

### **BOWEL MANAGEMENT**



Figure 1: Graphic Credit: cFotosearch.com

Spinal cord injuries frequently cause serious bowel dysfunction, including constipation and a lack of control over bowel movements called "stool incontinence." This significantly impacts daily life, leading to secondary health problems and contributing to increased depression and anxiety. Implementing an effective bowel management program is a key part of life after injury, critical for maintaining overall physical and mental health.

### Q: What is a bowel management program?

A bowel program uses diet and routine to help the body achieve regular bowel movements. Customized programs are developed by doctors based on an individual's specific health needs with the goal of passing stools daily or every-other-day and preventing accidental bowel movements.

### Q: What is neurogenic bowel and how can it be managed?

Neurogenic bowel is a medical condition resulting from the loss of gastrointestinal and anorectal function. Lesions in the nervous system, which can be caused by spinal cord injuries, strokes or diseases of the nervous system, prevent an individual from being able to clear or control movement of the bowel, leading to constipation and stool incontinence. Different injuries cause different issues, but the two main kinds of neurogenic bowel are problems with spasticity or flaccidity. Reflex bowels are not able to control the movement needed to relax the anal sphincter. This can result in constipation and accidental bowel movements; when the rectum is full, the reflex that prompts bowel movements will occur but individuals living with paralysis might not feel the movement coming. Flaccid or non-reflex bowel is the result of nerve damage that decreases the involuntary muscle movements in the digestive tract and causes the sphincter to become looser than in a normally functioning bowel. The result is constipation and stool leakage from a sphincter that doesn't close tightly. Neurogenic bowel can be managed with either a bowel program or a colostomy, in which waste is removed from the body through a surgically created opening in the colon that connects with the surface of the abdomen.

### Q: Why is bowel management important?

Effective bowel management improves overall health and quality of life for people living with paralysis. A dysfunctional bowel can lead to medical problems including chronic constipation, abdominal and rectal pain, impaction, hemorrhoids and renal failure. The resulting pain and discomfort can also trigger autonomic dysreflexia, a potentially life-threatening condition that elevates blood pressure to dangerous levels. Bowel management not only helps prevent these medical conditions but is also important for mental health. The challenges of bowel dysfunction can cause deep emotional distress that affect sense of self and personal relationships. Sexual intimacy and the pursuit of both professional and social lives can suffer as individuals, fearing accidental bowel movements, isolate themselves.

### Q: Describe digestion and how food the moves through the body.

The mission of the digestive system is to bring food into our bodies and get rid of its waste. Digestion begins in the mouth, as saliva breaks down the food and sends it to the

esophagus and on to the stomach. The stomach and small intestine extract the nutrients that give us with energy from the food. What's left is waste that isn't needed or used by the body. This waste turns into stool in the colon and travels to the rectum where it is expelled as the anus opens. A functioning bowel requires teamwork from the muscles and nerves around the rectum and anus. Nerves alert the muscles to a full rectum. But damaged nerves impact bowel control, limiting what the muscles can do and disrupting communication between the two. The resulting dysfunction causes problems controlling and regulating bowel movements.

### Q: Are all bowel programs the same?

No. Each person's needs are different. Bowel programs will vary depending on injury level, specific health issues, lifestyle, home environment and preference. Program techniques, including positioning, will be tailored to what suits individual needs. Some people sit upright on a commode chair for their program, letting gravity support the process; others, especially those at higher risk for pressure sores, may choose a sidelying position. Whether completed during the morning or evening, the timing of the program should be consistent. Pick a time of day that supports the approximately 30 – 60 minutes needed from start to finish; feeling rushed can cause unnecessary anxiety or for the program to be cut short before completion.

### Q: How does it work?

There are different techniques that support stool stimulation and removal: mini enemas, which lubricate and pull water into the stool to trigger evacuation; digital stimulation, in which the circular motion of the index finger in the rectum helps relax the anal sphincter; suppositories, which stimulate nerve endings and cause the bowel to contract; and manual removal, in which the stool is physically removed from the rectum. Reflex bowel programs will begin with digital stimulation and the use of an enema or suppository. After a waiting period of about 15-20 minutes, digital stimulation should be performed every 10-15 minutes until the rectum is empty. Flaccid or non-reflex bowel programs will begin by using a lubricated finger to digitally stimulate and relax the sphincter; stool will then be gently removed manually from the rectum. Don't rush the process for either program and always make sure to check that the rectum is fully empty. Stool softeners and laxatives should be used carefully as these can cause constipation. Everyone using a bowel program will need to experiment and determine what works best for individual needs.

### Q: How are bowel programs different based on injury level?

The location of a spinal cord injury significantly affects bowel function. Injuries occurring

below T12, known as lower motor neuron injuries, cause flaccid or non-reflex bowel, marked by decreased muscle movement and a looser sphincter. Injuries above T12, known as upper motor neuron injuries, result in reflex bowel and spasticity problems that damage the defecation reflex. The goal for individuals with upper motor neuron injuries is to have soft formed stools, while those with lower motor neuron injuries should aim for firm, but not hard, stools.

### How can diet and exercise make my program more effective?

While establishing a routine is critical to the program's success, it's just as important to maintain a healthy diet and activity level. Eat a wide variety of fruits, vegetables and grains such as bran or barley to ensure your body gets roughly 20 to 25 grams of fiber a day; fiber provides the weight and bulk stools need to move more easily through the colon. Eat smaller meals throughout the day to keep the digestive process engaged and avoid gas and bloating. Constipation may be caused by not drinking enough fluids; unless advised otherwise by your doctor, drink at least 2 or 3 quarts of water per day. Limit or avoid liquids containing caffeine, including coffee, tea, energy drinks and sodas; these can remove fluids from your body and contribute to dehydration. Also monitor medications, including those that treat depression, muscle spasms and pain, which may cause constipation. The more exercise and movement you build into your life, the better. Activity helps promote muscle movement in the colon and keep stools moving. All kinds of movement, from bathing and dressing to propelling your own wheelchair or even just stretching, can help increase your activity level and decrease constipation.

### Q: How can I prevent accidents?

Always perform your bowel program on time; skipping or delaying the program can cause accidents. Make sure that the rectum is completely empty at the end of each program, which can be determined by doublechecking that no further stool comes out after two digital stimulations 10 minutes apart. Pay attention to your diet and keep track of any foods that overstimulate your bowel. Adjust techniques if accidents are occurring regularly, such as switching to a mini-enema, using half a suppository or increasing the program to twice a day. Limit or avoid alcohol.

### Q: Why am I excreting mucus from my rectum?

Mucous is most often from overstimulation of the bowel by the suppository. Even after the stool is evacuated, the suppository might be still working, stimulating the bowel. The suppository is what gets all of the stool down in the rectum and out (along with the digital stimulation). It is convenient when the length of time of action of the suppository coincides with the stool evacuation but this often does not work out precisely. If there is excessive mucous, a less cathartic suppository can be used

such as a glycerin or the suppository can be cut in half lengthwise. The lengthwise cut allows more distance for bowel stimulation. After a length of time, many people can eliminate the suppository as the bowel becomes 'trained' to evacuate at the routine time using only digital stimulation. Most people do not choose these options as a quick evacuation is more desirable than a little mucous. But it is a personal decision and depends on the person's tolerance level of the mucous.

Some people have excessive mucous right after evacuation so it is not much of a bother. Of course, everyone defines excessive differently. Sometimes, the overstimulation from the suppository causes mucous followed by autonomic dysreflexia which is definitely a medical problem. But others have mucous later which is a problem of inconvenience.

# Q: I'm going on vacation. How can I adjust my bowel program to make my trip more enjoyable?

Consistency is important for the success of a bowel program and cannot be abandoned while on vacation. But there are things you can do to support your bowel needs without limiting your fun on the road. If you typically perform your program in the morning, book flights and plan outings for later in the day. Request seats nearby bathrooms and travel with wet wipes, a change of clothes and pads in case of accidents. Watch your diet and fluid intake on travel days, avoiding spicy or other triggering foods that have caused you problems in the past. Explore local grocers or farmers' markets to stock up on fruits and vegetables for snacks. Drink plenty of water each day throughout the trip.

Sources: Model Systems Knowledge Translation Center, University of Washington Department of Rehabilitative Medicine, Craig Hospital, Shepherd Center, Mayo Clinic, Cedars-Sinai Medical Center

#### Need to talk to someone?

Our Information Specialists are available to answer your questions.

Call toll-free 1-800-539-7309 Mon-Fri, 9 am-8 pm EST.

Or schedule a call or ask a question online at

<a href="https://www.ChristopherReeve.org/Ask">https://www.ChristopherReeve.org/Ask</a>.

### **Resources for Bowel Management**

Bladder and Bowel Community
<a href="https://www.bladderandbowel.org/">https://www.bladderandbowel.org/</a>
Forward House
17 High Street
Henley-in-Arden, UK
B95 5AA

Email:help@bladderandbowel.org

Offers support and information to those in the UK living with bowel or bladder dysfunction.

#### Christopher & Dana Reeve Foundation: Bowel Management Brochure

http://s3.amazonaws.com/reeve-assets-production/Bowel-Mgmt-Brochure\_FINAL.pdf Please call an Information Specialist at 800-539-7309 for a print copy of our Bowel Management brochure.

# Christopher & Dana Reeve Foundation: Nurse Linda blog "Avoiding Bowel Complications Part 1" 6/30/20

https://www.christopherreeve.org/blog/life-after-paralysis/avoiding-bowel-complications-part-i

# Christopher & Dana Reeve Foundation: Nurse Linda blog "Avoiding Bowel Complications Part 2" 7/6/20

https://www.christopherreeve.org/blog/life-after-paralysis/avoiding-bowel-complications-part-2

# Christopher & Dana Reeve Foundation: Sheri Denkensohn-Trott blog "Living with a Neurogenic Bowel" 4/26/20

https://www.christopherreeve.org/blog/life-after-paralysis/life-after-spinal-cord-injury-living-with-a-neurogenic-bowel

#### Craig Hospital: Bowel Care Resources

https://craighospital.org/spinal-cord-injury-resource-library?q=&topics=14823

Phone: 303-789-8000

Email: rehab@craighospital.org

## Model Systems Knowledge Translation Center (MSKTC): Bowel Function After Spinal Cord Injury

https://msktc.org/sci/slideshows/bowel-function-after-spinal-cord-injury

1000 Thomas Jefferson St, NW

Washington, DC 20007 Phone: 202-403-5600 TTY: 877-334-3499 Email: msktc@air.org

**MSKTC** is a national center that works to put research into practice to serve the needs of people with traumatic brain injuries, spinal cord injuries, and burn injuries.

# Model Systems Knowledge Translation Center (MSKTC): Hot Topic: Managing Bowel Function After SCI

https://msktc.org/sci/Hot-Topics/Bowel\_Function

### Multiple Sclerosis Association of America: Bowel Problems

https://mymsaa.org/ms-information/symptoms/bowel-problems/

#### **National Multiple Sclerosis Society: Bowel Problems**

https://www.nationalmssociety.org/Symptoms-Diagnosis/MS-Symptoms/Bowel-Problems

### New Mobility article Sept. 2018: Megacolon, Bowel Program Frequency

http://newmobility.com/megacolon-bowel-program-frequency/

## Northwest Regional Spinal Cord Injury System: University of Washington School of Medicine: Taking Care of Your Bowels - The Basics

https://sci.washington.edu/info/pamphlets/bowels\_1.asp

This pamphlet offering details on bowel management can be downloaded as a PDF.

# Northwest Regional Spinal Cord Injury System: Taking Care of Your Bowels - Ensuring Success

https://sci.washington.edu/info/pamphlets/bowels\_2.asp

This pamphlet with recommendations for regular bowel elimination can be downloaded as a PDF.

### Northwest Regional Spinal Cord Injury System: SCI and Maintaining Healthy Bowels https://rehab.washington.edu/patientcare/patientinfo/articles/sci\_bowels.asp

#### **Shepherd Center: Bowel Care**

https://www.myshepherdconnection.org/sci/bowel-care Bowel care info for patients.

#### **Shepherd Center: Bowel Function After SCI**

https://www.myshepherdconnection.org/sci/bowel-care/function-after-sci

#### **Shepherd Center: Digital Stimulation**

https://www.myshepherdconnection.org/sci/bowel-care/digital-stimulation

#### Spina Bifida Association: Bowel Management

https://www.spinabifidaassociation.org/resource/bowel-management/

### Spina Bifida Association's Lifespan Bowel Management Protocol

https://www.spinabifidaassociation.org/lifespan-bowel-management-protocol/

Developed to support healthcare professionals managing bowel incontinence in those living with spina bifida and neurogenic bowel.

#### Spinal Cord Injury Information Network: Bowel Management

https://www.uab.edu/medicine/sci/daily-living/managing-personal-health/secondary-medical-conditions/bowel-management

This page has links to a range of bowel management resources.

# University Health Network - Toronto Rehabilitation Institute's Brain and Spinal Cord Injury Rehabilitation Program: Rectal Touches (Digital Stimulation)

http://www.spinalcordessentials.ca/handouts/digital-stimulation/

#### On Demand Videos

# Kessler Foundation: Bowel Management (Managing Medical Complications After Spinal Cord Injury - Part 1 of 3)

https://youtu.be/uNfSJhZZZ34

Northern New lersev Spinal Cord Injury System Center (NNISCIS) (https://kesslerfoundation.org/NNJSCIS) has released a three-part video series, Managing Medical Complications After Spinal Cord Injury: Bowel Management (https://youtu.be/uNfSJhZZZ34), Pressure Ulcer Prevention (https://youtu.be/kHep3NPVwiM), and Pneumonia Prevention (https://youtu.be/Tir5daLvLw). The 30-minute videos provide information to individuals with SCI and caregivers on management and prevention of these conditions, which can have a significant impact on day-to-day activities and quality of life if they are not managed properly.

### Spinal Cord Injury Information Network: Secondary Conditions of Spinal Cord Injury Health Education Video Series

https://www.uab.edu/medicine/sci/uab-scims-information/secondary-conditions-of-sci-health-education-video-series

The 25-minute "Bowel Management" video stresses management and its importance on quality of life, predicting bowel movements, avoiding bowel accidents, bowel care procedures, and anatomical model demonstrations. It can be streamed online or downloaded.

The information contained in this message is presented for the purpose of educating and informing you about paralysis and its effects. Nothing contained in this message should be construed nor is intended to be used for medical diagnosis or treatment It should not be used in place of the advice of your physician or other qualified health care provider Should you have any health care related questions, please call or see your physician or other qualified health care provider promptly Always consult with your physician or other qualified health care provider before embarking on a new treatment, diet or fitness program You should never disregard medical advice or delay in seeking it because of something you have read in this message

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