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**Craig Hospital** 

*Caring exclusively for patients with spinal cord and brain injuries.*

## H<sub>2</sub>O to Go! Hydration

*You've probably heard those narrators on the National Geographic specials say things like, "Water gives life," or, "Without water there could be no life." They may be overly dramatic, but they're right!*

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### It's easier than you think to get dehydrated

We humans are more than 60% water. We begin to get dehydrated and our performance drops off with just so much as a 2% water loss. What can cause water loss? It doesn't take much. It can happen to an athlete who's competing, to someone who's in bed with the flu or diarrhea, in the very hot weather, or even to someone who just doesn't drink enough.

### No water, no go....

What happens to your body when you're dehydrated?

- Your urine will get dark and you may have less urine output.
- Your brain won't work properly – you'll be groggy, slow, feel out of it, or have headaches.
- Your muscles may not work as effectively or you may feel weak or have muscle cramps.
- Your kidneys won't be able to function; waste products will back up in your body, making you feel generally crummy.
- You'll have more trouble regulating your body temperature; you may feel overheated, or you may feel chronically cold and unable to get warm.
- You may get constipated
- Your metabolism will decrease making it easier to gain weight.
- You may feel hungry all the time, and so you'll be likely to eat more.
- Your skin and lips will get dry and itchy.
- You may feel dizzy if your blood pressure drops.

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## It's even a bigger deal if you have a spinal cord injury

All of the things we just listed can happen to anyone who gets dehydrated. However, at least half of these problems are also things that doctors and researchers tend to worry about happening in people with spinal cord injuries – *regardless of whether they're dehydrated!*

Think about it: body temperature? You've already heard about how hard it can be to regulate, especially if you have quadriplegia.

Constipation? You've already heard about it and probably even experienced it.

Doctors and SCI survivors alike also worry about skin condition, metabolism, and kidney function. So, since all these things are worsened by dehydration it doesn't take a rocket scientist to see that water and keeping hydrated is especially important for people who have spinal cord injuries.

## How much should I drink?

Drinking at least 2000 to 3000 ml of water every day is important. This is equivalent to about 8 to 12 eight-ounce glasses or about 3 quarts of water every day. You may think, "That's A LOT of water," and you're right! But, there are great benefits to constantly flushing out your kidneys and bladder.

## When to increase water intake

You will need to increase your fluid intake further if you are:

- Exercising
- In warm weather or warm environment
- On a high fiber diet or taking fiber supplements (*Fiber soaks up lots of water*)
- Trying to lose weight
- In high altitude where the air tends to be drier and evaporation occurs faster
- Traveling, especially in airplanes where the same air is re-circulated over and over again, which also may make the air drier
- Sick – like a cold or a bladder infection. Fevers, vomiting, diarrhea all cause you to lose or use up large amounts of water, which needs to be replaced
- Sweating excessively
- Consuming alcohol or caffeine
- Have high blood sugars
- Taking medications that require large amounts of water

## A special warning for SOME SCI survivors:

Doctors recommend large amounts of water for *most* people with spinal cord injuries. We didn't say *all* people with spinal cord injuries.

If you use a bladder program that involves intermittent catheterization, you may have been told to restrict your fluid intake. For sure, you should follow that advice. If you're on one of these programs, your health care professional should have developed a plan that balances what goes in – what you drink – with what comes out – how often you catheterize yourself.

It's not a good idea to reduce how much you drink simply for the convenience of catheterizing yourself less often; this could leave you not only thirsty, but dangerously dehydrated as well. Check with your doctor first. And, if you're on an intermittent catheterization program and you don't think you're getting to take in as much fluid as you want or need, you should also check with your urologist or spinal cord injury doctor. He or she might be able to help you adjust the balance between how much you drink and how frequently you need to empty your bladder.

Also, if you have a medical history of electrolyte imbalances, talk with your doctor about the amount of water you should drink daily. Your water needs may be adjusted based on your health history.

## A few more pointers.....for EVERYONE:

And, regardless of what kind of bladder management program you use, keep these points in mind:

- Drink alcohol in moderation followed by additional water or avoid alcohol all together.
- Drinks with caffeine do not help meet your water requirements. In fact, they can cause you to *lose* water by increasing your urine output. So, if you use caffeinated drinks, increase your water intake as well.
  - If you drink four cups of coffee, you may need more than eight cups of water per day to make up for what the caffeine causes you to lose. If your fluid intake is restricted to begin with, you may want to avoid caffeine entirely, or at least greatly limit these beverages.
  - Caffeine can be found in coffee, tea, soda, energy drinks, dietary, or weight loss supplements, and in some medications
- Sports drinks and juices do help you replace water, but they contain lots of calories. They're also expensive. If you're not a heavy-duty exerciser, sports drinks really aren't necessary; they're no better than plain water. And, if you're watching your weight, they may have far more calories than you want!

## ...an important but little known fact:

- Finally, know that your thirst sensation runs quite a bit slower than your body's need for water. By the time you realize that you're feeling thirsty, your body will already be suffering from drought. Most experts suggest that you drink *before* you get thirsty. If you're exercising – even if you're just pushing a long distance – drink water before, during, and after.

## It's no easy feat...

As one of the SCI survivors commented after reading this brochure, "It's not going to be easy to get in 2 to 3 liters of water a day!" That's especially true if you need help to do it. Here are some suggestions:

- Keep a water bottle with you. If you have limited hand function, maybe a large tube can be rigged connecting the bottle and your mouth.
- Some people have used "Camelback" or similar water systems that they wear like a backpack. Know how much water the system holds so that you can easily keep track of your intake.
- Make it a point to drink a bottle or two of water every time you empty your leg bag.
- Drink before meals when you're hungry, rather than afterwards when you're already full.
- To stay better hydrated drink throughout the day.
- If you do intermittent catheterizations try to do most of your drinking in the morning and afternoon so there's time for all that water to be eliminated before bedtime. Follow your doctor's recommendations on how much you should drink and how often you should catheterize.
- Don't waste your drinking efforts on things that won't help like alcohol, coffee, caffeinated teas or sodas. A smaller amount of water will do you more good than a larger amount of many other beverages.

## Questions to ask yourself...

How do you know if you're not getting enough water? Check off the questions that you can answer "yes" to:

- Is your urine dark? (It should be a light yellow in color)
- Has your urine output decreased?
- Do you get an unusually high number of bladder stones or bladder infections?
- Are you frequently constipated?
- Is your skin dry? If you wrinkle it or pinch it, does it take awhile to "bounce" back?
- Do you get groggy or headachy part way through the day?
- Do you have a lot of trouble staying cool – or keeping warm?
- Do you have high blood sugars?

A "yes" to any one of these questions *can* mean you're not getting enough water. Any of them *could* be lessened by taking in more fluids, especially if you think your intake hasn't been up to snuff anyway.

However, don't kid yourself – every one of these problems or complaints can *also* be caused by something *other* than dehydration – sometimes by something very serious. While you can feel safe prescribing "extra water" for yourself, if drinking more doesn't solve the problem – or if it's a problem that you have pretty much all the time, regardless of how much you drink — check it out with your physician.

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