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GESA
Gastroenterological Society of Australia

facts about...

CONSTIPATION

CONSTIPATION

What is constipation?

Constipation is one of the most common medical complaints in Australia. One in 10 children present to medical attention for problem constipation. One in 5 middle aged women suffers from constipation.

Adult males have fewer problems but the incidence of constipation rises in both sexes with advancing age. People say they are constipated when they can't empty their bowels as often or as easily as they would like.

A desirable bowel habit is a once to twice daily evacuation of a softly formed stool passed without difficulty or pain, in a timely fashion. There is wide individual variation in the "normal" bowel habit.

MANY HEALTHY
children have problems with constipation, particularly around the time of toilet training.

What symptoms are associated with constipation?

Some people hold onto their motion for many days. The large bowel absorbs water from the stool which may become hard and dry and difficult to pass. Cramping abdominal pain is common, and is usually relieved with evacuation of a bowel motion.

The passage of hard, dry bowel motions may cause a small split in the internal lining of the back passage (causing an anal fissure) and subsequent bowel motions may cause an intense stinging pain, sometimes associated with passage of a small amount of bright red blood. Pain around the back passage causes a reflex contraction of the outlet muscles and exacerbates the constipation.

Occasionally the motion becomes so large that it stretches the back passage, which results in loss of sensation of the "need to toilet". This can lead to faecal overflow and soiling on the underpants or pyjamas.

What can I do about this?

1. The first step is to relieve any pain around the back passage. Specific treatments are available from your general practitioner to treat anal fissures and other local causes of pain.

2. The second step is to ensure that medications or underlying medical conditions are not contributing to the problem. Drugs used to treat blood pressure, heart disease, depression and supplements of calcium and iron commonly cause constipation (see list overleaf). Occasionally an underactive thyroid gland, calcium metabolism disorders, scleroderma or neurological disorders such as Parkinson's disease, stroke or paralysis will slow the bowel habit.

3. The third step is to evaluate "environmental" factors such as diet, fluid intake and toileting habits which may be contributing to constipation. A diet high in fibre is beneficial for most people with simple constipation. Fluid intake should be at least 1500mls daily. Allowing adequate time for toileting is important. This applies both to children racing to be ready for school and to adults

facing specific issues such as shift work, a busy schedule or difficulty accessing a toilet at work. Female hormones often affect the bowel habit, with constipation more common before the start of a menstrual period and in early pregnancy.

Dietary guidelines

We should all aim to consume a varied, nutritious diet that will allow absorption of the correct amount of calories for energy, amino acids for building protein and essential micronutrients (vitamins and minerals) to sustain a healthy, active body. The food remnants that don't get broken down and absorbed in the small bowel pass along to the large bowel and are generally known as "fibre". By drawing water into the stool, this fibre contributes to the bulk. An adequate intake of fibre will help form a bulky softly formed bowel motion. The recommended daily intake of fibre is 20-30 grams daily (check your intake with the table overleaf). A good rule of thumb for children is that a child needs their age plus 5 grams of fibre each day (a 5 year old should take 5+5+ = 10 grams fibre/day). Fibre derived from some cereals and vegetables may cause increased flatulence and some dietary experimentation may be required to find the most appropriate fibre.

Constipation in Children

Motivating a child to drink plenty of fluid and eat a high fibre diet can be challenging. Encourage your child to sit on the toilet, preferably 15 minutes after a meal, and try to pass a motion. Reward a good result with praise and if necessary start-up a star chart. Every time the child produces a motion, put a sticker on the chart for all to see. If there is blood on the toilet paper or your child seems to be in pain, consult your general practitioner. Faecal soiling at night

ANY CHANGE
in bowel habit should be discussed with your doctor. Further investigation may be required.

is commonly due to "overflow" and the key goals of management are to achieve regular, preferably daily, complete evacuation of the lower bowel. It may take months of regular emptying of soft stool before the lower bowel returns to normal size and function. Children often need to take laxatives during this period to keep the motion soft.

There are other rare causes of constipation in children that may require further investigation. This may include obtaining a biopsy or tissue sampling from the back passage. A traumatic experience related to toileting (such as bullying at school in the toilets) or pain around the back passage (nappy rash, anal fissure) may result in the child "withholding" a bowel motion with resultant constipation. Close consultation and counselling with your doctor may be required to manage these difficult cases.

Constipation in Adults

1. Simple Constipation

Simple constipation is usually caused by "environmental" factors as described above. Attention to fibre and fluid intake, and toileting habits are of prime importance in management.

2. "Slow Transit" Constipation

In some people, constipation can be extremely difficult to manage. Rarely, difficult cases may be due to "Slow Transit" constipation. In this condition the bowel muscles don't contract properly and forward propulsion of the stool along the length of the bowel is weak. The stool may take longer than a week to complete the journey through the large bowel compared to 1-3 days in the average person. The cause is unknown, and with the passage of time an adult with this condition may develop a distended floppy bowel that lack tone, the so-called "mega-colon".

3. Pelvic Floor Weakness and "Obstructed Defecation"

This is a common condition. The lower end of the bowel commonly becomes baggy and may form a pocket ("rectocoele"). Stool hides in this pocket as the platform of pelvic muscles descends. A bulge is felt around the back passage or in the front passage. Small amounts of stool may be evacuated but the rectum retains a large amount of stool and the person senses "unsatisfied defecation". Bladder symptoms of frequency, urgency or incontinence commonly coexist.

Hand pressure to support the bulging area and instruction in exercises to strengthen the pelvic floor exercises can be useful. The mechanical efficiency of passing a motion is improved if the feet are positioned on a small stool to allow the knees to be higher than the hips whilst sitting on the toilet. Toilet seats are often too high and this is particularly relevant for children.

Doctors and physiotherapists with an interest in this area may offer specialised treatments to increase pelvic floor and core abdominal strength. Local surgery to reduce the redundant mucosa in the lower bowel and strengthen the posterior wall of the vagina can be helpful.

4. Irritable Bowel Syndrome

Irritable bowel syndrome typically causes a bowel habit alternating between constipation and diarrhea. Sufferers have a heightened perception of pressure changes within the bowel lumen causing a sensation of "bloating" and cramping abdominal pain. Constipation predominates in some irritable bowel patients and if bowel evacuation can be achieved regularly without straining many of the pressure symptoms will be relieved

5. Bowel Cancer

Any change in bowel habit, particularly bleeding or severe pain, should be discussed with your doctor. Bowel cancer is a very, very uncommon cause of constipation but if you have noted a change, further investigation such as colonoscopy may be required. Constipation and the long-term use of laxatives does not predispose to bowel cancer.

Laxatives and their role in the management of constipation

Despite optimising dietary intake and toilet habits, some people will require laxatives to manage constipation. Laxatives fall into 4 main categories: bulking agents, stool softeners, osmotic agents and stimulant laxatives. There are many different types of laxative preparations available, ranging from tablets, powders, syrups to local preparations inserted directly into the back passage (enema or suppository). Unwanted side effects of laxative use include abdominal discomfort and flatulence, nausea, weight loss, urgent explosive fluid stool, and more seriously dehydration and weakness.

In general, treatment for simple constipation would usually start with stool bulking agents, softeners or the newer macrogel osmotic agents. If the back passage is full of dense, hard stool then a local softening glycerol suppository may be more useful than preparations delivered by mouth. Fibre bulking is not usually effective if the bowel is very loaded. After regaining control of the bowel habit laxatives can usually be weaned. However some people will require laxatives lifelong and some are preferred for long-term use (see table overleaf).

Long-term use of softening oils can cause deficiencies of fat soluble vitamins and are not recommended if there is any risk of inhaling during vomiting. Fluid shifts are more likely in the very young and the old and care should be taken with the osmotic type of laxatives in these age groups. Patients with slow transit constipation should avoid increasing fibre as this will only increase the bowel workload, and should also avoid many stimulant laxatives as this will only decrease bowel wall sensitivity even further.

LAXATIVES

Many different types of laxatives are available but only some are suitable for long-term use. Check with your Doctor for suitablity.

Dietary source of laxatives

Apple juice, prune juice conatin sorbitol.
Artificial sweeteners may be sorbitol.
Liquorice contains anthraquinones.

Laxatives suitable for long-term use

Fibre Supplements

Psyllium husks/powder (Metamucil®).
Ispaghula husks (Fybogel®).
Sterculia (Normafibe®, Granocol®).
Guar gum (Benefiber®).

Osmotic Laxatives*

Magnesium hyroxide (Uro-Mag®, Milk of Magnesia®).
Magnesium citrate (Citroma®).
Magnesium sulphate (Epsom Salts).
Magnesium/Sodium salts (Fleet®, Picoprep®, Picolax®).
Glycerol (Glycerol supposites)
Lactulose (Enulose®, Cophulac®, Duphulac®, Actilax®).
Macrogel (Movicol®).
Polythylene glycol (Glycoprep®, Colonlytely®).
Sorbitol solution (Sorbilax®, Minilax®).

* Not recommended for patients with renal insufficiency.

Laxatives advised for short-term use only

Stimulant Laxatives

Anthraquinones (Ford pills®, Peritone®, Herbal teas).
Cascara sagrada.
Senna (Senokot®).
Castor Oil.
Phenophalein (Laxettes®).
Bisacodyl (Duralax®, Bisalax®).

Stool Softeners

Paraffin Oil (Parachoc®, Agarol®)
Mineral Oil
Dioctyl sodium sulphosuccinate (Coloxyl®).

FOOD FIBRE CONTENT

Bread		
Brown	1 slice (27g)	1.20g
White	1 slice (27g)	0.40g
White - Hi Fibre	1 slice (27g)	0.80g
Ceral		
All Bran	1 bowl (38g)	1.00g
Cornflakes	1 bowl (38g)	0.40g
Porridge	1 bowl (38g)	0.30g
Weet-Bix®	1 bowl (38g)	3.90g
Fruit		
Apples	200g	4.00g
Apricot	100g	1.70g
Avocado	100g	3.40g
Bananas	100g	2.00g
Grapes	100g	0.70g
Kiwi Fruit	100g	1.90g
Mangoes	100g	2.60g
Passionfruit	100g	3.30g
Paw-Paw	100g	2.20g
Peaches	100g	1.50g
Pears	100g	2.80g
Pineapple	100g	1.20g
Prunes	100g	8.00g
Stawberries	100g	2.00g
Potatoes		
Baked (with skin on)	100g	2.70g
Chips	100g	2.20g
Mashed	100g	1.10g
Rice		
Brown Rice	100g	1.20g
White Rice	100g	0.30g
Vegetables		
Baked Beans	100g	5.00g
French Beans	100g	2.30g
Broccoli	100g	2.70g
Brussell Sprouts	100g	3.00g
Cabbage	100g	2.40g
Carrots	100g	3.00g
Cauliflower	100g	1.80g
Cucumber	100g	0.60g
Lettuce	100g	1.50g
Mushrooms	100g	1.10g
Onions	100g	1.40g
Capsicum	100g	1.60g
Pumpkin	100g	1.00g
Spinach	100g	2.00g
Sweet Potato	100g	2.40g
Tomatoes	100g	1.50g

This information booklet has been designed by the Digestive Health Foundation as an aid to people who have constipation or for those who wish to know more about it. This is not meant to replace personal advice from your medical practitioner.

The Digestive Health Foundation (DHF) is an educational body committed to promoting better health for all Australians by promoting education and community health programs related to the digestive system.

The DHF is the educational arm of the Gastroenterological Society of Australia, the professional body representing the Specialty of gastrointestinal and liver disease in Australia. Members of the Society are drawn from physicians, surgeons, scientists and other medical specialties with an interest in GI disorders.

Since its establishment in 1990 the DHF has been involved in the development of programs to improve community awareness and the understanding of digestive diseases.

Research and education into gastrointestinal disease are essential to contain the effects of these disorders on all Australians.

Further information on a wide variety of gastrointestinal conditions is available on our website.

dhf
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