁴ EFSA Panel on Dietetic Products, Nutrition and Allergy (NDA): Scientific Opinion on the appropriate age for introduction of complementary feeding of infants. EFSA J 2009;7:1423-1460.

¹⁵ Pryzrembel H. Timing of introduction of complementary food: short- and long-term health consequences. Ann Nutr Metab. 2012;60 Suppl 2:8-20