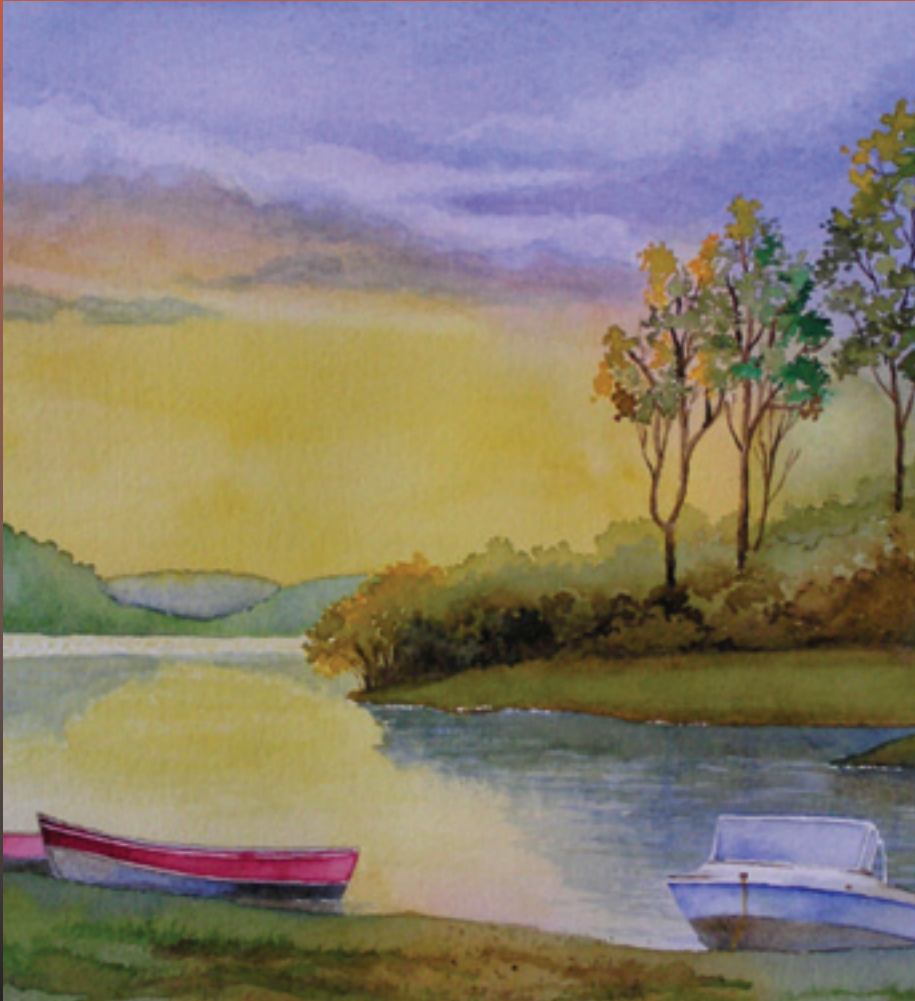




Multiple
Sclerosis
Society of
Canada

Understanding Bowel Dysfunction



UNDERSTANDING BOWEL DYSFUNCTION

Adapted from Multiple Sclerosis Basic Fact Series: BOWEL PROBLEMS, a publication of the National Multiple Sclerosis Society (USA) © 2006.

Written by Nancy J. Holland, RN, EdD, and Robin Frames.

Illustrations by Russell Ball.

Reviewed by the Client Education Committee of the National MS Society's Medical Advisory Board.

© National Multiple Sclerosis Society, 2006

Reprinted by the Multiple Sclerosis Society of Canada with permission of the National Multiple Sclerosis Society (USA).

Canadian adaptation and editing: Nadia Pestrak

Further acknowledgements:

Thanks to Cindy DesGrosseilliers, Deanna Groetzinger, Julie Katona, Dr. William J. McIlroy, Diane Rivard, Jon Temme, and Kelly Temme for their contributions.

Design and Publishing: Greenwood Tamad Inc.

ISBN: 0-921323-62-X



Multiple Sclerosis Society of Canada, 2006
Legal Deposit –
National Library of Canada

COVER ARTWORK

Helen Carson

Evening Gold, Watercolour on paper

"As a child I became tuned into nature & throughout the years have always found spiritual peace there."

Helen Carson has lived almost all her life on a farm in Saskatchewan. She was diagnosed with MS in 1990. Helen has been interested in art since she was a child and has taught watercolour classes for many years. She describes the desire to paint as a force within. In this piece Helen sought to capture the quiet and calm of a sunset, after a busy day at the lake. You can see more of her work at <http://carson.prairieartists.com>

Table of Contents

The bowel: what it is, what it does	3
Constipation and diarrhea	4
Constipation and MS	6
Diarrhea and MS.....	8
See your doctor	9
Tests	9
Good bowel habits.....	9
If you need more help	13
Impaction and incontinence	15
Incontinence.....	16
In conclusion	18

The bowel: what it is, what it does

The bowel, also known as the colon or large intestine, is the lower portion of the digestive system. This is the internal plumbing that takes the part of our food that can't be used in the body and makes it ready for disposal. The food we eat begins its journey at the mouth, and proceeds through the throat and esophagus to the stomach.

Major digestive action starts in the stomach, and is continued in the small or upper intestine. The food, which is moved through the digestive system by a propulsive action, has become mainly waste and water by the time it reaches the bowel, a five-foot-long tube.

By the time the stool reaches the final section of the bowel, called the sigmoid colon, it has lost much of the water that was present in the upper part of the digestive system. The stool finally reaches the rectum, and – on command from the brain – is consciously eliminated from the body with a bowel movement through the anal canal.

Normal bowel functioning can range from three bowel movements a day to three a week. Despite the widely recommended "one movement a day," physicians agree that such frequency is **not** necessary. The medical definition of "infrequent" bowel movements is "less often than once every three days." Most physicians agree that a movement less often than once a week is not adequate.

The rectum, the last 10-15 cms of the digestive tract, signals when a bowel movement is needed. It remains empty until just before a bowel movement. The filling of the rectum sends messages to the brain via nerves in the rectal wall that a bowel movement is needed.

From the rectum, the stool passes into the anal canal, guarded by ring-shaped internal and external sphincter muscles. Just prior to being eliminated, the stool is admitted to the anal canal by the internal sphincter muscle, which opens automatically when the rectal wall is stretched by a mass of stool. The external sphincter, on the other hand, is opened by a conscious decision of the brain, so that bowel movements can be performed only at appropriate times.

Constipation and diarrhea

If the contents of the bowel move too fast, not enough water is removed and the stool reaches the rectum in a soft or liquid state known as **diarrhea**. If movement of the stool is slow, too much water may be absorbed by the body, making the stool hard and difficult to pass. This condition is **constipation**. Constipation can prevent any of the stool from being eliminated, or it can result in a partial bowel movement, with part of the waste retained in the bowel or rectum.

Common causes.

Diarrhea and constipation are frequent companions of travellers, resulting from encounters with unfamiliar or contaminated food or water, or simply because of a change in an accustomed level of activity. Diarrhea can also be triggered by a viral, bacterial, or parasitic infection.

Continued diarrhea may also stem from food allergies or sensitivity to particular kinds of foods, such as highly spiced dishes or dairy products. (Intolerance to dairy products can often be accommodated by drinking lactose-reduced milk or by eating dairy products together with tablets containing lactose-digesting enzymes.)

Non-MS-related constipation may also be caused by common medications such as calcium supplements or antacids containing aluminum or calcium. Other drugs that may lead to constipation include antidepressants, diuretics, opiates, and antipsychotic drugs.

Ironically, one of the most common causes of non-MS-related constipation is a voluntary habit: delaying bowel movements to save time on busy days or to avoid the exertion of a trip to the bathroom. Eventually the rectum adapts to the increased bulk of stool and the urge to eliminate subsides. The constipating effects, however, continue, and elimination becomes increasingly difficult.

For some women, constipation is a premenstrual symptom, and during pregnancy it may be one way that the colon reacts to a change in the level of sex hormones.

Irritable bowel syndrome.

Also known as spastic colon, is an umbrella term for a number of conditions in which constipation and diarrhea alternate, accompanied by abdominal cramps and gas pains. Your doctor can determine if you have a disease or simply a syndrome associated with stress.

Constipation and MS

Constipation is the most common bowel complaint in MS. It's easy to slip into poor dietary habits or physical inactivity. These can disrupt the digestive system, as can depression which is also common. As explained above, various medications can also make the situation worse.

But there is more to the problem than poor habits. MS can cause loss of myelin in the brain or spinal cord, a short-circuiting process that may prevent or interfere with the signals from the bowel to the brain indicating the need for a bowel movement, and/or the responding signals from the brain to the bowel that maintain normal functioning.

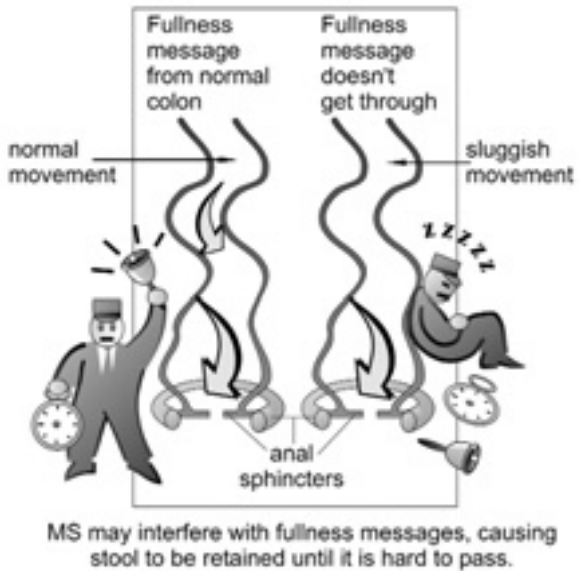
Common MS symptoms such as difficulty in walking and fatigue can lead to slow movement of waste material through the colon. Weakened abdominal muscles can also make the actual process of having a bowel movement more difficult.

People with MS often have problems with spasticity. If the pelvic floor muscles are spastic and unable to relax, normal bowel functioning will be affected.

UNDERSTANDING BOWEL DYSFUNCTION

Some people with MS also tend not to have the usual increase in activity in the colon following meals that propels waste toward the rectum.

And finally, some people with MS try to solve common bladder problems by reducing their fluid intake. Restricting fluids makes constipation worse. This is so common in MS that the **first** step to take may be to get medical help for your bladder problems so that adequate fluid intake, which is critical to bowel functions, will be possible.



A long-term delay in dealing with bowel problems is not an option. Besides the obvious discomfort of constipation, complications can develop. Stool that builds up in the rectum can put pressure on parts of the urinary system, increasing some bladder problems. A stretched rectum can send messages to the spinal cord that further interrupt bladder function. Constipation aggravates spasticity. And constipation can be the root cause of the most distressing bowel symptom, incontinence. See page 16.

Diarrhea and MS

In general, diarrhea is less of a problem for people with MS than is constipation. Yet when it occurs, for whatever reasons, it is often compounded by loss of control. Reduced sensation in the rectal area can allow the rectum to stretch beyond its normal range, triggering an unexpected, involuntary relaxation of the external anal sphincter, releasing the loose stool.

MS sometimes causes overactive bowel functioning leading to diarrhea or sphincter abnormalities that can cause incontinence. The condition can be treated with prescription medications such as Pro-Banthine or Ditropan.

For the person with MS, as with anyone else, diarrhea might indicate a secondary problem, such as gastroenteritis, a parasite infection, or inflammatory bowel disease. It is never wise to treat persistent diarrhea without a doctor's advice.

Your doctor may suggest a bulk-former such as Metamucil. When bulk-formers are used to treat diarrhea instead of constipation, they are taken without any additional fluid. The objective is to take just enough to firm up the stool, but not enough to cause constipation.

If bulk-formers do not relieve diarrhea, your doctor may suggest medications that slow the bowel muscles, such as Lomotil. These remedies are for short-term use only.

See your doctor

Minor bowel symptoms may be treated with the suggestions offered in this publication, but only your doctor can rule out the more dangerous conditions that a persistent symptom may be signalling.

Tests

After age 40, all people should have periodic examinations of the lower digestive system. The methods include a rectal exam or a sigmoidoscopy or colonoscopy. These last two tests, in which the bowel is viewed directly with a flexible, lighted tube, are increasingly routine as early diagnostic exams. They do not require a hospital stay. The colonoscopy, which examines the entire large intestine, is widely considered the better choice.

Good bowel habits

It is much easier to prevent bowel problems by establishing good habits than to deal with impaction, incontinence, or dependency on laxatives later on. If your bowel movements are becoming less frequent, take action. You may be able to prevent worsening problems by establishing good habits now.

Drink enough fluids.

Each day, drink two to three quarts of fluid (8-12 cups) whether you are thirsty or not. Water, juices, and other beverages all count (other than coffee and tea, which can dehydrate you).

It is hard to drink adequate fluid if one is waking up at night because of the need to urinate or contending with urinary urgency, frequency, leaking, or loss of bladder control. These are “red-flag” problems for people with MS. But such symptoms can be controlled. See your physician – and treat bladder symptoms first.

Put fibre into your diet.

Fibre is plant material that holds water and is resistant to digestion. It is found in whole-grain breads and cereals as well as in raw fruits and vegetables. Fibre helps keep the stool moving by adding bulk and by softening the stool with water. Incorporate high-fibre foods into your diet gradually to lessen the chances of gas, bloating, or diarrhea.

Getting enough fibre in your daily diet may require more than eating fruits and vegetables. It may be helpful to eat a daily bowlful of bran cereal plus up to four slices of a bran-containing bread each day. If you have limited mobility, you may need as much as 30 grams of fibre a day to prevent constipation. If you find you cannot tolerate a high-fibre diet, your doctor may prescribe high-fibre compounds such as psyllium hydrophilic muciloid or calcium polycarbophil.

Regular physical activity.

Walking, swimming, and even chair exercises help. Some regular exercise is important at any age or any stage of disability. Ask your doctor, nurse, or physiotherapist if you have any concerns. The MS Society of Canada publication, *Everybody Stretch* may also be of interest and is available by contacting your local MS Society Division: 1-800-268-7582.

Establish a regular time of day.

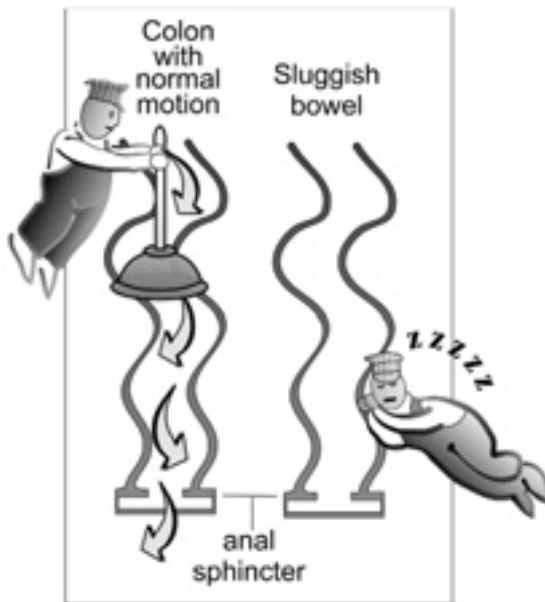
The best time of day is about a half hour after eating, when the emptying reflex is strongest. It is strongest of all after breakfast. Set aside 20 or 30 minutes for this routine. Because MS can decrease sensation in the rectal area, you may not always feel the urge to eliminate. Stick to the routine of a regular time for a bowel movement, whether or not you have the urge.

It also may help to decrease the angle between the rectum and the anus, which can be done by reducing the distance from the toilet seat to the floor to between 30.5 – 37 cms. But many people with mobility problems **raise** the toilet seat for ease of use. A footstool can create the same desired body angle, by raising your feet once you are seated on a higher toilet seat.

Avoid unnecessary stress.

Your emotions affect your physical state, including the functioning of your bowel. Take your time. Use relaxation techniques. And remember that a successful bowel schedule often takes time to become established.

Depression has been known to cause constipation. The constipation can upset you further, starting an unnecessary cycle of worsening conditions. If emotions are troubling you, talk to your doctor or nurse.



If you need more help

If these steps fail to address your constipation problem adequately, your doctor will probably suggest the following remedies.

Stool softeners.

Examples are Colace and Surfak. Mineral oil should not be taken while taking a stool softener, because it can reduce the absorption of fat-soluble vitamins.

Bulk-forming supplements.

Natural fibre supplements include Metamucil, Prodiem and others. Taken daily with one or two glasses of water, they help fill and moisturize the gastrointestinal tract, and provide “bulk” to the stool. They are generally safe to take for long periods, and sometimes take a couple of days to produce the desired effect.

Saline laxatives.

Milk of Magnesia, Epsom salts, and sorbitol are all **osmotic** agents. They promote secretion of water into the colon. They are reasonably safe, but should not be taken on a long-term basis.

Stimulant laxatives.

Other laxatives include Dulcolax or Senokot. These provide a chemical irritant to the bowel, which stimulates the passage of stool. The gentler laxatives usually induce bowel movements within 8 to 12 hours.

Many over-the-counter laxatives have harsh ingredients. Even though no prescription is required, ask your doctor or pharmacist for recommendations.

Suppositories.

If oral laxatives fail, you may be told to try a glycerin suppository half an hour before attempting a bowel movement. This practice may be necessary for several weeks in order to establish a regular bowel routine. For some people, suppositories are needed on a permanent basis.

Dulcolax suppositories stimulate a strong, wave-like movement of rectal muscles, but they are much more habit-forming than glycerin suppositories. These agents must be carefully placed against the rectal wall to be effective. If inserted into the stool, no action will occur.

Enemas.

Enemas should be used sparingly, but they may be recommended as part of a therapy that includes stool softeners, bulk supplements, and mild oral laxatives.

Manual stimulation.

You can sometimes promote elimination by gently massaging the abdomen in a clockwise direction, or by inserting a finger in the rectum and rotating it gently. It is advisable to wear a plastic finger covering or plastic glove.

Note: These techniques may need several weeks before it is clear how well they are working. The digestive rhythm is modified only gradually.

Impaction – and incontinence

Impaction refers to a hard mass of stool that is lodged in the rectum and cannot be eliminated. This problem requires immediate attention.

Impaction can usually be diagnosed through a simple rectal examination, but symptoms may be confusing because impaction may cause diarrhea, bowel incontinence, or rectal bleeding. Your doctor may want you to have a series of tests to rule out the chance of the more serious diseases.

Impaction leads to incontinence when the stool mass presses on the internal sphincter, triggering a relaxation response. The external sphincter, although under voluntary control, is frequently weakened by MS and may not be able to remain closed. Watery stool behind the impaction thus leaks out uncontrollably.

Loose stool as a side effect of constipation is not uncommon in MS. A bowel “accident” may be the first warning a person has that an annoying problem has become a major issue.

Incontinence

Total loss of bowel control happens only rarely in people with MS. It is more likely to occur, as mentioned above, as an occasional incident. Some people with MS report that a sensation of abdominal gas warns them of impending incontinence.

If incontinence is even an **occasional** problem, see your doctor – but don’t be discouraged. It can usually be managed. Work closely with your doctor and nurse for a solution.

A regular schedule of elimination may be the key. When the bowel becomes used to emptying at specific intervals, accidents are less likely.

Dietary irritants such as caffeine and alcohol should be considered contributing factors and reduced or eliminated. In addition, medications that reduce spasticity in striated muscle – primarily baclofen (Lioresal) and tizanidine (Zanaflex) – may be contributing to the problem and their dose or scheduling may need to be adjusted.

Drugs such as Tolterodine or Pro-Banthine, often prescribed to quiet bladder spasms, can be helpful when a hyperactive bowel is the underlying cause of incontinence. Since these drugs also affect bladder function, your physician may need to start you on low doses and slowly increase them until the best results are obtained. You may have your “post-void residual urine volume” tested during this period to avoid possible urinary retention.

In addition to drugs, biofeedback may help train an individual to be sensitive to subtle signals that the rectum is filling.

Don't restrict your life in the meantime. Protective pants can be used to provide peace of mind. An absorbent lining helps protect the skin, and a plastic outer lining contains odours and keeps clothing from becoming soiled.

In conclusion

As with many other kinds of medical problems, it's easier to treat the digestive system with good preventive habits. Dealing with impaction, incontinence, and potential dependence on laxatives is much more difficult than preventing the basic problems.

Should your bowel problems persist or worsen, ask your doctor for a referral to a gastroenterologist, who specializes in bowel and digestive problems.

1

Treat bladder problems first.



2

Plenty of fruits, vegetables, fibre, and **fluids** every day.



3

Exercise!



4

Use toilet a half hour after breakfast **every day.**



How to reach the MS Society of Canada

Current as of June, 2006

Call toll-free in Canada: 1-800-268-7582
www.mssociety.ca

British Columbia Division

1501-4330 Kingsway
Burnaby, British Columbia
V5H 4G7
(604) 689-3144
info.bc@mssociety.ca

Alberta Division

Victory Centre
11203 - 70 Street
Edmonton, Alberta
T5B 1T1
(780) 463-1190
info.alberta@mssociety.ca

Saskatchewan Division

150 Albert Street
Regina, Saskatchewan
S4R 2N2
(306) 522-5600
info.sask@mssociety.ca

Manitoba Division

1455 Buffalo Place
Winnipeg, Manitoba
R3T 1L8
(204) 943-9595
info.manitoba@mssociety.ca

Ontario Division

175 Bloor Street East
Suite 700, North Tower
Toronto, Ontario
M4W 3R8
(416) 922-6065
info.ontario@mssociety.ca

Quebec Division

550 Sherbrooke Street West
Suite 1010, East Tower
Montréal, Québec
H3A 1B9
(514) 849-7591
info.qc@mssociety.ca

Atlantic Division

71 Ilsley Avenue, Unit 12
Dartmouth, Nova Scotia
B3B 1L5
(902) 468-8230
info.atlantic@mssociety.ca

National Office

175 Bloor Street East
Suite 700, North Tower
Toronto, Ontario
M4W 3R8
(416) 922-6065
info@mssociety.ca



Contact the Multiple Sclerosis Society of Canada:

Toll-free in Canada: 1-800-268-7582

Email: info@mssociety.ca

Website: www.mssociety.ca

Our Mission

To be a leader in finding a cure for multiple sclerosis and enabling people affected by MS to enhance their quality of life.