

### For men BLADDER AND BOWEL DYSFUNCTION WHEN YOU HAVE A SPINAL CORD INJURY

Bladder and bowel dysfunction often has a major impact on the daily life. Finding a working routine will put you in control, providing the confidence you need to be able to do the things you love to do. In this booklet we have put together information about the urinary and digestive tracts, symptoms that can occur, and therapies that might help you managing your bladder and bowel. We hope that you will find it useful!

We would like to thank urotherapists and nurses in Scandinavia for their assitance with fact checking.



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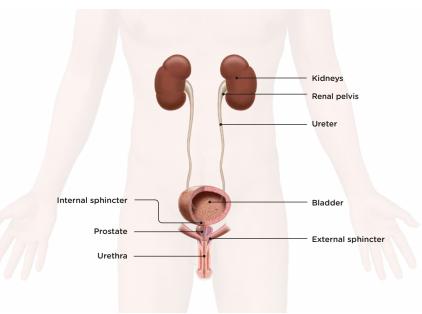
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" Being able to decide when you are going to the trilet is something I do not take for granted. Disposable catheters have given me the feeling of being normal again" Kissinger Deng

# THE URINARY TRACT AND YOUR HEALTH

A healthy, functioning urinary tract is important to our well-being. In fact, our lives depend on it.

The kidneys have two primary functions: eliminating waste products from the blood and regulating the body's salt and water balance. The kidneys excrete waste products in the form of urine. The urine is collected in the bladder, which serves as a reservoir. The bladder is actually a large muscle which can expand and contract. The bladder volume shrinks, and the urine passes via the internal sphincter. It works like a safety valve and is either open or closed. When it is open, the urine can flow out and into the toilet. Bladder emptying is controlled by the central nervous system, coordinated by conscious and unconscious intent. Urine volume varies individually, but the norm is 200-400 ml each time and 1-2 liters every 24 hours. Most people urinate four to eight times a day.



### HOW DOES THE URINARY TRACT WORK WHEN YOU HAVE A SPINAL CORD INJURY?

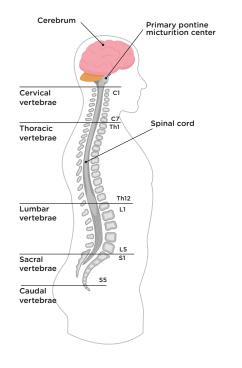
The spinal cord is approximately the width of one finger and very delicate. It is encased in a canal filled with fluid within the spinal column. The spinal cord contains cells which send and receive signals from the entire body. Thanks to these signals, we are able to move our arms, legs and other muscles in the body. These signals also control the passing of urine and stool.

In the event of a spinal cord injury, the connection between the brain and bladder becomes completely or partially severed. This often impaires bladder function, affecting the filling, emptying and control of the bladder.

Bladder dysfunction can be categorized as either: **overactive bladder** or **underactive bladder**.

**Overactive bladder** may develop in spinal cord injuries above thoracic vertebra 12 (Th12). The bladder pressure is high, but difficult to empty because the bladder and the urethra muscles fail to work together. This may cause kidney damage over the long term.

**Underactive bladder** may develop in the event of a spinal cord injury from thoracic vertebra 12 (Th12) or below. The bladder pressure is so low, it is incapable of contracting to empty, and the urethral sphincter is weak.



Bladder dysfunction after a spinal cord injury can usually be categorized within these two groups:

### Overactive bladder

Once the spinal shock phase is over, people with a spinal cord injury above Th12 may develop spastic bladder.

#### Signs:

- In the event of complete injury, the person loses sensation of bladder filling levels or the need to empty the bladder.
- In the event of partial injury, there may be a frequent urge to urinate, although the urge will be of a different nature than prior to the injury.
- Non-volitional contractions of the bladder may occur, the bladder muscle still has power to empty. This may lead to involuntary urine leakage (reflex bladder). The bladder volume shrinks.
- Residual urine: The bladder's ability to contract is insufficient to empty the bladder completely. This may lead to urinary incontinence and urinary tract infections.
- Bladder contractions against a closed urethra (detrusor sphincterdyssynergia) lead to high pressure in the bladder with a risk for backflow up to the kidneys (reflux).

### **Underactive bladder**

The connection with the central nervous system is broken. This results in a loss of reflexes.

#### Signs:

- In the event of complete injury, the person loses sensation of bladder filling levels or the need to empty the bladder.
- The bladder muscle has little or no power to empty, resulting in a large quantity of residual urine in the bladder.
- The bladder is often distended and overfilled.
- Residual urine may lead to urinary incontinence and urinary tract infections.
- The pressure in the muscle is often low, and may lead to urinary incontinence with increased abdominal pressure, such as physical exertion, coughing and sneezing.

### URINARY TRACT INFECTIONS

A neurogenic condition may affect bladder emptying, leaving the urinary system particularly vulnerable to complications.

Urinary tract infections (UTI) are common in people with conditions affecting the ability to empty the bladder – completely or partially.

A UTI is a bacterial infection affecting some portions of the urinary tract. Urine contains a number of fluids, salts and waste products. Urine does not normally contain bacteria. When bacteria manages to enter the bladder or kidneys and multiply in the urine, they attack the bladder lining and cause a UTI.

Urinary tract infections are divided into asymptomatic and symptomatic UTIs. An asymptomatic UTI means you have bacteria in the urine without symptoms.

Bacteria in the urine without symptoms (see signs of symptomatic UTI) does not necessarily mean you have a UTI or require any antibiotic treatment.

Your HCP may ask you to provide a urine sample if you suspect a UTI, so you get the correct antibiotic.

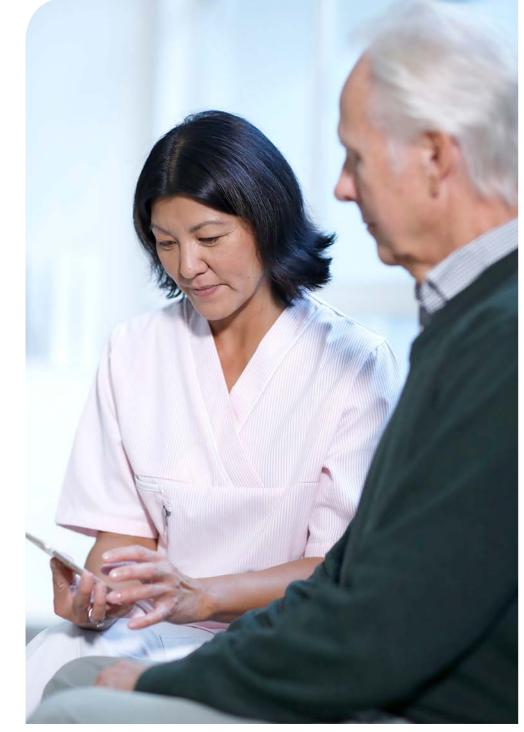
### Signs of symptomatic UTI:

- Changes in bladder function
- Leakage/increased leakage
- Sweating/burning sensation when emptying the bladder
- Frequent urges
- Pain across the lower abdomen or back
- Blood in the urine
- Fever and/or general deterioration in your medical condition
- Increased spasticity (increased muscle tension)
- Increased autonomic reactions, such as sweating and chills

If you have symptoms of a urinary tract infection – contact a healthcare professional for further medical advice.

Prevent UTI and download the STOP UTI app





STOP

UΤľ

### BLADDER MANAGEMENT

#### Three main treatment approaches:

- Preventing urine reflux and kidney damage
- Preventing complications, such as large quantities of residual urine and urinary tract infections
- Improving quality of life by reducing incontinence and frequent urges

#### Management and treatment

Health care professionals can customize a treatment to handle your specific problems. For mild problems, the treatment normally begins with advice and tips on how to handle your problems.

### **Bladder emptying**

Bladder catherization is a treatment if you are having a difficult time emptying the bladder or the bladder does not empty adequately when you urinate (residual urine). There are two different catheterization methods: clean intermittent catheterization (CIC) and a permanent catheter.

### Medicine

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Medicines (tablets) are available to reduce urges to urinate. These relax the bladder muscle.

There is also a medicine, which is injected into the muscle wall. This medicine may reduce the overactivity of the bladder. Self-catheterization will occasionally be necessary after the treatment because the medicine is so effective, the bladder muscle is unable to contract to empty the bladder.

#### Accessories aids

Incontinence protection is used for urine leakage. The protection should be tested and adapted to individual needs.

### These treatments are often combined:

- For example, medicine for calming an overactive bladder.
- Intermittent catheterization (IC). The bladder is emptied completely using a disposable catheter.
- Use of incontinence protection
- Bladder training and/or pelvic floor muscle training

Speak with your SCI doctor or nurse. There are many ways to improve your quality of life

### CATHETERIZATION

### Catheter-assisted bladder emptying

For a bladder that is unable to fully empty, catheterization is the solution. There are two different catheterization methods: Intermittent Catheterization (IC) and a permanent catheter, often referred to as an "indwelling catheter". IC is the first-line choice and involves emptying the bladder regularly with a disposable catheter.<sup>1,2</sup>

### The benefits of IC<sup>1,2</sup>

There are many benefits of using IC compared to using a permanent catheter. The purpose of IC is to empty your bladder completely on a regular basis and prevent UTIs, urine leakage and frequent urges to urinate. Using IC supports a sexually active life.

### Indwelling catheters

An indwelling catheter will drain urine from the bladder continuously as the catheter remains in place for many days or weeks. It is held in position by an inflated balloon in the bladder. The catheter can be inserted either through your urethra (urethral indwelling catheter) or through a little hole in your abdomen and into your bladder (suprapubic catheter).

### There are many benefits to IC with a disposable catheter, including<sup>1,2</sup>:

- Protection of the lower and upper urinary tract
- Complete emptying of the bladder, reducing the risk of a urinary tract infection
- Improvement in quality of life by reducing incontinence and frequent urges



Intermittent Catheterization (IC) is a method for emptying the bladder regularly using a disposable catheter. The method is effective whether you have problems storing urine, or emptying the bladder.

#### How IC works

IC involves inserting a catheter into the bladder regularly to drain the urine. This helps the bladder empty completely. When the bladder is empty, the catheter is removed and discarded. Most people learn how to self-catheterize very quickly. With a little training, it only takes a few minutes.<sup>2-4</sup>

IC may sound a little scary, difficult or uncomfortable. As with any new technique, practice makes perfect. Thousands of women, men and children around the world use self-catheterization every day. It also prevents the risk of kidney damage and urinary tract infections.<sup>1,2</sup>

#### How often?

The number of catheterizations depends on the urine quantity. The urine quantity should not exceed 400 ml on each occasion. The number of times the catheterization must be performed varies individually and depend upon fluid intake. IC is normally performed four to six times per day, rarely at night.

#### The purpose of treatment<sup>2</sup>

- Prevent urine reflux and kidney damage
- Prevent complications, such as large quantities of residual urine and urinary tract infections
- Improve quality of life by reducing incontinence and frequent urges

### HOW CAN IC SOLVE YOUR PROBLEM?

### Reduce the risk of urinary tract infections

Complete emptying of the bladder reduces the risk of a urinary tract infection.<sup>1,2</sup> To prevent urinary tract infections, you should empty your bladder completely on a regular basis.

### Improve your quality of life

Minimizing the risk of urinary tract infections and/or incontinence can help you lead a more fuller life, free from worrying about embarrassing urine odor or wet clothes. This can give you better control and improve the quality of your life. When the bladder is emptied completely, visits to the toilet also become less frequent.

#### Save time

Many people need to sit on the toilet for a long time to empty the bladder, or need to return after having just gone. IC only takes a few minutes, and you empty the bladder completely.

### Prevent incontinence and frequent urges to urinate

Emptying your bladder completely on a regular basis will help you avoid leakage and frequent urges to urinate. An overfilled bladder may cause uncontrolled leakage.

### Maintain normal kidney function

Emptying your bladder completely on a regular basis prevents kidney damage, especially if you have a neurological disorder causing abnormal bladder pressure.

### INSTRUCTIONS FOR PERFORMING IC



1. Wash your hands with soap and water, before and after catheterization. Touch the catheter tube as little as possible after you have washed your hands before self-catheterization.



**3.** Return the penis to its normal position when the urine starts flowing through the catheter.



2. Hold the penis up towards the stomach to straighten the urethra. Slowly insert the catheter into the urethra. When urine starts to flow, push the catheter one or two centimeters further in.



4. When the urine flow stops, slowly remove the catheter a little. If urine starts flowing again, wait for it to stop completely, then remove the catheter completely. Your bladder is now completely empty.

A Tiemann catheter, with an angled tip, requires a specfic technique for catheterization. Your doctor, nurse or urotherapist will provide information and training.



1. Note the location of the mark on the funnel relative to the catheter tip when you insert the catheter. That way you ensure the catheter tip is going in the right direction during the catheterization.



**2.** Ensure the catheter tip turns up towards the abdomen while inserting the catheter and during the catheterization.

Find a position you are comfortable with and use any accessories you need.

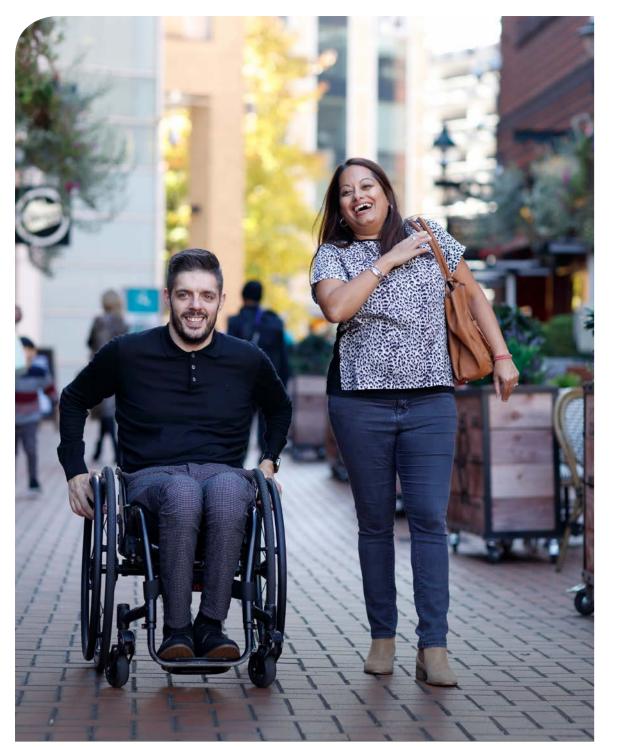






In this scenario, an extension tube is connected directly to the toilet bowl for emptying. A tip for keeping the tube from moving while emptying is to place the tube between the toilet base and the toilet seat.

# If you perform self-catheterization sitting in a wheelchair, it may be helpful to use a urine collection bag or LoFric Hydro Kit<sub>x</sub>



### ${\sf MICHAEL}\;{\sf KERR}$ – User of LoFric Origo and LoFric Hydro-Kit

"Eighteen years ago I had a diving accident on a holiday. I dived into a swimming pool and didn't realize it was the shallow end. I hit my head in the bottom and broke my neck. I sustained a spinal cord injury at C6-7 level and started using intermittent catheters to empty my bladder.

The biggest challenge for me was holding the catheter. That's what I found most tricky, but once I found a way that worked for me, it was fine. I have tried a few different catheters before I tried this one and this works best for me. It is easy to use, it is compact. I can fold it up and put it in a bag under my chair, so it is discreet. I don't need to worry about finding water, it's already in there. You just squeeze it and break the seal and you've got your sterile water.

My bladder management has greatly improved! I feel better, no sweating, no infections and it improves your sexual function as well. I feel much better since I started using intermittent catheters."

### KIM KLÜVER CHRISTIANSEN

- User of LoFric Origo and LoFric Hydro-Kit

"I have used LoFric products on a daily basis for the past 15 years. It allows me to live my life without worrying about IC. It works well!

I use LoFric Origo because of its discreet packaging that makes it easy to take along. As a cyclist with the national Danish team, I travel approximately 15 weeks per year to races and training camps in other countries. I always use the LoFric Hydro-Kit on these trips. The integrated solution of a catheter and bag, plus a small bottle of hand sanitizer makes it simple, safe and hygienic to use a catheter in public restrooms and on airplanes. The same applies when I have a 5-hour training session on my bike. Then it's important that I have a simple and hygienic solution for IC. LoFric Hydro-Kit is my first choice for this.



### GOOD ADVICE AND TIPS

### Drinking

The body generally needs 1.5-2 liters of fluid intake daily. This fluid flushes the bladder and reduces the risk of urinary tract infection.

### Good hygiene

Daily hygiene in the genital area is recommended. It is wise to use hand sanitizer before self-catheterization in a public restroom.

### **Catheterizing frequencies**

Your urotherapist/nurse will advise you on how often to catheterize. The normal frequency is 4-6 times a day. It varies from person to person, depending upon your specific bladder issues, how much you drink, how much urine you pass each time and whether you can urinate without a catheter. As a general rule, the bladder should not contain more than 400 ml of urine. To avoid complications, follow the recommendations given to you during training.

### Empty your bladder completely

You can do this by changing your body position while the catheter is still in your bladder. Withdraw the catheter slowly to empty all of the urine. Don't be in a hurry. Residual urine inside the bladder increases the risk of urinary tract infection. The bladder is emptied most effectively while sitting or standing.

### Difficulty inserting the catheter

If you are tense, the sphincter muscle around your urethra may tighten up, making it more difficult to insert the catheter. Don't try to force the catheter in. Find a good position, cough a little and relax. Try to reinsert the catheter. When you start the treatment, you may see a little blood in your urine or on the catheter. This is usually caused by urethra irritation. It usually clears up very soon, but if in doubt, contact your urotherapist or nurse.

### When travelling

Carry your catheters and accessories with you when you travel. Since there is always a slight risk of luggage getting lost, always keep a few days' supply of catheters in your hand luggage. To avoid problems at customs, you can order a Medical Validation Certificate from your urotherapist/nurse or contact us at Wellspect HealthCare.

Read more about traveling with catheters at wellspect.com

### CHECKLIST BEFORE STARTING IC

To make sure that you have all the information you need to get started with and maintain self-catheterization, you can use this checklist. Fill it in together with your nurse.

### Information about IC

Contact healthcare:	
Clinic:	Telephone:
Catheter selection, LoFric	CH: Length:cm
Number of catheterizations per day:	

<ul> <li>Urinary tract anatomy</li> <li>Information on complications, such as urinary tract infections</li> <li>Normal functioning of the urinary tract</li> <li>Benefits of IC</li> <li>Training in the IC method</li> <li>Performing IC under supervision</li> <li>Information on complications, such as urinary tract infections</li> <li>Demonstrate catheters and any other accessories</li> <li>Practical advice</li> </ul>	What can cause bladder empt	ying problems?	Adapting emptying intervals individually
<ul> <li>Normal functioning of the urinary tract</li> <li>Benefits of IC</li> <li>Training in the IC method</li> <li>Practical advice</li> </ul>	Urinary tract anatomy		
Benefits of IC     and any other accessories       Training in the IC method     Practical advice	Normal functioning of the uri	inary tract	
□ Practical advice	Benefits of IC	L	
	Training in the IC method	Г	Practical advice
	Performing IC under supervis	sion	

### Follow-up on IC

Contact healthcare:	
Clinic:	Telephone:
Catheter selection, LoFric	CH: Length:cm

Number of catheterizations per day: .....

- To adapt the emptying interval
   review your micturition list
- IC technique repetition
- Follow-up on the affect IC treatment has on everyday life/quality of life - correct catheter?
  - correct emptying interval?

- Practical information about changes in the product line and current web sites
- Any complications
- Practical advice, for example



### HOW DOES THE DIGESTIVE TRACT WORK?

The entire digestive tract in a human body is nine meters in length. Once we have chewed and swallowed the food, it is transported through the stomach to the bowel.

### How the digestive tract works

After the food is divided into small pieces in the stomach, it passes through the small intestine, where the primary function is to absorb nutrition. The food then continues through the colon. The colon receives approximately 1.5 liters of fluid per day from the small intestine, and absorbs salts and the majority of the water, which is transformed to approximately 150-200 ml feces.

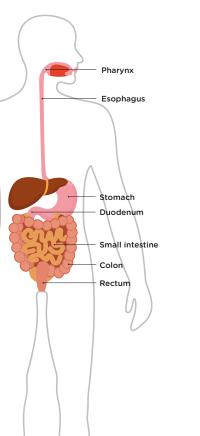
The feces are transported with the help of bowel movements. The passage through the colon takes approximately 1-3 days. The feces are stored in the rectum until a signal is sent to the brain indicating it's time to tend to its needs, then passed through the rectum.

### **Passing stools**

Passing stools is controlled by the brain and spinal cord nerve signals. When a signal arrives from the brain that the bowels need to be emptied, the process for passing stools begins.

Contractions in the diaphragm (bowel movements) increase the pressure in the abdomen and release the peristalsis in the colon and rectum, causing the sphincter to relax and open the rectum.

It is normal to pass stools from three times per week to three times per day.



### HOW DOES THE BOWEL WORK WHEN YOU HAVE A SPINAL CORD INJURY?

The digestive tract is controlled by the nervous system which runs through the spinal cord up to the brain. Bowel function may be affected, if the nerve paths are cut off, due to disease or injury affecting the central nervous system.

The injury completely or partially affects the volontary control over the sphincter, which controls stool and gas release. Other things affecting the bowel include changes in mobility as a result of a disability, fatigue and/or medication use.

Neurogenic bowel dysfunction may lead to constipation, fecal incontinence and bowel movement disorders. Constipation may also complicate bladder emptying. Studies demonstrate constipation leads to an increased frequency of urinary tract infections.

### Constipation

The bowel movements are slower and more irregular in people with neurogenic bowel dysfunction. Common symptoms are hard and dry feces, combined with an "upset stomach" and gas.

#### Signs

- You may still feel the emptying was not complete. This may be due to the sphincter failing to relax when the feces are in the rectum and it is time to pass stools. Consequently, it takes a long time to pass stool. This may even cause hemorrhoids, which may be painful and bleed slightly.
- The musculature is more relaxed, making it more difficult to empty the bowel completely.
- Difficult to squeeze with the stomach muscles.

### Fecal incontinence

Fecal incontinence is another common problem for people with neurogenic bowel dysfunction. It is a condition where stools are passed involuntarily.

#### Signs

- The volontary control over the sphincter disappears completely or partially, depending upon whether the injury is complete or incomplete.
- A weak sphincter muscle which does not have enough strength to retain feces gathered in the lower portion of the bowel.
- Constipation may cause incontinence. Watery feces run past the hard feces, causing leakage. It is not uncommon to be affected by both of these problems at the same time.



### BOWEL MANAGEMENT

### First treatment option - conservative treatment

#### Diet

Diet is important, because certain foods cause a loose stool and others cause constipation. Regular meals and normal amounts of fluid and fiber intake are known to be important.

#### Exercise

Regular exercise helps to get bowel movements started.

#### Medication

There are various medications, which help the bowel to better movement and fecal consistency, making it easier to pass stools.

#### **Toilet training**

Sitting on the toilet regularly for a certain period of time each day may help. Look for the signal, and go when the signal arrives, don't wait. If you do not receive any signal, go anyway.

#### Mini-enema

A mini-system may suffice for many patients, where you inject approximately 100 ml of water to empty the rectum. For patients with neurogenic bowel dysfunction, the mini-system may be offered at an early stage. If the effect is inadequate, the patients may switch to a transanal irrigation system.

### Second treatment option - Transanal irrigation (TAI)

Transanal irrigation is the next step. TAI is an often overlooked therapy. This method effectively empties the bowel. Instilling water into the colon using a rectal catheter or cone starts the peristaltic movements of the bowel, so stools may be passed. This therapy can save a lot of time and reduce frustration when conservative methods do not give the desired results.

### Third treatment option - surgery

Higher up in the pyramid, you see options like antegrade irrigation, electrical stimulation or colostomy.



Treatment pyramid

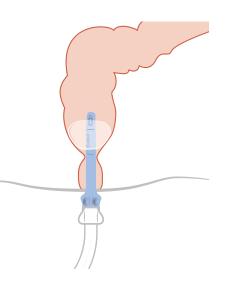
# WHAT IS TRANSANAL IRRIGATION?

Transanal irrigation (TAI) is a technique for emptying the bowel effectively. The process involves easing the emptying of the rectum and the lower portion of the colon by instilling water into the bowel.

Regular bowel irrigation empties the colon and rectum so effectively that the lower portion of the bowel remains empty until the next irrigation. Not only does TAI prevent leakage, it also allows for choosing the time and place to empty the bowel. The instillation of water also starts the peristaltic movement, preventing constipation. Other important benefits of TAI are that you do not have to spend so much time and energy caring for your bowel, freeing up time for other pursuits.

#### No more accidents

When the training period is complete and the bowel have adjusted to TAI, the general goal is to irrigate every other day. At this stage, you should have developed a routine for passing stools where you avoid constipation and incontinence. The purpose of TAI is to restore good and regular bowel function, so you can live normally.



Water is inserted into the intestine through a rectal catheter or cone.



### MOTIVATION AND EXPECTATION

Motivation and patience are essential. Prepare and give yourself time to change habits, both mentally and physically, and the bowel to adapt to your new routines. You also need time to find your optimal treatment parameters. expectations of what TAI can do for you and how long it may take to achieve satisfactory results. A commitment of up to 4-12 weeks may be necessary in order to stabilize the bowel and to develop a good individualized defecation routine.

Give it time. It is worth it!

It is important to have realistic

### TRAINING IS KEY

Education and personalization are key to success in TAI, and comprehensive training is very important when you start. Ideally, your healthcare provider should guide you through your first session. TAI is proven effective, however previous ways of performing the therapy have sometimes been perceived as complicated by users. Therefore, making TAI easier to learn and perform were the main focal points when developing Navina Systems.



### KENT REVEDAL - User of Navina Classic

"When a nurse showed me a TAI system for the first time, I was certain this was not for me. It consisted of water, tubes, catheters and a pump. I could just imagine how messy and disgusting it would be. Brown water, constant attention, constant irritation... No thanks.

I suffered a spinal cord injury just a few months prior, and was in a phase where I was adjusting to my new life. I had recently returned to my home. My focus was on how I would continue living there, but in a wheelchair. A messy TAI routine was not exactly something I wanted to deal with every day.

But I didn't understand the concept of TAI. I've used the system since 2011 now, and realised very early on that I had nothing to fear. I had heard various arguments for why TAI was not a good solution, or something to use over the long term. There are many arguments why I believe TAI should be used much more often in healthcare for people with bowel disorders, and here are a few:

One of the most embarrassing things you can experience is to soil your pants in public. Many treatment alternatives, such as laxatives or specialized diets, did not help much. Accidents can happen anyway. My own experience with using TAI regularly, is that this problem can generally be avoided. I can even eat most anything at all. Before I began using TAI, I would go out to eat fast food with friends or family, and frequently had to go to the toilet immediately after eating. My bowel system could not accept that type of food without upsetting my stomach. Now I can eat as I choose, without risking accidents.

Many people with neurogenic bowel have lost their voluntary control. This means they are not able to feel the sensation of needing to empty the bowel. Once you have lost sensation and control over the sphincter, the risk of accidents and the need for sudden visits to the toilet are always an immediate concern. When you use TAI, you regain control over your trips to the bathroom. You develop a routine and can choose when and where you will relieve yourself. That is the incitement for most people"

### ERIK FORNÅÅ - User of Naving Smart

"In recent years, I developed increasing problems with constipation and searched high and low for a solution. The time spent on the toilet increased, and I still did not feel as though I had completely finished.

I had periodic bouts of nausea and fever. The exact cause could not be identified, despite several examinations. The x-ray showed the intestine was not completely empty, despite the fact I had recently been to the bathroom. In a Facebook group, I got tips about water enemas with a pump and asked my doctor about trying this.

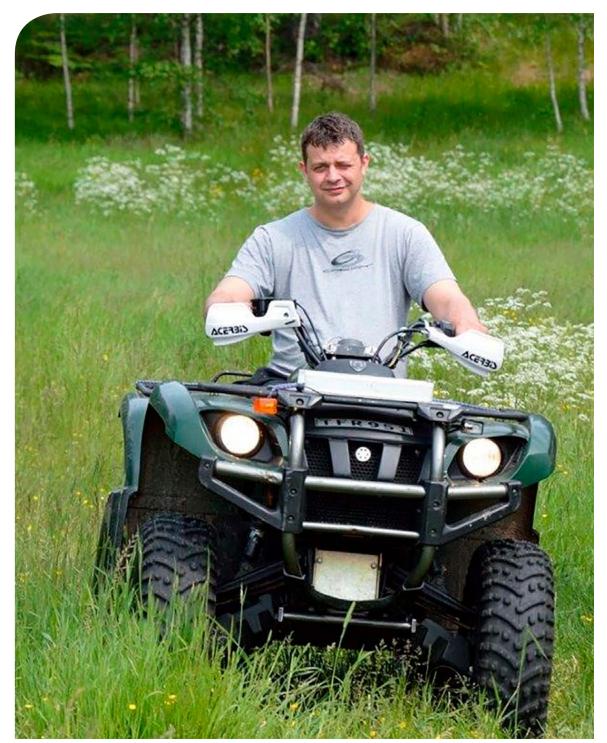
Transanal irrigation is nothing new. The therapy has been in use for some time, but is most frequently initiated after testing so-called conservative methods, such as nutrition and various laxatives. Despite training, diets and all sorts of laxatives, it was often difficult to maintain bowel movements, and constipation had become a fact of life. There were remnants of the powder I used in the intestine. This made me bloated and gassy afterward, even if I had been to the bathroom recently.

The difference in the product I use, is improvements to the function of the water enema itself. There is an electronic system making it possible to set both the amount and the flow of water being instilled into the rectum. These settings are saved until the next time, so the therapy can be adapted to the individual. Added assurance also comes from knowing the pump shuts off automatically if the water meets too much resistance in the intestine. This means people like myself with reduced sensation in the abdomen are free from worrying about something going wrong without being able to feel it happening.

I can relax in a completely different way from before. I don't even have to be as careful about what I eat as before. Trips to the toilet are less stressful, go much faster, and when I leave the toilet, I have fully emptied.

The bowel procedure now takes just 45 minutes from the time I roll into the bathroom until I roll out again. That is approximately thirty minutes faster than before. There is no doubt TAI has had a positive effect on life.

Everyone with a spinal cord injury should try this. The therapy has been an enormous improvement – I feel like a new person!"







### "I RATE A FUNCTIONING BOWEL AND BLADDER HIGHER THAN MY ABILITY TO WALK"

Bladder and bowel dysfunctions often appear together. In a lot of cases, these symptoms coexist and interact. If you have a neurogenic condition, they can have a huge impact upon quality of life. If bladder symptoms are getting worse, this often also means the bowel symtoms will also. But they are rarely addressed together, even though it may be beneficial for the outcome.

### These are some examples of how bladder and bowel interact in patients with a SCI

#### Urinary leakage due to constipation

Constipation can cause urinary urge incontinence and increased frequency due to mechanical pressure on the bowel.

#### Neurological interactions

Bladder and bowel functions are neurologically controlled in the same way, both centrally and locally.

#### Pharmaceutical interactions

Anticholinergics for reducing bladder symptoms and opioid use may worsen constipation issues. This is one example of how treatments can interact.

### A combined treatment approach

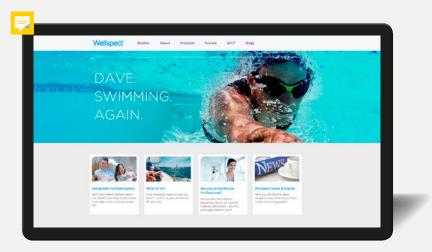
Therapies that relieve one of these conditions often relieve the other at the same time.

A combined treatment approach increases the effectiveness of each therapy, and regaining control of both your bladder and bowel will significantly improve your quality of life. Ask your healthcare provider for more information.

### WOULD YOU LIKE TO KNOW MORE ABOUT GETTING A GOOD START?

- Learn more about your body and different diagnoses
- Discover the benefits of Intermittent Catheterization (IC) with LoFric
- Get informed about how transanal irrigation (TAI) with Navina Systems can help you regain bowel control
- Watch instruction videos
- Read user testimonials

You will find all this and more at: wellspect.com



#### Contact us

If you have any questions or need more information about LoFric and Navina Systems and our user support programs, do not hesitate to contact us directly.

You will find all contact details on wellspect.com



#### References

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At Wellspect we value the people behind our success as a leading provider of life-changing products for bowel and bladder management such as the well-known brands LoFric® and Navina™. From the thousands of users and healthcare professionals worldwide who inspire our innovative solutions, we know that working together is the best way to advance continence care, giving our users more time for life. Building on over 30 years of life-improving performance, we passionately strive to make a difference every day to everyone who needs our products and services. Wellspect. A Real Difference.

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