Bristol Stool Chart

The Bristol Stool Form Chart is a valuable visual guide to use with parents in the diagnosis of constipation. Early identification of constipation and effective treatment can improve outcomes.

Type 1		Separate hard lumps	Very constipated
Type 2	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Lumpy and sausage like	Slightly constipated
Type 3	ANDE	A sausage shape with cracks in the surface	Normal
Type 4		Like a smooth, soft sausage or snake	Normal
Type 5		Soft blobs with clear-cut edges	Lacking fibre
Type 6		Mushy consistancy with ragged edges	Inflammation
Type 7	÷.	Liquid consisteny with no solid pieces	Inflammation

Adapted from: Lewis SJ, Heaton KW (1997) Stool form scale as a useful guide to intestinal transit time. Scandinavian Journal of Gastroenteroloav 32: 920-4

Advice for parents^{1,2}

A GP or paediatrician may prescribe laxatives for disimpaction and treatment.⁴ If an underlying pathological cause of constipation has been ruled out, parents can be advised on the following areas as appropriate:

- fluids are consumed⁴
- For bottle fed babies additional fluids may be necessary provided by cooled, boiled water.² It is vital that any water given does not displace milk in the infant's diet
- For bottle feeding parents, ensure formula is prepared according to the manufacturer's directions and not over-concentrated

- Ensure a balanced diet and sufficient Lie baby down and gently mvoe their legs like they are riding a bicycle. This can help to get things moving
 - Parents should be advised to keep a diary of symptoms to monitor changes in bowel movements⁵
 - Infants presenting with symptoms of constipation may benefit from a specialist formula such as HiPP comfort^{12, 13}

Introducing HiPP comfort milk

HiPP comfort milk is a FSMP (Food for Special Medical Purposes) suitable for the management of infant colic and constipation. It can be used from birth under medical supervision as a sole source of nutrition or as part of a varied diet from six months.

Contains a special blend of ingredients designed to ease the symptoms of colic and constipation:

- Hydrolysed whey protein improves protein digestibility^{6,14}
- Structured vegetable fat blend aids digestion and absorption of fat and calcium. Produces softer stools^{10, 12}
- **Reduced lactose** aids digestion of lactose and reduces likelihood of flatulence and intestinal discomfort^{15, 16}
- Oligosaccharides alters gut microflora and softens stools^{7, 10}
- Starch thickens formula to minimise air swallowing



Always ensure the formula is prepared according to the guidelines on the packaging. HiPP comfort is thicker than standard infant formulas so may flow better through a faster flow teat Infant's stools may initially appear greenish in colour. This is perfectly normal and no cause for concern.

frequency7, 8, 10

Important notice: Breastfeeding is best for babies. HiPP Comfort may be used as a baby's sole source of nutrition from birth. It should only be used under medical supervision. It is not suitable for parenteral use and should not be give if baby is allergic to cow's milk or suspected as such.

For healthcare professional use only



Comfort formulas clinical findings

 79% of infants with colic demonstrated a reduction in frequency of symptoms⁷ Significant decrease in colic episodes after one week and significantly fewer crying episodes by 2 weeks? Higher proportion of bifidobacteria in the infant's gut¹⁰ Softer stools and an increase in stool

References: 1. NICE Clinical Knowledge Summary (2017) Colic-infantile. Available at: https://cks.nice.org.uk/colic-infantile 2. NHS. Colic. Available at: http://www.nhs.uk/conditions/colic/Pages/Introduction.aspx 3. NHS. Constipation. Available at: http://www.nhs.uk/Conditions/Constipation/ Pages/Treatment.aspx 4. NICE guideline CG99 (2010) Constipation in children and young people: diagnosis and management. Available at: https://www. nice.org.uk/Guidance/CG99 5. Tabbers MM, DiLorenzo C, Berger MY, et al. (2014). Evaluation and Treatment of Functional Constipation in infants and Children: Evidence-based Recommendations from ESPGHAN and NASPGHAN. JPGN 2014;58: 258–274. Available at: http://www.naspahan.org/files/ documents/pdfs/cme/jpgn/Evaluation_and_Treatment_of_Functional.24.pdf 6. Benninga M A, Nurko S, Faure C, et al (2016). Childhood Functional Gastrointestinal Disorders: Neonate/Toddler. (Includina Rome IV Diaanostic Criteria for Functional Gastrointestinal Disorders.) Gastroenteroloay. 2016; 150:1443–1455 7. Savino F, Cresi F, Maccario S, et al. (2003). "Minor" feeding problems during the first months of like: effect of a partially hydrolysed milk formula containing fructo- and galacto-oligosaccharides. Acta Paediatr Suppl 2003; 441: 86-90 8. Savino F, Maccario S, Castagno E. et al (2005). Advances in the management of digestive problems during the first months of life. Acta Paediatrica, 2005; 94 (Suppl 449); 120-124 9. Savino F, Palumeri E, Castagno E, et al. (2006). Reduction of crying episodes owing to infantile colic: a randomized controlled study on the efficacy of a new infant formula. Eur J Clin Nutr 2006: 60: 1304-10 10. Schmelzle H. Wirth S. Skopnik H. et al. (2003). Randomized Double-Blind Study of the Nutritional Efficacy and Bifidoaenicity of a New Infant Formula Containing Partially Hydrolyzed Protein, a High Beta-Palmitic Acid Level, and Non digestible Oligosaccharides. J Pediatr Gastroenterol Nutr 2003; 36: 343-51 11. Weaver L T et al. The bowel habit of milk-fed infants. Journal Pediatric Gastroenteroloay and Nutrition, 1988; 7: 568-571 12. Kennedy K. Fewtrell M.S. Morley R. et al (1999), Double-blind, randomized trial of a synthetic triacylalycerol in formula-fed term infants: effects on stool biochemistry, stool characteristics, and bone mineralization, Am J Clin Nutr: 70: 920–7. 13. Quinlan PT, Lockton S, Irwin J, et al (1995). The relationship between stool hardness and stool composition in breast-fed and formula-fed infants JPGN: 20: 81-90 14. Billeaud C et al. Eur J Clin Nutr 1990: 44: 577-583, 15. Kanabar D et al. J Hum Nutr Dietet 2001;14:359-63 16. Infante D et al. World | Gastroenterol 2011: 17: 2104–2108

NERE on comfort

For the dietary management of colic and constipation

What is colic?



Colic (or infantile colic) is the name for excessive and inconsolable crying in a baby that otherwise appears to be healthy and thriving¹. It's a common problem that affects up to one in five babies.²

A baby who has colic may appear to be **Diagnosis and symptoms**⁶ in distress, but the crying outbursts are not harmful, and the baby should continue to feed and gain weight normally².

Symptoms tend to begin when the baby is a few weeks old and usually stop by 3-4 months of age, 6 months at the latest.¹

What causes colic?

The underlying cause of infantile colic is unknown. Theories suggest indigestion, trapped wind or temporary aut sensitivity to certain proteins or sugars found in breast and formula milk². Since symptoms of colic may also be the consequence of a cow's milk protein allergy, the necessary investigations should be carried out if this is suspected. Colic occurs equally in boys and girls, and in both breastfed and formula fed babies.

The latest guidelines (ROME IV) define colic as episodes of crying or fussing/ discontent without an obvious cause lasting 3 or more hours/day and occurring at least 3 days/week for at least 1 week.

Symptoms of colic

- Intense crying bouts²
- Fluctuating between crying and fussing⁶
- Crying in the late afternoon or evening for several hours²
- Red flushed face when they cry²
- Clenching fists, drawing knees to their tummy or arching their backs when crying²

NICE & NHS advice



Advice for parents^{1, 2}

- Reassure parents their baby is well and they're not doing anything wrong. Baby is not rejecting them and colic is a normal phase which will pass
- Hold the baby during a crying episode
- Try gentle motion pushing in a pram, rocking in a crib or over parents shoulder
- Avoid over stimulating the baby
- Try 'white noise' vacuum cleaner, hairdryer or running water
- Bathe the baby in a warm bath

Advice for breast feeding mothers²

- Reduce caffeine intake, spicy food and alcohol
- Under medical advice, breastfeeding mums can try removing dairy products from their diet for a week or two to see if symptoms improve



as it's possible that the baby may have a short-term intolerance to proteins found in cows' milk and in other dairy products.²

Advice for bottle-feeding parents²

- Preventing baby from swallowing air when feeding by sitting or holding them upright
- Burping baby after feeds
- Use a fast-flow teat to minimise air swallowing

Parents should be encouraged to look after their own well-being by resting when the baby is asleep, asking friends and family for support, and avoiding isolation by meeting with parents with similar aged babies². Support groups such as Cry-sis can offer support via their helpline on 0845 122 8669.





Management options



Medical treatments²

As colic eventually improves on its own, medical treatment isn't usually recommended. But if a parent is finding it hard to cope, the NHS website advises them to speak to a GP or pharmacist for advice about possible treatments. There are some over-the-counter treatments available such as simeticone and lactase drops but there isn't much good evidence for the effectiveness of these treatments.



Dietary management

Formula fed infants - Comfort formulas are specialist infant formulas, categorised as a food for special medical purposes (FSMPs). HiPP comfort milk is a gentle nutritionally complete infant formula which is suitable for the dietary management of colic and constipation. If CMPA is suspected or diagnosed, then a suitable alternative formula (EHF or AAF) should be prescribed

Comfort formulas are available from supermarkets and pharmacies, and are recommended for use under medical supervision.

"HiPP comfort milk is a gentle nutritionally complete infant formula which is suitable for the dietary management of colic and constipation."

What is constipation?



Constipation is associated with infrequent and/or painful defecation. It is prevalent in around 5-30% of the child population, depending on the criteria used for diagnosis.⁴

The best way to prevent constipation in infancy is to encourage breastfeeding. Breastfed infants tend to have more bowel movements than formula fed infants, and constipation is unusual in breastfed infants and more common in formula fed infants.¹

At 4 weeks of age, the majority of babies pass between 1-5 stools per day which vary from liquid to hard. Some infants, especially when breastfed, can go up to a week without a bowel movement.¹ As long as stools are soft, there is no constipation issue.

What causes constipation?

The cause is not fully understood but factors may include fever, dehydration and fluid intake, changes in the infant's diet, psychological issues, pain, toilet training, medicines and family history of constipation.⁴

Diagnosis and symptoms⁴

History taking may be required to diagnose idiopathic constipation (constipation without an identifiable cause). Symptoms may include:

- Fewer than three complete stools per week (type 3 or 4, see Bristol Stool Form Chart)
- Hard large stool
- 'Rabbit dropping' (type 1, see Bristol Stool Form Chart)
- Foul smelling wind and stool
- Excessive flatulence
- Irregular stool texture
- Straining or withholding
- Bleeding associated with hard stool
- Soiling or overflow