

# Understanding Constipation in Infants and Toddlers



# Information for Parents, Carers and Health Care Professionals

Constipation is a common problem that can affect up to 28% of all children and has been recognised as being amongst the most common infant digestive problems reported by parents. We know from experience that the sooner the problem is identified and treated the easier it is to manage. Frequently however, the problem is not recognised until the child starts potty training, when it is often more difficult to treat, particularly if the child is reluctant to open their bowels because of fear of pain or discomfort.

If constipation is identified and treated as soon as possible after the problem starts, then it is going to be easier for everyone. There are often unfounded concerns regarding the use of laxatives with babies, but NICE clearly states 'Do not use dietary interventions alone as first-line treatment for idiopathic constipation'. Laxatives can safely be used in this age group and the NICE guidance 'Constipation in children and young people: diagnosis and management' (NICE CG99) provides suggestions for appropriate doses. Advice for dietary interventions and fluid intake are also provided.

#### The first stool - Meconium

The first stool passed following birth is called meconium and is often green in colour and very sticky. It is passed within the first 24 hours in about 87% of infants and within 48 hours by 99% (Griffin & Beattie 2001).

It is known that infants who are fed breast pass a softer and greater number of stools than those fed infant formula. The stool consistency in infants should be soft until weaning, when it becomes firmer. The actual frequency of bowel movements in infants can vary a great deal depending on whether they are breast or bottle fed.

# Normal frequency of bowel movements in children

Age	Bowel movements per week a	Bowel movements per day b
0-3 months breast fed	5 to 40	2.9
0-3 months formula fed	5-28	2.0
6-12 months	5-28	1.8
1-3 years	4 to 21	1.4
> 3 years	3 to 14	1.0

Adapted from: Fontana et

a Approximately mean  $\pm$  2 SD. b Mean

# Why are breast fed babies stools different?

Breast milk contains proteins and oligosaccharides that are not digested – resulting in stools being larger in volume and softer in consistency. Breast fed babies tend to be fed 'on demand', with more frequent feeding resulting in more stimulation of the gastrocolic reflex. However, as the infant matures normal physiological changes occur within the intestine and colon resulting in a decreased number of stools.

**Transit time** (The time it takes for the feed to come out at the other end as poo.)

The decline in frequency of bowel actions with age correlates with increased bowel transit times. An older study identified an increase in transit time from 8.5 hours in infants aged 1-3 months, to a mean transit time of 16 hours in a group of infants aged 4 to 24 months (*Weaver & Steiner 1984*).

When determining if an infant is constipated it is important to look not only at frequency of evacuations (poos), but the consistency as well. This is because it is normal for the frequency of stools to reduce over time.

#### Possible causes of constipation in infants

- Formula feed made up incorrectly (too concentrated, with not enough water)
- Weaning introduction of solid food, but without enough water-based drinks in between meal times
- Not enough fibre (fruit and vegetables)
- High dairy food intake (cows milk etc) can affect some babies
- Illness resulting in dehydration



## Formula feeds

- Families need to ensure feeds are made up correctly
- Changing the formula may help, but should be done under the supervision of a health care professional

It is important to remember that breast feeding should always be promoted and any introduction or changes of formula feeds should only be done on the advice of a healthcare professional.

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#### Some simple interventions parents can try

- Abdominal Massage: This should only be taught to parents by a qualified health professional
- **Leg Exercise:** Lay the infant on their back and gently move their legs in a bicycle motion. This will cause the stomach muscles to move and put gentle stimulation on the infant's intestines, which may make them have a bowel movement.
- Warm Bath: A relaxing warm bath may help their stool pass more easily. During
  or after the bath, try gently massaging the tummy (if parents have been taught how
  to do this by a qualified health professional)
- Fruit juice/puree: Depending on the age of the infant dilute fruit juice containing sorbitol such as apple or pear could be tried



If trying any of the above does not help then further advice should always be sought from a health care professional and laxatives (eg macrogol) may need to be prescribed, to prevent the constipation becoming chronic.

## **Infant Dyschezia**

Sometimes babies can appear to strain and grunt, or go red in the face when they have their bowels opened – but they then pass normal, soft stools. This is usually because the infant has not yet worked out how to relax the pelvic floor during defeacation (while pooing) and when they feel the urge to go they often stretch out their legs, which tightens the pelvic floor. Parents frequently say they have to 'help the poo come out' by bending and holding their babies legs up.



This problem is sometimes called 'infant dyschezia', which just means uncoordinated defeacation. It will normally correct itself with time and does not require treatment.

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#### Suppressing defecation

- If an older infant/ young child does not want to open their bowels for whatever reason, they can inhibit defecation (stop themselves from pooing) by tightening the external anal sphincter and squeezing the gluteal muscles.
- These actions push the stool higher up in the rectum and reduce the urge to defecate (poo). If this is continually repeated the rectum eventually stretches to accommodate the extra poos and then the rectum is less able to push them out.
- If this behaviour continues then the child will become constipated very quickly.

#### Withholding stools



This occurs commonly in toddlers who may have experienced the passage of an uncomfortable/painful stool.

The longer the stool remains in the rectum the larger and harder the stool becomes. A vicious circle develops with the child wanting to 'hold on' to avoid the passage of more poos that may be uncomfortable or painful.

It is therefore important that any change in stool consistency or frequency, that may indicate the potential development of constipation, is addressed quickly to prevent the cycle of 'holding on' developing.

#### **Key messages for infants**

- Constipation is not an uncommon problem in infants, particularly if they are fed infant formula
- Parents need to be reminded to always seek health care advise if they suspect constipation is present. This is so appropriate treatment may be given in a timely manner
- Laxatives should be prescribed to prevent the problem becoming chronic and simple interventions (such as increasing fruit and vegetables for children who are weaned and ensuring enough water is drunk), should prevent it from reoccurring

# Working with toddlers

Remember it is almost impossible to get their cooperation.

- Encourage parents to increase water-based drinks and fibre (particularly fruit and vegetables), but do not make this the focus of treatment
- Do not address potty training until the constipation is resolving

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- Allow 'poo nappies'. If the child insists on using a nappy to poo then allow them to
  use a nappy, but it must be only in the bathroom/toilet area. Then encourage sitting
  on the toilet/potty with nappy on, eventually working on removing the nappy
  completely. (see the Bladder and Bowel UK information leaflet 'Understanding
  toilet refusal the child who will only poo in a nappy')
- Laxatives should be considered when the diagnosis of constipation is made.
   Laxatives need to be given at sufficient doses to maintain regular soft bowel
   motions (at least three bowel motions per week) and must be continued until the
   child has been passing soft stools for several weeks. They should be weaned
   gradually, as the child tolerates, rather than stopped suddenly

# **National Institute for Health and Care Excellence (NICE)**

NICE have produced clinical guidance on the 'Diagnosis and Management of Constipation in children and young people' (NICE 2010, updated 2017). This is available online at <a href="https://www.nice.org.uk/guidance/cg99">https://www.nice.org.uk/guidance/cg99</a>. They also produced quality standards in 2014 (reviewed 2017) available at: <a href="https://www.nice.org.uk/guidance/qs62">https://www.nice.org.uk/guidance/qs62</a>

#### Note:

Constipation in infants and toddlers is a common problem but it is important that the advice of a Healthcare Professional is always obtained to ensure there is not an underlying problem causing it and to prevent the constipation becoming chronic.

#### **IMPORTANT NOTICE:**

Breast feeding is best for babies and a healthy balanced diet is important when breast feeding. A decision not to breast feed can be difficult to reverse. Also the introduction of partial bottle feeding will reduce the supply of breast milk, whereas continuing breast feeding will maintain a healthy supply of milk. An infant formula should only be used on the advice of a doctor or health professional and the cost and any social implications of using infant formula should be considered when deciding how to feed your baby. If an infant formula is used, all the preparation and feeding instructions should be followed carefully, as this is important for your babies health.

#### For further information contact Bladder and Bowel UK

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Bladder and Bowel UK, working under the umbrella of Disabled Living, provides impartial advice and information regarding resources, products and services for children and adults with bladder and bowel problems

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