

# When grow healthy rhymes with grow happy

Happiness is acknowledged as a new goal of global policies. Parents play an important role in a child's happiness, but what skills are needed to build a happy childhood and a solid foundation for happiness in later life? A complex approach, integrating parenting, social relationships, play, nutrition, physical activity and sleep is required. And ultimately, a happy child has more chance of success later in life.

Every parent's goal is to raise a happy kid, and now, happiness is the United Nations' goal too. In fact, a 2019 report showed happiness has taken over from Gross Domestic Product (GDP) as one of the most relevant measures of social progress (Helliwell, Layard & Sachs, 2019). But what does happiness look like and what does it mean during childhood?

So far, research has shown happy children have higher levels of self-esteem and confidence, are more extroverted and exhibit positive social behaviours like sharing and giving (Huebner, Suldo & Gilman, 2006). They are also more hopeful and have a greater sense of personal control.

Interestingly, family socioeconomic status, parental education and occupational class have minor impacts

on happiness. Instead, happiness is more heavily influenced by environmental factors (De Neve et al., 2012).

Nutrition, gut health and comfort play a crucial role in happy growth, and good physical health correlates with a child's happiness. For example, colic in babies can reduce quality of life for an infant and their family, causing stress, anxiety and fatigue and can even put mothers at higher risk of postnatal depression (Maxted et al., 2005). Fortunately, advances in nutrition science are helping alleviate gut health issues like colic, diarrhoea and constipation in children, while ensuring they get the nutrients they need to grow up happy and healthy.

### CREATING A HAPPY AND HEALTHY GUT

One key to a happy gut is a healthy microbiome – the community of



The family plays a key role in a child's happiness.

bacteria, fungi and other microorganisms naturally found in the intestines – that help break down nutrients and promote gut function. Among the best studied community members is *Lactobacillus reuteri*, a probiotic bacterium that can be found in human milk. This beneficial probiotic may help to relieve constipation, regurgitation and diarrhoea in infants (Indrio et al., 2014; Gutierrez-Castrellon, 2014), and can even help immune function (Valeur et al., 2004). It can also alleviate colic discomfort, reducing crying time and improving the family's quality of life (Savino et al., 2007; Bellaiche et al., 2018).

### AN EASIER "WHEY" TO DIGEST

Human milk is filled with nutrients including proteins, fats, carbohydrates, vitamins and minerals. However, not all proteins have the same digestibility. For example, some infants may struggle to digest a protein called casein, potentially causing digestive discomfort and leading parents to seek medical help. Luckily, most proteins in human milk are whey proteins which do not clot in the stomach and are much easier to digest.

Other ingredients with beneficial influences on gut comfort include magnesium and lactose, as they can

help relieve constipation by drawing water into the intestine and softening stools. Stool consistency can also be impacted by the type of fat used in formula; some have a specific nutritional profile supporting softer stool formation closer to that of breastfed babies (Infante et al., 2011).

Knowing this, Nestlé developed a set of formulae, combining *L. reuteri*, a unique

fat blend, whey proteins\*, magnesium and lactose, designed to help infants from birth through to 36 months and beyond. These formulae aim to improve comfort and overall happy growth through improved digestion, gut health and gut defences.

### OUT OF A BIND

According to Nestlé, most traditional formulae contain high levels of long

**...happy children have higher levels of self-esteem and confidence, are more extroverted and exhibit positive social behaviours...**



The UN recognises play as a child's basic human right.



# Behind the Research

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## Detail

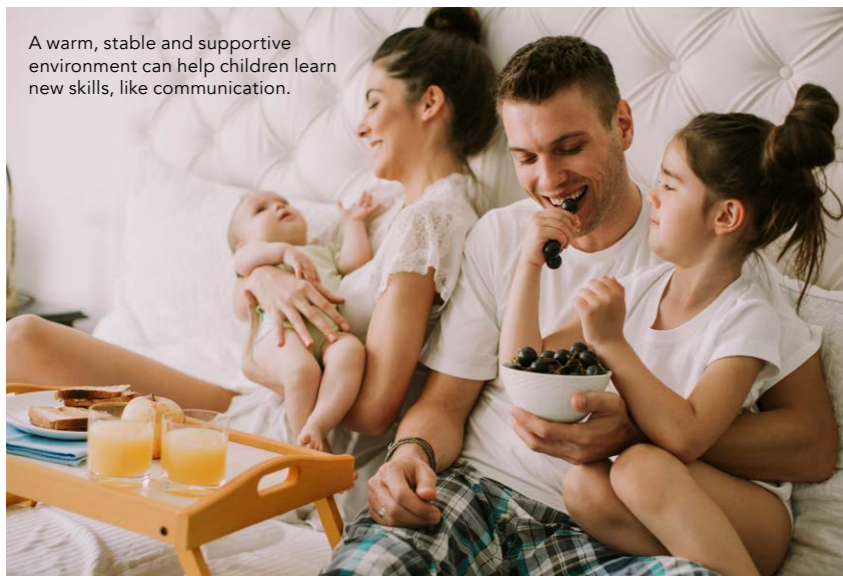
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## Bio

Nestle Research is the largest private research organisation working on nutrition.

## References

- Bellaiche, M. et al. (2018). Multiple functional gastrointestinal disorders are frequent in formula-fed infants and decrease their quality of life. *Acta Paediatr.*, 107, 1276–1282.
- De Neve, J-E., Christakis, N.A., Fowler, J.H & Frey, B.S. (2012). Genes, Economics and Happiness. *J Neurosci Psychol Econ*, 5(4), 193–211. Available at: <https://doi.org/10.1037/a0030292>
- Gray, P. (2011) The decline of play and the rise of psychopathology in children and adolescents. *American Journal of Play*, 3, 443–463.
- Gutierrez-Castrellon P., et al. (2014). Diarrhea in Preschool Children and Lactobacillus Reuteri: A Randomized Controlled Trial. *Pediatrics*, 133(4), e904–e909.
- Hale, L., Berger, L.M., LeBourgeois, M.K. & Brooks-Gunn, J. (2011). A longitudinal study of preschoolers' language-based bedtime routines, sleep duration, and well-being. *Journal of Family Psychology*, 25, 423.
- Helliwell, J., Layard, R., & Sachs, J. (2019). *World Happiness Report*, New York: Sustainable Development Solutions Network.
- Huebner, E.S., Suldo, S.M. & Gilman, R. (2006). Life Satisfaction. In: G.G. Bear & K.M. Minke (eds.). *Children's needs III: Development, prevention, and intervention* (357–368). National Association of School Psychologists.
- Indrio, F., Di Mauro, A., Riezzo, G., Civardi, E., Intini, C., Corvaglia, L., Ballardini, E., Bisceglia, M., Cinquetti, M., Brazzoduro, E., Del Vecchio, A., Tafuri, S. & Francavilla, R. (2014). Prophylactic use of a probiotic in the prevention of colic, regurgitation, and functional constipation a randomized clinical trial. *JAMA Pediatr.*, 168(3), 228–233.
- Infante, D., Segarra, O., Redecillas, S., Alvarez, M. & Miserachs, M. (2011). Modification of stool's water content in constipated infants: management with an adapted infant formula. *Nutrition Journal*, [online] 10(1), 55.
- Loton, D.J. & Waters, L.E. (2017). The Mediating Effect of Self-Efficacy in the Connections between Strength-Based Parenting, Happiness and Psychological Distress in Teens. *Frontiers in Psychology*, 8, 1707.
- Macted, A.E., Dickstein, S., Miller-Loncar, C., High, P., Spritz, B., Liu, J. & Lester, B.M. (2005). Infant Colic and Maternal Depression. *Infant Mental Health Journal*, 26(1), 56–68. Available at: <https://doi.org/10.1002/imhj.20035>
- Office of the UN High Commissioner Human Rights. (1989). Convention on the Rights of the Child. Available at: <https://www.ohchr.org/en/professionalinterest/pages/crc.aspx> [Accessed 22/04/2020]
- Pellis, S.M. & Pellis, V.C. (2007). Rough-and-tumble play and the development of the social brain. *Current Directions in Psychological Science*, 16(2), 95–98. Available at: <https://doi.org/10.1111/j.1467-8721.2007.00483.x>
- Savino, F., Pelle, E., Oggero, R. & Miniero, R. (2007). Lactobacillus reuteri (American Type Culture Collection Strain 55730) versus simethicone in the treatment of infantile colic: A prospective randomized study. *Pediatrics*, 119(1), e124.
- Shirtcliff, E.A., Skinner, M.L., Obasi, E.M. & Haggerty, K.P. (2017). Positive parenting predicts cortisol functioning six years later in young adults. *Developmental Science*, 20(6).
- Valeur, N., Engel, P., Carbajal, N., Connolly, E. & Ladefoged, K. (2004). Colonization and immunomodulation by Lactobacillus reuteri ATCC 55730 in the human gastrointestinal tract. *Appl Environ Microbiol.*, 70(2), 1176–1181
- van den Berg, M.M., Benninga M.A. & Di Lorenzo, C. (2006). Epidemiology of childhood constipation: a systematic review. *Am J Gastroenterol.*, 101(10), 2401–2409.



A warm, stable and supportive environment can help children learn new skills, like communication.

## Nestlé has created ... formulae based on human milk, which support child development and improve quality of life for infants and their families.

chain saturated fatty acids (LCSFA) in position 1-3. These specific fatty acids (sn1 - sn3) typically bind calcium in the gut to form "calcium-fatty acid soaps", reducing calcium absorption and hardening the stool. Interfering with this process helps calcium absorption, which is important for bone health, and impacts on overall infant comfort, happy growth and health.

As a result, Nestlé reduced the number of LCSFAs in their formulae so that it is functionally comparable to breastmilk – allowing for better fat and calcium

absorption, and softer stools. The latter is particularly important as around 50% of children develop constipation in the first years of life (van den Berg, Benninga & Di Lorenzo, 2006).

### SUPPORTING HAPPY GROWTH

Nutrition, gut health and comfort are critical for kids' development, happiness and quality of life, but they aren't the only things.

Research has shown that parenting style and social relationships can significantly impact children's security

and happiness (Loton & Waters, 2017). Growing up in a warm, stable and supportive environment with clear rules and boundaries can help children form deeper, respectful relationships with their parents. It also helps children learn new skills, like communication, behaviour control and emotional intelligence (Shirtcliff et al., 2017). This gives them confidence and helps them develop strong friendships later in life.

Play is another key element of happiness and is crucial for physical, emotional, social and mental development. It's so important that the UN recognises it as a child's basic human right (Office of the UN High Commissioner Human Rights, 1989). Kids can engage in a range of play, including 'free and unstructured', 'physical', 'social interactive' and 'educational'. These foster creativity, self-esteem, resilience, cognitive development, academic success and wellbeing (Pellis & Pellis, 2007).

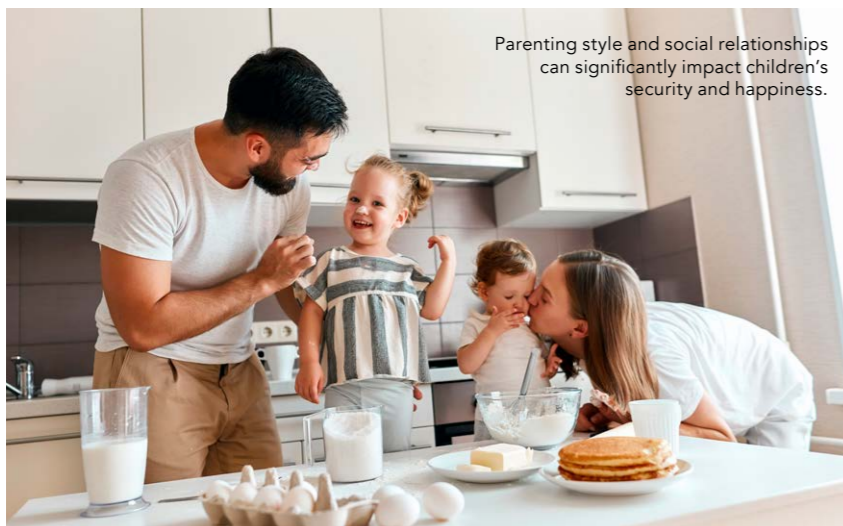
It goes without saying that physical activity is important for child development, self-efficacy and social influence (Gray, 2011). Here, parents can encourage kids to play a sport, invest in more outdoor family activities or, if children do play video games, select ones with exercise components.

Finally, parents need to make sure kids get enough sleep to perform their best during the day. Developing good sleeping habits – such as a fixed bedtime and removal from electronic devices – can help improve children's behaviour and wellbeing (Hale et al., 2011).

### TYING IT ALL TOGETHER

Raising a happy kid is every parent's goal, and with happiness bringing so many advantages, it's no wonder. Fortunately, there are plenty of ways to support happy growth, whether it's engaging in play, encouraging social interaction, or helping kids get the nutrition they need for healthy development. Nestlé's formulae, such as LACTOGEN® & NESTOGEN®, support parents and kids in this journey, providing the adapted nutrition, and specific proteins, fats and probiotics needed for a happy gut, happy growth and a happy future.

Parenting style and social relationships can significantly impact children's security and happiness.



BREASTFEEDING IS BEST FOR BABIES