Spinal Cord Injury and Bowel Management
Lower Motor Neuron Injury

The digestive system has the upper and lower tracts. The upper digestive tract breaks down the food that you eat into nutrients that are used by your body. The food you don’t need goes into the small and large intestines. As the waste reaches the rectum, the urge to have a bowel movement (BM) gets stronger.

Some people have 1-3 bowel movements per day. Others can have as few as 3 bowel movements per week.

You may not feel the sensation that you need to have a bowel movement and you may have loss of voluntary sphincter muscle control. When the spinal nerves have suffered an injury and normal bowel function is lost, bowel function is referred to as a neurogenic bowel.

A **flaccid bowel** occurs with injuries below T-12 (lower motor neuron injuries). There is a loss of reflex response. The bowel does not usually empty itself. However, mucus and fluid can seep around stool and leak out the anus due to the loose sphincter.
**Bowel Programs** - Stool must be removed from the body so you need to establish a bowel program based on your bowel type.

**Flaccid bowel program**
A flaccid bowel program is usually done one or more times daily. There are 6 steps in a reflex bowel program.

1. Wash hands thoroughly.
2. You will need: gloves (powder and latex free are preferable), lubricant (water-based only), toilet paper.
3. Get into position. Most individuals with a flaccid bowel are able to sit on a toilet or commode chair.
4. Stimulants are not usually effective for a flaccid bowel so manual removal of stool is done (as with a reflex bowel) about every 5 minutes until the BM is over. Between each 5 minute removal time, you can promote stool movement by: digital rectal stimulation (as with reflex bowel), firmly rubbing (clockwise) your abdomen with your hand, movement of the body. The 4 most common body actions are:
   - Leaning forward and side-to-side
   - Body push-ups to reposition and vary pressure areas
   - Tightening and releasing of abdominal muscles
   - Bearing down to force stool out (known as a valsalva maneuver and should not be done if you have a heart condition)
   - Inhaling air deeply followed by forcing air out by increasing abdominal pressure
5. The BM is probably over when you have no stool results after 2 manual removals, which is about 10 minutes without results.
6. Clean and dry the anal area.

**Bowel management** is your ability to maintain control over your bowel movements, avoid any unplanned or accidental BMs, avoid leakage between each bowel program, maximize the amount of stool removed during each bowel program, finishing each bowel program within 1 hour, feeling secure to participate in all activities that you choose, keeping your digestive system healthy.

If possible, maintain the schedule that you began during rehabilitation. Keep this schedule until you have no bowel accidents between programs. Once your body is adjusted and well trained to only have a BM when stimulated, you may then adjust the time of your bowel program to best fit your lifestyle.
Mediterranean Diet
The food that you eat greatly influences your bowel program. If you eat or drink something warm about 30 minutes prior to starting your bowel program, you are more likely to have a positive result. Fiber is important to maintaining a healthy digestive system. Some people take fiber supplements, however, fruits, vegetables, and whole grain foods are the sources recommended for getting adequate fiber intake. You need 25-35 grams (g) of fiber daily. Do not make sudden or drastic changes to your fiber intake because sudden increases in fiber can cause diarrhea and sudden decreases in fiber can cause constipation.

Some foods, especially when eaten in excess, can cause bowel problems. Dairy products, white potatoes, white bread and bananas can cause constipation. Fruits, caffeine and spicy foods can cause diarrhea. Beans, corn, onions, peppers, radishes, cauliflowers, sauerkraut, turnips, cucumbers, and apples can cause gas buildup.

Water is important for optimal urinary tract functioning. Water is also important for a healthy digestive tract in that water helps keep your stool from getting too hard and prevents constipation and impaction.

Physical activity is important for overall good health and it also promotes easier passage of food through your digestive system.

Medications
All medications have an effect on your bowel program. Talk to your health care provider about your medication uses and side effects. Stool softeners and laxatives are commonly used by people with spinal cord injury. Colace® (stool softener) and Peri-Colace® (stool softener with added laxative) are mild but too much or too little dosage may cause diarrhea or constipation.

Regularity with your bowel movements can help you prevent having an unplanned BM. The best way to avoid bowel accidents is to maintain a consistent bowel program. If you do have an unplanned BM, you should still continue your bowel program as scheduled. Talk to your health care provider if you do need to make adjustments to your bowel program.

Bowel problems can occur even with the best bowel management. Below are possible bowel problems and what to do if they happen.

Constipation
- If you are constipated, your stool will appear hardened and stone-like. Other symptoms may include irregular bowel movements, no BM for several days, swollen or hardened abdomen, and lack of appetite.
What to do until the constipation is gone:

- Increase your water intake.
- Continue to do your bowel program on a daily basis.
- Add or slightly increase the dose of a stool softener such as Surfak or Colace.
- Increase your fiber intake by no more than 5 grams (g) every other day.
- Increase your physical activity.
- Avoid bananas, cheese and other food that can harden your stool.

**Impaction**

- The main symptoms of impaction (blockage) are similar to constipation.

What to do until the impaction is resolved:

- Manual removal of the stool from the rectum. Use a gloved, lubricated finger and gently hook your finger around any stool and remove it from the rectum.
- Increase your water intake.

**Diarrhea**

- The main symptom of diarrhea is watery or runny stool. Diarrhea may even be caused by an impaction (blockage) of stool. An impaction may be causing the diarrhea if you have recently had hardened stone-like stool or no results from your past several bowel programs.

What to do until the diarrhea is gone:

- Increase your water intake.
- Increase the frequency of your program only if you are having bowel accidents.
- Temporarily stop taking any stool softener or laxatives. (If this helps, you may need to adjust your dose until your stool is normal consistency.
- Increase your fiber intake by no more than 5 grams (g) every day.
- If the diarrhea lasts longer than 24 hours or there is blood in the stool, call your health care provider.

**Important information about your bowel management**

- **Autonomic Dysreflexia** (AD) is a response to a painful or irritating stimulus. An overextended bowel or a rough digital rectal stimulation may cause AD. If your spinal cord injury is at level T6 or above, you need to be able to recognize the signs and symptoms of AD and what action you need to take.
- Your **blood pressure** can rise significantly with having the signs and symptoms of AD and this is called “silent AD.” Silent AD is a common occurrence during routine bowel programs and you may want to do the following if you are at risk for silent AD:
  - Talk to your health care provider about prescribing an anesthetic lubricant such as Lidocaine Gel 2%.
  - Insert a small amount of anesthetic lubricant into your rectum prior to starting your bowel program.
  - Get into a comfortable position.
- Increase the frequency of your bowel program to prevent over extension of your rectum.
- Maintain normal stool consistency.
- Contact your health care provider and always seek emergency treatment if you feel that it is needed.

**Frequent accidents** - Once your bowels have been trained to empty at scheduled times; you should rarely ever have a bowel accident or mucus drainage. If you have more than 1 or 2 accidents *per year*, you should do the following:

Do a review of your bowel management program. You may need to adjust your schedule. You may need a more frequent bowel program or more food/water intake, more physical activity and medications may be needed.

**Little or no bowel movements** - The frequency between each bowel movement (BM) will be different for each individual, so you have to determine if you are having a problem with the amount of your bowel movements. There will be times when you have no or a little bowel movements. You should be concerned if you have limited or no bowel movements after 2 days if you have a daily bowel program or 4 days if your bowel program is every other day.

- If you have little or no BM results 1-2 days past your normal bowel program schedule, follow the recommendations above for constipation.
- Contact your health care provider after 3-4 days of little or no BM past your normal bowel program schedule.

**Bleeding** - Bleeding is usually caused by hardened stool or digital stimulation that is too vigorous or not enough lubricant. If bleeding does occur:

- Follow the instructions for constipation if your stool is hardened.
- Keep fingers well lubricated when physically removing stool or performing digital stimulation.
- Perform your digital rectal stimulation less aggressively and keep your finger nails trimmed.
- Contact your health care provider if there is heaving bleeding.

**Excess Gas** - Excess gas buildup in your digestive system can cause you to feel full, tight or bloated and passing of gas can be embarrassing. If you find you have excess gas buildup:

- Limit yourself when eating gas causing foods.
- Try eating cumin, coriander, or caraway because these spices have been shown to counteract the production of excess gas.
- Take an over the counter anti gas medication.
- Add or increase your probiotic intake to reduce excess gas by restoring balance to the flora that is normally in your intestines.
• **Bowel program takes too long** - Your bowel program should last no longer than 1 hour once you have established your bowel program. If it is taking longer than 1 hour:
  - Review your bowel program and adjust your schedule.
  - If you have a flaccid bowel you may want to perform a more frequent program.
  - You may also need to adjust your food and or water intake, physical activity and medications.
  - See your health care provider before making changes to your medications.

**Colostomy**
A colostomy is a hole that is made surgically from the large intestine to the outside of your abdomen. A bag is placed over the hole on your abdomen to collect your stool before it gets to your rectum. Colostomies are becoming more popular with individuals who have a spinal cord injury, especially those who have constant bowel problems. You may want to think about learning more about colostomies or talking to other individuals who have one.

**Summary**
Bowel function changes as people age. Bowel movement frequency can change discuss any changes with your health care provider. After a spinal cord injury, bowel management is a lifelong process. You may need to work a year or longer to find the proper management program for you. Once you find the proper balance for you, you will see that it is one of the most important aspects to maintaining your quality of life.

**Bowel Care Record**
Every time you do bowel care, fill in the following on the chart:

**Date, then Start time:** The hour and minute you start stimulation or try having a bowel movement

**Position:** Left side lying, right side lying or sitting.

**Stimulation method:** Stimulant medication, digital rectal stimulation or other technique that you use to start a bowel movement.

**Assistive techniques:** Methods used to promote bowel emptying and the number of times that you use these. For example: abdominal massage, bending, push-ups, Valsalva maneuver.

**Times of Results:** The time when the first stool begins to come out of your anus and the time that the last stool comes out.

**Stool amount, consistency and color:** Amount: If stool were formed in a ball, would it be the size of a golf ball, tennis ball, softball. Consistency: hard, firm, soft, liquid. Color: especially write down anything unusual for you.

**Comments:** Write down any unplanned bowel movements, abdominal cramping, pain, muscle spasms, pressure ulcers, hemorrhoids or bleeding.
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<th>Start Time</th>
<th>Position</th>
<th>Stimulation Method</th>
<th>Assistive Techniques</th>
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