### **Dr David A Clark**

MBBS(Qld) FRACS FRCSEd General & Colorectal Surgery Laparoscopic Intestinal Surgery Colonoscopy ABN: 68 676 182 920

Phone:3350 2088Fax:3350 2333

All correspondence to: Holy Spirit Northside Medical Centre 627 Rode Road Chermside 4032

# **CONSTIPATION**

#### What is constipation?

Constipation is a symptom that has different meanings to different individuals. Most commonly, it refers to infrequent bowel movements, but it may also refer to a decrease in the volume or weight of stool, the need to strain to have a movement, a sense of incomplete evacuation, or the need for enemas, suppositories or laxatives in order to maintain regularity.

For most people, it is normal for bowel movements to occur from three times a day to three times a week; other people may go a week or more without experiencing discomfort or harmful effects. Normal bowel habits are affected by diet. The average diet includes 12 to 15 grams of fibre per day, although 25 to 30 grams of fibre and about 6 to

8 glasses of fluid daily are recommended for proper bowel function. Exercise is also beneficial to proper function of the colon.

Eating foods high in fibre, including bran, shredded wheat, whole grain breads and certain fruits and vegetables will help provide the 25 to 30 grams of fibre per day recommended for proper bowel function.

About 80 percent of people suffer from constipation at some time during their lives, and brief periods of constipation are normal. Constipation may be diagnosed if bowel movements occur fewer than three times weekly on an ongoing basis. Widespread beliefs, such as the assumption that everyone should have a movement at least once each day, have led to overuse and abuse of laxatives.

#### What causes constipation?

There may be several, possibly simultaneous, causes for constipation, including inadequate fibre and fluid intake, a sedentary lifestyle, and environmental changes. Constipation may be aggravated by travel, pregnancy or change in diet. In some people, it may result from repeatedly ignoring the urge to have a bowel movement.

# More serious causes of constipation include tumours or areas of narrowing in the colon, so it is essential to exclude these causes first.

#### Can medication cause constipation?

Yes, many medications, including pain killers, antidepressants, sedatives and other psychiatric medications, blood pressure medication, diuretics, iron supplements, calcium supplements, and aluminium containing antacids can cause or worsen constipation.



PATIENT INFORMATION

Furthermore, some people who are not actually constipated may become dependent on laxatives in a misguided attempt to have daily bowel movements, and many cause themselves harm through laxative abuse.

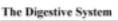
#### How can the cause of constipation be determined?

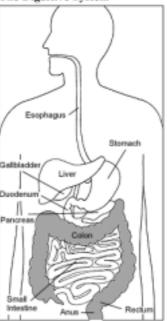
Constipation may have many causes, and it is important to identify them so that treatment can be as simple and specific as possible. Your doctor will want to check for any **anatomic** causes, such as tumours or areas of narrowing in the colon.

After a clinical examination further investigation of the whole large bowel with a colonoscopy is usually performed.

Other tests may identify specific **functional** causes to help direct treatment. For example, "marker studies," in which the patient swallows a capsule containing markers that show up on x-rays or radio nucleotide studies, may provide clues to disorders in muscle function within the intestine. Other physiologic tests evaluate the function of the anus and rectum. These tests may involve evaluating the reflexes of anal muscles that control bowel movements using a small plastic catheter, or x-ray testing to evaluate function of the anus and rectum during defaecation. The aim here is to identify "outflow" obstruction or prolapse; or global "slow transit" as the cause.

In many cases, no specific anatomic or functional causes are identified and the cause of constipation is said to be **idiopathic**.





#### How is constipation treated?

The vast majority of patients with constipation are successfully treated by adding high fibre foods like bran, shredded wheat, whole grain breads and certain fruits and vegetables to the diet, along with increased fluids. Increased exercise is important. Fibre supplements containing indigestible vegetable fibre, such as bran, are often recommended and may provide many benefits in addition to relief of constipation. Products such as Metamucil or psyllium husks are excellent. They may also help to lower cholesterol levels, reduce the risk of developing colon polyps and cancer, and help prevent symptomatic haemorrhoids.

Fibre supplements may take several weeks, possibly months, to reach full effectiveness, but they are neither harmful nor habit forming. Some stimulant laxatives may cause a "lazy bowel" with overuse or abuse.

PATIENT INFORMATION



# Table 1. Amount of Fibre in Some Foods

### Fruits

| raspberries | 1 cup | = 6 grams of fibre |  |  |
|-------------|-------|--------------------|--|--|
| apple       | 1     | = 3 grams          |  |  |
| tangerine   | 1     | = 2 grams          |  |  |
| peach       | 1     | = 1 gram           |  |  |

#### Vegetables

| squash           | 3/4  cup = 4  grams                              |
|------------------|--|
| 1                | 1 0  |
| Brussels sprouts | 1/2  cup = 3  grams                              |
| cabbage          | 1/2  cup = 2  grams                              |
| carrot           | 1 = 2  grams                                     |
| potato, peeled   | 1 = 2  grams                                     |
| tomato           | 1 = 2  grams                                     |
| asparagus        | $1/2 \operatorname{cup} = 1 \operatorname{gram}$ |
| broccoli         | $1/2 \operatorname{cup} = 1 \operatorname{gram}$ |
| cauliflower      | $1/2 \operatorname{cup} = 1 \operatorname{gram}$ |
| romaine lettuce  | 1 cup = 1 gram                                   |
| spinach          | $1/2 \operatorname{cup} = 1 \operatorname{gram}$ |
| zucchini         | 1 cup = 1 gram                                   |

#### **Starchy Vegetables**

| black-eyed peas | 1/2  cup = 4  grams |
|-----------------|---------------------|
| lima beans      | 1/2  cup = 4  grams |
| kidney beans    | 1/2  cup = 3  grams |

#### Grains

| brown rice         | 1 cup   | = | 3 | grams |
|--------------------|---------|---|---|-------|
| oatmeal            | 2/3 cup | = | 3 | grams |
| whole-wheat cereal | 1 cup   | = | 3 | grams |
| whole-wheat bread  | 1 slice | = | 2 | grams |
| white rice         | 1 cup   | = | 1 | gram  |

www.davidclark.net.au

Updated August 2005



## **Treatment Summary**

- 1. High fibre diet
- 2. Exercise
- 3. Fibre supplements- Metamucil, psyllium husks

If unsuccessful then try 2<sup>nd</sup> line therapies

- 4. Osmotic laxatives- Movicol, Epson salts, lactulose, sorbitol
- 5. Stool softeners- Coloxyl, Agarol (paraffin-acts as a lubricant)
- 6. Microlax Enemas, Glycerine suppositories
- 7. Stimulant laxatives-Senna/Senakot/Nulax, Bisacodyl/Durolax \*not to be used long-term

Designating a specific time each day to have a bowel movement also may be very helpful to some patients. In some cases, bio-feedback may help to retrain poorly functioning anal sphincter muscles. Only in rare circumstances are surgical procedures necessary to treat constipation.

www.davidclark.net.au

Updated August 2005