# Back on a BIKE

Getting a Handle on a New Ride



With good weather upon us, riding a bicycle is an activity that amputees can enjoy. Cycling provides a good cardio workout and a way to enjoy your neighbourhood. An easy ride around your community is a great low-impact activity that is easy on your joints, helps increase muscle strength, and develops coordination and balance. Here are a few tips to get you back on your bicycle this summer.

## Check with your physician, therapist or prosthetist.

It's always a good idea to check with your primary care providers – physiatrist, physical therapist and prosthetist – before starting a new activity. They'll advise on possible medical conditions like joint health or heart and vascular issues that you should be aware of before starting the activity. Get an overall health check to make sure you are healthy enough to ride a bike.

Next, check with your prosthetist to make sure that your prosthesis can handle the repetitive pedaling or cycling motions. Ask your prosthetist about what you should watch out for during or after cycling with regards to socket fit, skin friction, redness, blisters and so on, to make sure that your residual limb stays healthy. He or she may also check the alignment of your prosthesis to ensure that it is optimized for riding a bike. For upper-limb riders, assess how your straps fit in the riding position.



#### Try a stationary bike.

Once you've been given a heathy "all clear" to ride a bike, try out a stationary bike at your local community centre or your own gym if you belong to one. Or ask your physiotherapist or prosthetist if you can try a stationary bike at their clinic or centre. This will give you an opportunity to feel what it would be like to pedal and more importantly, determine your riding pace so you don't

overwork yourself on your first ride. Ride the stationary bike at a moderate pace, increasing gradually to a comfortable cadence. Do not go into a race speed as that is a tumble waiting for a place to happen once you are on the road. Learn your safe pace to enjoy a safe ride.

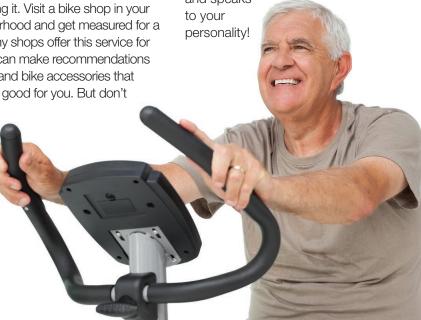


#### What you'll need.

• Bike. If you had a bike prior to your amputation, you can likely ride the same one. If you don't own a bike, shop around. Ask biking friends about their bikes and their experiences with different ones. Bike costs vary from as little as \$200 for a low-end one (usually your department store brands) to thousands of dollars for specialty cycles. Decide on the type of riding you'll do, and where you'll ride the bike before purchasing it. Visit a bike shop in your neighbourhood and get measured for a bike. Many shops offer this service for free and can make recommendations on bikes and bike accessories that would be good for you. But don't

get caught up on the fanciest bike. As long as it is functional, light enough for you to carry, the right size and the right bike for the riding you want to do... a cheap bike can give you several seasons of riding. Once you get more comfortable riding a bike, and are riding more and could benefit from a custom bike, that's the time to invest in an expensive bike.

• Helmet. Safety first! Whether or not it is regulated in your neighbourhood to wear a helmet, wear one anyway for your own safety. You just never know when a fall can happen, especially during your first few times on the bike. In addition to learning how to fall safely, a good bike helmet adds more security and protection. Make sure the helmet fits well, and that it is easy to put on and take off. There are many options and many styles. Pick one that both protects and speaks



• Comfortable clothing. You don't have to get fancy. Wear clothes that are comfortable. Shorts will do but if you prefer to wear pants, make sure that your movement is not restricted while pedaling, and that the fabric will not get caught in the gears when pedaling. Use a rubber band to secure your pant leg near the ankle to prevent getting caught in the gear or chain.



#### Pedals and pedaling.

Lower-limb amputees may experience problems placing a prosthetic foot on the pedals at first. If you are not confident with where your prosthetic foot is in relation to the pedal, you may experience some difficulty in starting to pedal the bike. Don't get frustrated if you don't master this right away. Over time, with practice, you'll come to know where and how far the bike pedal is in relation to your foot.

Another issue for lower-limb amputees is keeping your prosthetic foot/feet on the pedals. Prosthetic feet tend to slip off. Sometimes, because of your alignment, you may hit the pedal crank with your heel forcing your foot to slide. Again, don't



get frustrated. You will figure out how to position your foot on the pedal and you'll become more aware of when you are starting to slide off and adjust your footing to avoid it.

One solution to consider is securing your foot, or feet, with cycling shoes that clip into the pedal. This will allow you to ride more securely. But getting on and off of the bike with toe clips requires time and practice. Practice in a safe area first before going on the road with clip-on shoes to make sure you can get in and out of the clip safely.

### Handlebars and upper-limb attachments.

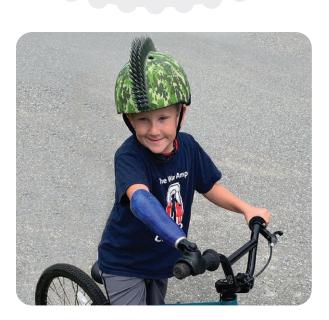
There are various cycling aids and attachments available for upper-limb amputees depending on the type of handlebar (visit www.trsprosthetics. com). Some upper-limb amputees use special sockets, or semi-sockets, or even bar attachments directly on the bike's handlebar to steer and balance the bike or use the breaking devices. It is best to see your prosthetist to assess whether you need an attachment or modification of the bike's handlebars for your use. You may need to take it to a bike shop to modify the handlebar.

Key adaptations for upper-limb amputees pertain to braking and gear shifting. One recommendation is re-cabling the brakes to operate both from one lever. For gear shifting, there are a combination of modes to operate the front and back gears independently — a finger- or thumb-trigger mechanism for the front and a rotating handlebar grip to shift the rear stack. You can also find integrated gear shifters that combine front and back controls into a single package. There are also steering dampers which reduce the bicycle's hair-trigger responsiveness and simplifies shifting, braking and steering with a single hand.



## Stumps and Cranks An Introduction to Amputee Cycling

By Sonia Sanghani



Riding a bike can be very rewarding in many ways. It's an activity that you can enjoy with your family and friends or one to change up your exercise routine. It takes some practice and requires some adapting to get comfortable, but it's definitely worth the effort. Riding a bike is a great way to enjoy the outdoors. And as it is said: "It's just like riding a bike... you never really forget how."

#### **BE SAFE!**

Disclaimer: By participating in any exercise you understand that you do so at your own risk, are voluntarily practicing these activities, assume all risk of injury to yourself, and agree to release and discharge thrive magazine and it's author from any and all claims or causes of action. Check with your rehabilitation team before performing these exercises.

