

# **Waltham Forest Guidelines for the Management of Constipation in Adults**

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## **1. Principles for the management of constipation in adults**

Constipation is defecation that is unsatisfactory because of infrequent stools, difficult stool passage, or seemingly incomplete defecation. Stools are often dry and hard, and may be abnormally large or abnormally small.

- Functional constipation is chronic constipation without a known cause.
- Secondary constipation is caused by a drug or medical condition (such as endocrine and metabolic diseases, myopathic and neurological conditions, and certain bowel conditions).
- Faecal loading/impaction is retention of faeces to the extent that spontaneous evacuation is unlikely.

Assessment should determine:

- The patients' understanding of constipation.
- The severity and impact of the constipation, and the presence and degree of faecal impaction and faecal incontinence.
- The role of predisposing factors.
- If there are any organic causes of constipation.
- The effectiveness of management to date.
- The presence of 'red flags' that might indicate a serious underlying condition and require referral.

No investigations are routinely required in an adult with constipation unless a secondary cause is suspected.

In adults with constipation:

- Constipating medication should be adjusted.
- An increase in dietary fibre, adequate fluid intake, and exercise should be advised.
- Oral laxatives should be offered if dietary measures are ineffective, or while waiting for them to take effect.
- Initial treatment should be with a bulk-forming laxative.
- If stools remain hard, an osmotic laxative should be added or switched to.
- If stools are soft but the person still finds them difficult to pass or complains of inadequate emptying, a stimulant laxative should be added.

Additional management of chronic constipation involves:

- Initially relieving faecal loading/impaction, if present (strategies include use of oral laxatives, plus suppositories or enemas if the response to oral laxatives is insufficient or not fast enough).
- Advising the person that it can take several months to be successfully weaned off all laxatives.
- Titrating the dose of laxative gradually upwards (or downwards) to produce one or two soft, formed stools per day.
- Continuing laxatives long term for those with secondary causes.

Referral should be arranged if red flags are present, treatment is unsuccessful, or if there is faecal incontinence.

## 2. Algorithm for the management of constipation in adults

The following guidelines have been adapted from the National Institute of Health Care Excellence Clinical Knowledge Summary for constipation.

[Click on this link to access the full details.](#)

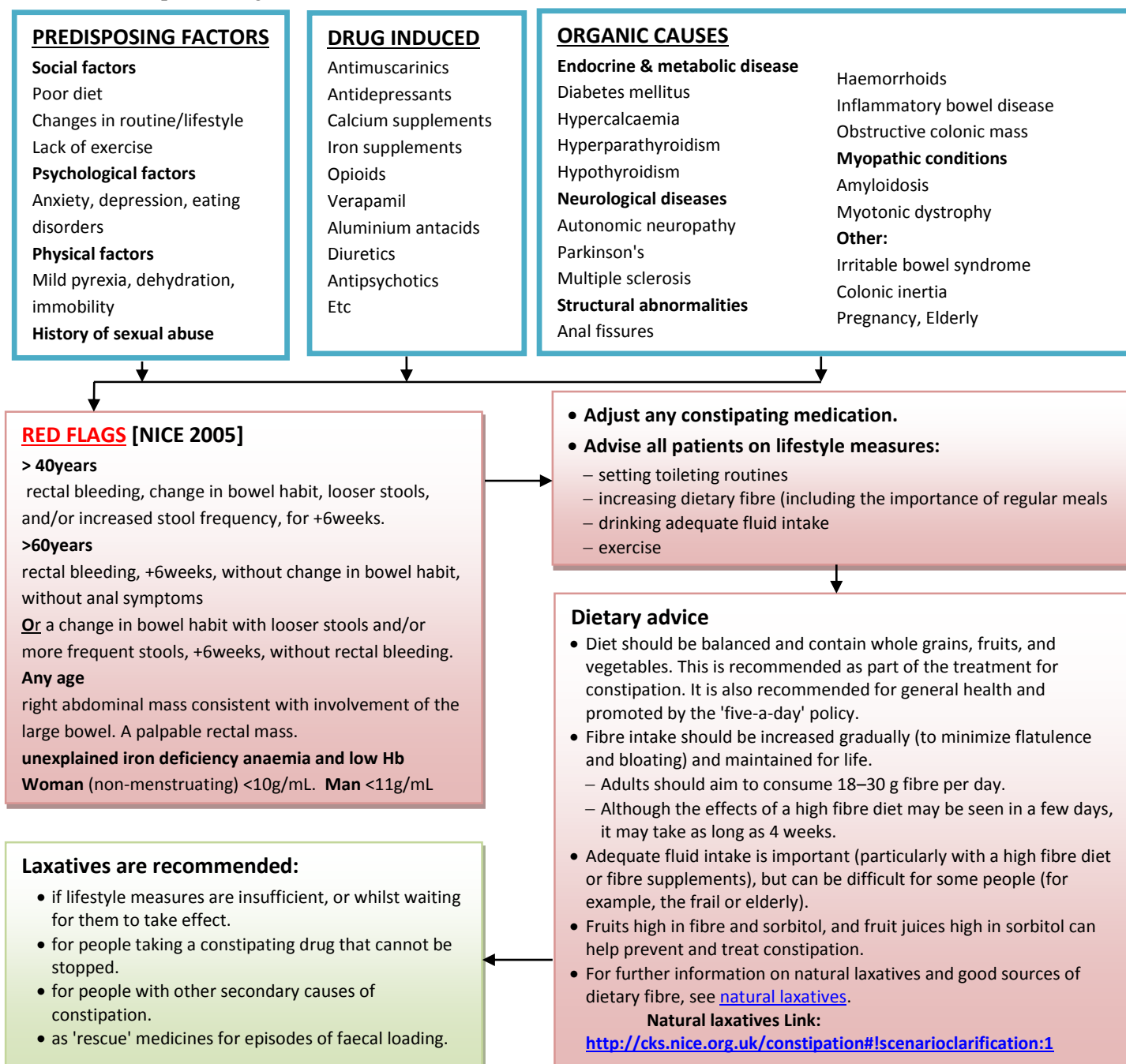
### Normal frequency of bowel movements

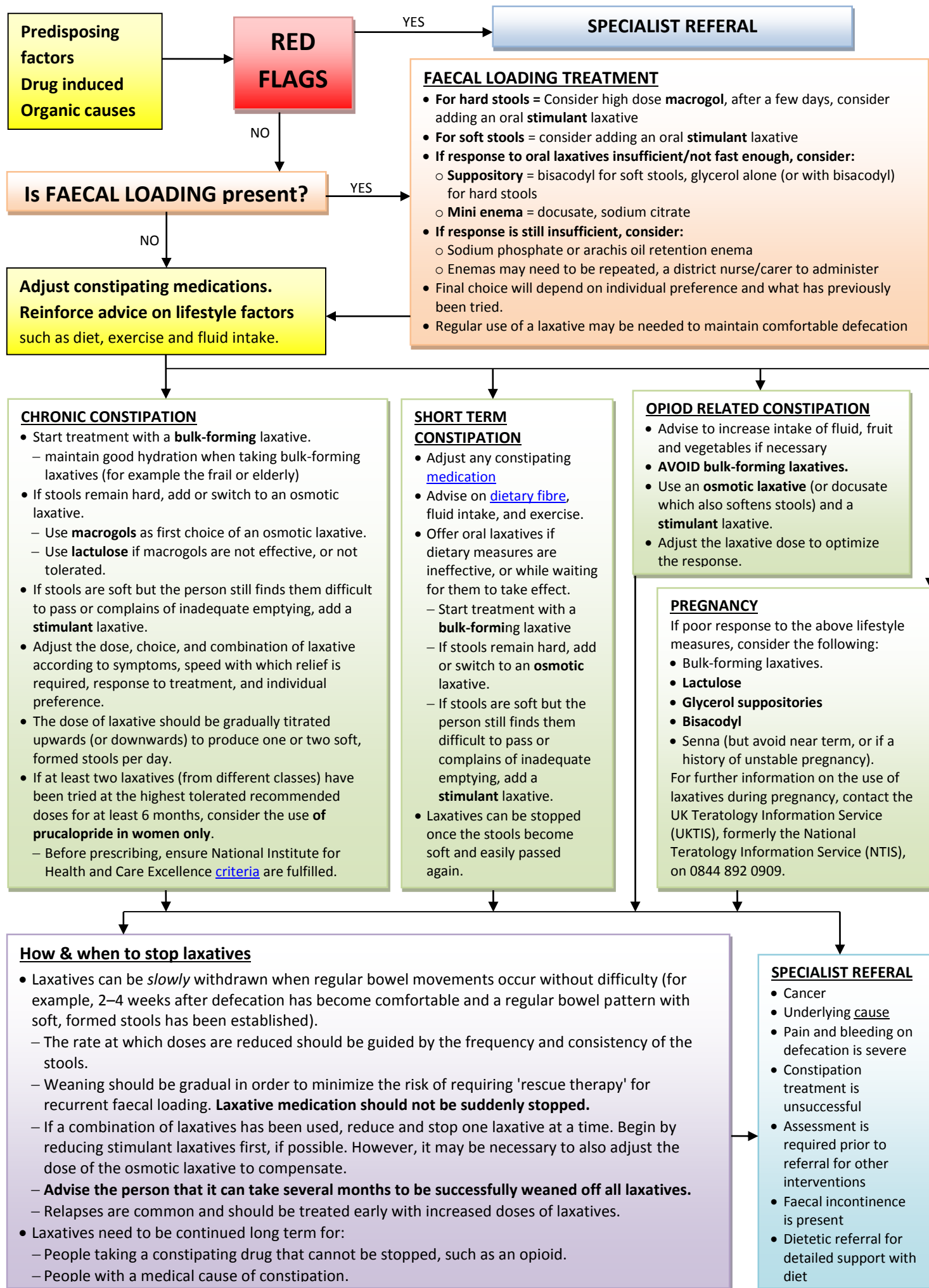
Bowel movement occurring less than three times a week is one of the Rome criteria for constipation [Longstreth et al, 2006].

Surveys in healthy adult populations have found that failure to defecate at least three times a week is reported by less than 1% of British people, [Connell et al, 1965], and 5% of North Americans [Drossman et al, 1982].

### Goals

- Understanding diagnosis and treatment options
- Agree a management plan and encourage patient compliance
- Clear faecal loading/impaction, if present
- Relieve symptoms, and achieve a normal stool pattern
- Agree a realistic target date with patients with chronic constipation for withdrawing laxatives
- Identify and manage secondary causes of constipation (management of secondary causes is outside the scope of this guideline).





### 3. Prescribing information

Important aspects of prescribing information relevant to primary healthcare are covered in this section specifically for the drugs recommended in the CKS topic. For further information on contraindications, cautions, drug interactions, and adverse effects, see the [electronic Medicines Compendium](http://medicines.org.uk/emc) (eMC) (<http://medicines.org.uk/emc>), or the [British National Formulary](http://www.bnf.org) (BNF) ([www.bnf.org](http://www.bnf.org)).

**The final choice of laxative will often depend on individual preference, and what has previously been tried.**

Factors affecting choice of laxative				
Laxative	1. Drug Tariff Prices April 2014 2. BNF March 2014 3. Dm+D accessed 1.4.2014	Points to note	Method of action	Common adverse effects
<b>Bulk forming laxatives</b>				
Ispaghula (also known as psyllium)	Ispaghula husk 3.5g effervescent granules sachets gluten free sugar-free £1.69 (30sachets, Ispagel Orange) <sup>2</sup> £2.20 (30 sachets, Fybogel) <sup>1</sup>	Useful first-line choice in adults when it is difficult to get enough fibre in the diet. Better tolerated than bran. Must not be taken immediately before bed. Adequate fluid intake is important, to prevent intestinal obstruction. This may be difficult for the frail or children. Not recommended for people taking constipating drugs.	<b>Bulk-forming laxatives</b> (such as <b>ispaghula husk, methylcellulose, and sterculia</b> ) act by retaining fluid within the stool and increasing faecal mass, leading to stimulation of peristalsis. They also have stool-softening properties.	Flatulence, bloating
Sterculia	Sterculia 62% granules 7g sachets gluten free £5.77 (60sachets, Normacol) <sup>1</sup>	<b>Time to effect:</b> 2–3 days		Flatulence, bloating
Methylcellulose	Methylcellulose 500mg tablets £3.22 (112 tablets, Celevac) <sup>1</sup>	Useful first-line choice in adults when it is difficult to get enough fibre in the diet. Better tolerated than bran. Must not be taken immediately before bed. Adequate fluid intake is important, to prevent intestinal obstruction. This may be difficult for the frail or children. Tablets swell in the mouth on contact with water. <b>Time to effect:</b> 2–3 days		Flatulence, bloating
Wheat or oat bran		Finely ground bran can be given as bran bread or biscuits, but these are less effective than unprocessed bran. May be unpalatable. Can be added to food or fruit juice. Often poorly tolerated (causes flatulence and bloating) unless increased slowly and can be difficult to take enough to be effective on its own. Adequate fluid intake is important.		Flatulence, bloating
<b>Osmotic laxatives</b>				
Lactulose	Lactulose 3.1-3.7g/5ml oral solution £2.82 (500ml) <sup>1</sup> £1.87 (300ml) <sup>2</sup>	Palatable — although some find it sickly sweet. Adequate fluid intake recommended as drugs can be dehydrating. If used alone in opioid-induced constipation, it often needs to be given in large doses that cause bloating and colic. <b>Time to effect:</b> 2–3 days	<b>Osmotic laxatives</b> (such as <b>lactulose, macrogols, phosphate enemas, and sodium citrate enemas</b> ) act by increasing the amount of fluid in the large bowel, by retaining fluid in the bowel, and by drawing fluid from the body into the bowel. Fluid accumulation in the lower bowel produces distension, leading to stimulation of peristalsis. Lactulose and macrogols also have stool-softening properties.	Flatulence, cramps, bloating
Macrogols (polyethylene glycol)	Macrogol compound oral powder sachets NPF sugar free £5.34 (30sachets, Laxido orange powder, available as sugar free) <sup>3</sup> £6.68 (30sachets, Movicol) <sup>1</sup>	Some people find it difficult to drink the prescribed volume of macrogol. Licensed for use in faecal impaction. Idrolax <sup>®</sup> does not contain electrolytes. Movicol-Half <sup>®</sup> contains half the dose and electrolytes of Movicol <sup>®</sup> . Adequate fluid intake recommended as drugs can be dehydrating. <b>Time to effect:</b> 2–3 days		Bloating, nausea

Factors affecting choice of laxative				
Laxative	1. Drug Tariff Prices April 2014 2. BNF March 2014 3. Dm+D accessed 1.4.2014	Points to note	Method of action	Common adverse effects
<b>Surface-wetting laxatives</b>				
Docusate sodium	Docusate 100mg capsules £2.09 (30capsules, Dioctyl) <sup>1</sup> £6.98 (100capsules Dioctyl) <sup>2</sup>	Probably acts both as a softening agent and a stimulant. May be a useful alternative for people who find it hard to increase their fluid intake.	<b>Surface-wetting agents (docusate and poloxamer</b> [an active ingredient of co-danthramer]) reduce the surface tension of the stool, allowing water to penetrate and soften it. Docusate also has a relatively weak stimulant effect.	
	Docusate 50mg/5ml oral solution sugar free £5.49 (300ml, Docusol) <sup>1</sup>	<b>Time to effect:</b> 12–72 hours		
<b>Stimulant laxatives</b>				
Senna	Senna 7.5mg tablets £11.70 (60tablets) <sup>1</sup> Senna 7.5mg/5ml oral solution sugar free £2.69 (500ml, Senokot Pharmacy) <sup>1</sup>	Licensed only for short-term use. Syrup is unpalatable.	<b>Stimulant laxatives</b> cause peristalsis by stimulating colonic nerves ( <b>senna</b> ) or colonic and rectal nerves ( <b>bisacodyl, sodium picosulfate</b> ).	Abdominal cramps, diarrhoea
		<b>Time to effect:</b> 8–12 hours		
Sodium picosulfate	Sodium picosulfate 5mg/5ml oral solution sugar free £5.80 (300ml) <sup>1</sup>	Licensed only for short-term use. Syrup is palatable.	Senna is hydrolyzed to the active metabolite by bacterial enzymes in the large bowel.	Abdominal cramps, diarrhoea
		<b>Time to effect:</b> 6–12 hours		
Bisacodyl	Bisacodyl 5mg gastro-resistant tablets £2.27 (60 tablets) <sup>1</sup> Bisacodyl 5mg e/c tablet £3.43 (100tablets) <sup>2</sup>	No syrup available. Licensed only for short-term use.	Bisacodyl and sodium picosulfate are hydrolyzed to the same active metabolite. However, bisacodyl is hydrolyzed by intestinal enzymes, whilst sodium picosulfate relies on colonic bacteria.	Abdominal cramps, diarrhoea
		<b>Time to effect:</b> 6–12 hours		
Dantron <b>(Terminal care only)</b>	<b>With poloxamer '188' (as co-danthramer)</b> Co-danthramer capsules 25mg/200mg £12.86 (60 capsules) Co-danthramer capsules 37.5mg/500mg £15.55 (60capsules) Co-danthramer 25mg/200mg/5ml oral suspension sugar free. £103.60 (300ml). Co-danthramer 75mg/1000mg/5ml oral suspension sugar free. £252.50 (300ml). <b>With docusate sodium (as co-danthrusate)</b> Co-danthrusate 50mg/60mg capsules £42.50 (63capsules) Co-danthrusate 50mg/60mg/5ml oral suspension sugar free £89.92 (200ml)	Restricted to use in terminal care. Prolonged contact with the skin (e.g. faecal or urinary incontinence) can cause a dantron burn — an erythematous rash with a sharply demarcated border. Available only combined with a softener: Co-danthramer (dantron with poloxamer). Co-danthrusate (dantron with docusate). Concerns about possible carcinogenicity (from high-dose studies in rats). People should be warned that it discolours urine red (occasionally blue or green).		Abdominal cramps, diarrhoea
		<b>Time to effect:</b> 6–12 hours		
<b>5HT4-receptor agonists</b>				
Prucalopride	Prucalopride 1mg tablet - £38.69 (28tablet) <sup>3</sup> 2mg tablet - £59.52 (28tablet) <sup>3</sup>	May be considered for women in whom treatment with other laxatives has failed to produce an adequate response. Should only be prescribed by clinicians experienced in treating chronic constipation.	<b>Prucalopride</b> is a selective, high-affinity, serotonin (5HT4) receptor agonist, and has enterokinetic effects, enhancing intestinal motility.	

#### **4. Adverse effects of laxatives**

**Most adverse effects can be avoided or reduced by increasing the dose of oral laxatives gradually.**

Advise people to start at the lowest dose and, if necessary, increase it every few days until one or two soft, formed stools are produced each day.

**Avoid excessive doses of laxatives.** This leads to diarrhoea and, if prolonged, electrolyte disturbances such as hypokalaemia.

**If intestinal obstruction is suspected,** do not use laxatives.

**The timing of stimulant laxatives** can be particularly important for children and the frail or elderly, so that they provoke a single stool each day, at a time when the individual has adequate time to reach the toilet [[Clayden et al, 2005](#)].

There have been concerns in the past that prolonged use of stimulant laxatives (off-licence use) might reduce colonic function or lead to tolerance. However, there is no convincing evidence that this is the case [[Wald, 2006](#)].








Current information on contraindications, cautions, drug interactions and adverse effects can be accessed from:

- the electronic Medicines Compendium (eMC) (<http://medicines.org.uk/emc>)
- the British National Formulary (BNF) ([www.bnf.org](http://www.bnf.org)).





## Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. <b>Entirely Liquid</b>

First published: Lewis SJ, Heaton KW (1997) Stool form scale as a useful guide to intestinal transit time. *Scandinavian Journal of Gastroenterology* 32: 920–4

## 7. Summary of guidelines for the management of constipation in adults

Assess Patient	What is patient's normal bowel habit?	When were bowels' last opened?	Any previous laxative used? OTC?	Obstructed or impacted?	Faecal incontinence?
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Identify cause	Drug induced	Poor diet, fluid intake, exercise	Psychological / physical factors	Medical conditions	<b>Red flags</b>
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Initial management	Educate patient	Set realistic management plan	Advice on increasing fluid intake, fibre intake and increase in exercise	Adjust any constipating medication	Advice on toileting routine
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Which laxative?			
Short term constipation	Chronic constipation	Opioid related constipation	Pregnancy
<ul style="list-style-type: none"> <li>• Offer oral laxatives if dietary measures are ineffective, or while waiting for them to take effect.               <ul style="list-style-type: none"> <li>– Start treatment with a <b>bulk-forming</b> laxative</li> <li>– If stools remain hard, add or switch to an <b>osmotic</b> laxative.</li> <li>– If stools are soft but the person still finds them difficult to pass or complains of inadequate emptying, add a <b>stimulant</b> laxative.</li> </ul> </li> <li>• Laxatives can be stopped once the stools become soft and easily passed again.</li> </ul>	<ul style="list-style-type: none"> <li>• Start treatment with a <b>bulk-forming</b> laxative.               <ul style="list-style-type: none"> <li>– maintain good hydration when taking bulk-forming laxatives (for example the frail or elderly)</li> </ul> </li> <li>• If stools remain hard, add or switch to an osmotic laxative.               <ul style="list-style-type: none"> <li>– Use <b>macrogols</b> as first choice of an osmotic laxative.</li> <li>– Use <b>lactulose</b> if macrogols are not effective, or not tolerated.</li> </ul> </li> <li>• If stools are soft but the person still finds them difficult to pass or complains of inadequate emptying, add a <b>stimulant</b> laxative.</li> <li>• Adjust the dose, choice, and combination of laxative according to symptoms, speed with which relief is required, response to treatment, and individual preference.</li> <li>• The dose of laxative should be gradually titrated upwards (or downwards) to produce one or two soft, formed stools per day.</li> <li>• If at least two laxatives (from different classes) have been tried at the highest tolerated recommended doses for at least 6 months, consider the use of <b>prucalopride in women only</b>.               <ul style="list-style-type: none"> <li>– Before prescribing, ensure NICE <a href="#">criteria</a> are fulfilled.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Advise to increase intake of fluid, fruit and vegetables if necessary</li> <li>• <b>AVOID bulk-forming laxatives.</b></li> <li>• Use an <b>osmotic laxative</b> (or docusate which also softens stools) and a <b>stimulant</b> laxative.</li> <li>• Adjust the laxative dose to optimize the response.</li> </ul>	<p>If poor response to the above lifestyle measures, consider the following:</p> <ul style="list-style-type: none"> <li>• Bulk-forming laxatives.</li> <li>• <b>Lactulose</b></li> <li>• <b>Glycerol suppositories</b></li> <li>• <b>Bisacodyl</b></li> <li>• Senna (but avoid near term, or if a history of unstable pregnancy).</li> </ul> <p>For further information on the use of laxatives during pregnancy, contact the UK Teratology Information Service (UKTIS), formerly the National Teratology Information Service (NTIS), on 0844 892 0909.</p>

Where clinically appropriate consider gradually withdrawing laxative when regular bowel movements occur without difficulty. Weaning should be gradual in order to minimize the risk of requiring 'rescue therapy' for recurrent faecal loading.

**Advise the person that it can take several months to be successfully weaned off all laxatives.**

**Laxative medication should not be suddenly stopped.** Laxatives may need to be continued for some long term conditions.

## 8. Cost-effective laxative choice

Laxative	Brand where applicable	1. Drug Tariff Prices April 2014 2. BNF March 2014 3. Dm+D accessed 1.4.2014	
		<b>Bulk forming laxatives</b>	
Ispaghula husk 3.5g effervescent granules sachets gluten free sugar-free	Ispagel Orange <sup>2</sup>	£1.69	30sachets <sup>2</sup>
	Fybogel <sup>1</sup>	£2.20	30 sachets <sup>1</sup>
Sterculia 62% granules 7g sachets gluten free	Normacol <sup>1</sup>	£5.77	60sachets <sup>1</sup>
Methylcellulose 500mg tablets		£3.22	112 tablets <sup>1</sup>
Wheat or oat bran			
<b>Osmotic laxatives</b>			
Lactulose 3.1-3.7g/5ml oral solution		£1.87	300ml <sup>1</sup>
		£2.82	500ml <sup>2</sup>
Macrogol compound oral powder sachets NPF sugar free	Laxido orange powder, available as sugar free <sup>3</sup>	£5.34	30sachets <sup>3</sup>
	Movicol <sup>1</sup>	£6.68	30sachets <sup>1</sup>
<b>Surface-wetting laxatives</b>			
Docusate 100mg capsules		£2.09	30capsules <sup>1</sup>
		£6.98	100capsules <sup>2</sup>
Docusate 50mg/5ml oral solution sugar free		£5.49	300ml <sup>1</sup>
<b>Stimulant laxatives</b>			
Bisacodyl 5mg gastro-resistant tablets		£2.27	60 tablets <sup>1</sup>
Bisacodyl 5mg e/c tablet		£3.43	100tablets <sup>2</sup>
Senna 7.5mg/5ml oral solution sugar free		£2.69	500ml <sup>1</sup>
Senna 7.5mg tablets		£11.70	60tablets <sup>1</sup>
Sodium picosulfate 2.5mg		£2.03	20 capsules <sup>2</sup>
		£2.87	50 capsules <sup>2</sup>
Sodium picosulfate 5mg/5ml oral solution sugar free		£5.80	300ml <sup>1</sup>
Glycerol Suppositories	1 gram	£0.98	12 suppositories <sup>2</sup>
	2 gram	£0.89	12 suppositories <sup>2</sup>
	4 gram	£3.16	12 suppositories <sup>2</sup>
Dantron with docusate sodium (as co-danthrusate)  (Terminal care only)	Co-danthrusate 50mg/60mg capsules	£42.50	63capsules <sup>2</sup>
	Co-danthrusate 50mg/60mg/5ml oral suspension sugar free	£89.92	200ml <sup>2</sup>
Dantron with poloxamer '188' (as co-danthramer)  (Terminal care only)	Co-danthramer capsules 25mg/200mg	£12.86	60 capsules <sup>2</sup>
	Co-danthramer capsules 37.5mg/500mg	£15.55	60capsules <sup>2</sup>
	Co-danthramer 25mg/200mg/5ml oral suspension sugar free.	£103.60	300ml <sup>2</sup>
	Co-danthramer 75mg/1000mg/5ml oral suspension sugar free.	£252.50	300ml <sup>2</sup>
<b>5HT4-receptor agonists</b>			
Prucalopride 1mg tablet		£38.69	28tablet <sup>3</sup>
Prucalopride 2mg tablet		£59.52	28tablet <sup>3</sup>

## 9. References

1. National Institute of Clinical Excellence, Clinical Knowledge and Skills on Constipation. Revised in January 2013. Accessed on 31.01.2014.
2. Drug Tariff April 2014.
3. British National Formulary (BNF) March 2014.
4. NHS Business Services drugs database, Dm+D. Accessed on 01.04.2014.
5. NICE CG99 Bristol Stool Chart. Accessed on 01.04.2014.