MS, You and Number Two

Bowel control is a complex process that involves the coordination of many different nerves and muscles. The bowel, also known as the colon or large intestine, makes up the lower portion of the digestive system. Its primary function is to prepare food that can’t be used in the body for disposal. Food is moved through the digestive system by a propulsive action called peristalsis. Digestion begins in the stomach, where this motion mixes food with gastric juices, turning it into a thin liquid. Digestion continues in the small (or upper) intestine and water is reabsorbed from the food as it moves to the large intestine. By the time stool reaches the bowel it has lost much of its water content. The rectum is the last four to six inches of the digestive system. It remains empty until just before a bowel movement. As the rectum fills, messages are sent to the brain that a bowel movement is needed. From the rectum, the stool passes into the anal canal, which is guarded by two sphincter muscles. The stool is allowed to pass into the anal canal by an internal sphincter, which opens automatically when the rectal wall is stretched by a mass of stool. An external sphincter controls
whether or not the stool is voided. This muscle is opened voluntarily, so that bowel movements can be performed at appropriate times.

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. Constipation is the most common bowel complaint in MS. Diarrhea and incontinence (loss of control) are less common. A recent study showed that almost half of people with MS experience constipation and almost one third have fecal incontinence. Results show that these symptoms are associated with higher levels of fatigue and disability.

MS can disrupt bowel function in a number of ways. For example, nerve damage can slow the signals to the anal sphincters, block the natural increase in peristalsis following meals and prevent pelvic floor muscles from relaxing (which is necessary for stool to exit the body). Weakened or spastic abdominal muscles can also make the actual process of having a bowel movement more difficult. Common MS symptoms like depression or a decrease in physical activity can lead to slow movement of fecal material through the colon. It’s important to note that not all bowel dysfunction is caused by MS, it can be due to other health conditions. Diarrhea may stem from food sensitivities/allergies or consuming contaminated food/water. It can also be due to a viral, bacterial or parasitic infection. A number of medications (some of which are used to treat MS symptoms) have the potential to cause constipation, such as antidepressants, diuretics, opiates, and antipsychotic drugs. Ironically, one of the most common causes of constipation is voluntarily delaying a bowel movement. This may be done to save time on a busy day, or when a trip to the bathroom isn’t possible. Eventually the rectum adapts to the increased bulk of stool, the urge to eliminate subsides and more water is resorbed making the stool harder and more difficult to pass.
It may be helpful to set a regular time to go to the bathroom and to plan plenty of time for this routine. In general, the best time of day to empty the bowel is about a half hour after eating. This is especially true after breakfast. Keeping a diary of bowel patterns can also be useful. This can give some insight into the effects of illness, medication and other lifestyle factors on bowel function. The Bristol Stool Chart is a free mobile app for this purpose that allows sharing of data with a health care professional. Sometimes it’s possible to stimulate a bowel movement by gently massaging the abdomen in a clockwise manner. Decreasing the angle between the rectum and the anus can also make it easier to go. This can be done by leaning forward while sitting on the toilet and placing the elbows on the knees. Placing the feet on a footstool so the knees are higher than the hips can create the same desired body angle.

Drinking plenty of fluids is essential to maintain regularity. As we discussed last month, bladder dysfunction is common in people with MS. Some attempt to relieve bladder symptoms by reducing their fluid intake and this makes constipation worse. Therefore, it’s important for people with MS to address any bladder issues they may be experiencing so that adequate fluid intake (which is critical to bowel functions) will be possible. A hot beverage may help to stimulate a bowel movement as this increases peristaltic activity in the digestive system. Some people find drinking prune juice helps to move things along. Adding fiber to the diet is also key because it holds water and is resistant to digestion. This helps keep the stool moving by adding bulk and by softening the stool. Good sources of fiber include fresh fruits and vegetables, or whole grain breads and cereals. Emotions can also affect bowel function. For this and many other reasons, keeping unnecessary stress to a minimum is a good idea. As discussed in our April 2019 newsletter, relaxation techniques like mindfulness can be helpful in this regard.

A laxative is a type of medication that helps a person empty their bowels. They are generally used to relieve constipation. Many different types of laxative are available over the counter, each works in a different way and can be used for varying periods of time.
### Types of Laxatives

**Emollient laxatives**, or stool softeners, help to wet and soften the stool so it is easier to pass. They are gentle enough for regular use and usually work in 12 to 72 hours. Stool softeners are generally recommended for people with temporary or mild, chronic constipation.

**Bulk-forming laxatives**, or fiber supplements, form a gel in the stool that helps it hold more water. It becomes softer and bigger as a result, which stimulates movement in the intestine to help pass the stool more easily and quickly. Taken daily with one or two glasses of water, they are generally safe to take for long periods and are a good option for people with chronic constipation. However, they take longer than other laxatives to work, having their full effect in 48 to 72 hours.

**Hyperosmotic laxatives** draw more water into the intestines which helps soften the stool to help it move more easily. Hyperosmotic laxatives can also be used for longer periods with little risk of side effects, but they should not be used continuously for longer than one week without consulting a doctor. Like bulk-forming laxatives, they’re a good option for people with chronic constipation and they take about the same amount of time to work (48 to 72 hours).

**Lubricant laxatives**, or mineral oil, coat the stool and intestines to prevent water loss. They also lubricate the stool to help it move more easily. Mineral oil typically works in 6 to 8 hours, but should not be used on a regular basis because it can interfere with the body’s absorption of fat-soluble vitamins. Lubricant laxatives are typically only good options for immediate relief of short-term constipation.

**Stimulant laxatives**, as the name implies, stimulate and increase the movement of the intestines. Taken orally, this type of laxative will usually work in 6 to 12 hours. Stimulant laxatives should not be used on a regular basis because they can cause dehydration and electrolyte imbalances.
Suppositories are an option if oral laxatives fail. They provide the fastest relief of constipation, usually within 15 to 30 minutes. A suppository is a medication that is inserted into the rectum, where it then dissolves and enters the bloodstream. A **glycerin suppository** is a form of hyperosmotic laxative that is typically administered half an hour before attempting a bowel movement. This can be repeated over the long term in order to establish a regular bowel routine (even on a permanent basis). A **Dulcolax suppository** is a form of stimulant laxative that must be carefully placed against the rectal wall for maximum effectiveness (it doesn’t work as well if inserted into the stool). It’s important to note that Dulcolax suppositories cannot be used for long periods because they are much more habit-forming than glycerin suppositories.

An **enema** can be used to clear hardened stool that is impossible to pass due to severe constipation. This involves instilling a saline solution directly into the rectum with a bulb syringe, which helps push waste out, typically within an hour. Enema kits are available over the counter for home use, but it’s important to consult with a physician before using one. **Rectal irrigation** (sometimes called anal irrigation) is a similar treatment that is used for longer term bowel management. This involves introducing warm saline into the rectum and lower colon using a rectal catheter. The saline stimulates the bowel muscles and flushes out the stool, leaving the lower half of the bowel empty. Rectal irrigation can be performed at home and, when done on a regular basis, is very effective at achieving full continence and preventing constipation.

When dealing with diarrhea, it may be helpful to eat bland foods like bananas, rice, applesauce, or toast (otherwise known as the **BRAT diet**). It’s important to stay hydrated as the body can lose a lot of fluid and electrolytes this way. Caffeinated, alcoholic and sugary drinks can worsen dehydration. Clear broth and water are helpful, and sports drinks are a good choice because they replace the electrolytes that are lost. A number of **medications** are used to treat diarrhea, both over the counter and prescription. These drugs work by slowing peristalsis, making stools firmer and pass less frequently. It’s important to note that antidiarrheal medications should not be taken if there is any sign of an infection, such as fever or blood in the stool. **Pelvic floor exercises** can help reduce the chances of bowel accidents. The pelvic floor muscles help to support the bladder and
bowel, plus the womb in women. When these muscles become slack it can weaken the sphincter muscles in the anal canal allowing the involuntary passing of stool. As discussed last month, sacral nerve stimulation has been shown to be an effective treatment for fecal incontinence with favorable long-term results. Research also shows that injection of collagen into the anal sphincter is a safe and effective way to help thicken the tissues, thus preventing soiling and improving control. Results show that repeat injections are often necessary.

There are a number of products available to protect against soiling from fecal incontinence, including protective underwear/briefs and disposable liners. Using this type of protection can afford confidence, especially in situations where getting to the restroom could be difficult. For those that may feel anxious about leaving the house, a number of mobile phone apps are available to find the nearest bathroom. It may also be helpful to wear easily removable clothes, for example pants with elastic waistbands and bring a change of clothes, just in case. For around the house, bed pads and mattress protectors can help keep the bed clean and dry. There are also covers and pads available for chairs.

Bowel dysfunction can not only cause a great deal of discomfort and embarrassment, it can also aggravate other MS symptoms. It’s important for people with MS to stay active, eat a healthy, balanced diet with plenty of fiber and drink enough fluids to regulate the bowel and keep stools at the right consistency. When good bowel habits don’t suffice, there are a number of effective treatment options available for managing most symptoms of bowel dysfunction. It’s important for people with MS to discuss any bowel issues they may be experiencing with their healthcare providers. Early medical evaluation is important to determine their cause and choose the best treatment strategy so they no longer impact, or have as much impact, on daily life.