

AMPLITUDE

POWERFUL, PRACTICAL, AND POSITIVE LIVING WITH LIMB LOSS.

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REPRINT

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TIPS

for

Getting the Best Results From Your Prosthesis

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PROSTHETIC DEVICES ARE WELL-DEVELOPED TOOLS that can greatly benefit amputees. For best results, it is essential that you and your prosthetist choose the correct device and that you use it properly. If these conditions are not met, serious problems, such as pain, skin breakdown, infection, back and joint issues, muscle strain, or other injuries, can result. The following tips should help you prevent or minimize such problems.





Dozens participate in the Össur Running and Mobility Clinic presented by the Challenged Athletes Foundation in New York. Images courtesy of Össur.

Right: Amputees participate in the Össur Running and Mobility Clinic with Bob Gailey, PhD, PT, left.

Below: From left: Gailey, Andrew Fleury, and a local clinical volunteer at the Össur Running and Mobility Clinic.



Use the correct prosthesis for your abilities, lifestyle, goals, and the specific activities you want to do. Carefully consider what you want to accomplish, and talk to your prosthetist about the type of prosthesis that is best for you. The most expensive or most high-tech prosthesis will not always be the appropriate device, but using a low-cost, low-tech prosthesis when it's not right for your situation can also be a problem.

If you can't afford the device or devices your prosthetist recommends, charitable organizations, vocational rehabilitation agencies, or other

sources may be willing to help you get what you need. Visit Resources on the Amplitude website (www.amplitude-media.com/Resources/Links) for information on such organizations.

Make sure that your prosthesis fits and is properly aligned.

If your prosthesis is too loose, your residual limb will move around inside it, and your control over it will be diminished. Also, friction between your prosthesis and your skin can cause skin damage, pain, and a potentially dangerous infection. If your prosthesis is too tight, it can cause pain when you walk, run, or do

anything that causes your muscles to flex.

Alignment of the prosthesis refers to the positioning of its components (for example, the socket, knee, and foot) in relation to each other to provide the best comfort and function. When your prosthesis is properly aligned, your foot will rest flat on the floor, and your knee should bend freely. If your prosthesis is improperly aligned, it can cause discomfort or difficulty walking. These are things that can change as you get stronger and learn to use your prosthesis better. ➔

➔ Your prosthesis should be comfortable and should not cause pain. If it doesn't fit or isn't properly aligned, ask your prosthetist to adjust it.

Protect your residual

limb. The solution for protecting residual legs or arms varies according to the individual. You might need socks, liners, creams, lotions, or other products to control the fit of your prosthesis as well as the temperature and perspiration of your residual limb inside the prosthetic device. Ask your prosthetist to help you find the best solution for your specific situation. Also, learn how to clean your residual limb and the inside of your socket to prevent skin breakdown and potential infection.

If you have diabetes, you'll need to be especially careful about protecting your residual limb. Any blister, tear, or damage to your skin can lead to an infection, making it difficult to wear

your prosthesis until the skin heals. If the infection worsens, it could lead to additional problems.

Get the physical therapy you need to be able to use your prosthesis optimally.

If you have a lower-limb amputation, improving your gait will help you avoid hip and back injuries, and improving your balance will help you avoid falling. If you do fall, knowing how to fall more safely will help you avoid or minimize injuries. Ask your prosthetist and physical therapist if they can teach you these skills or know someone who can.

In addition to that training, classes like the free mobility clinics offered by Össur and the Challenged Athletes Foundation (CAF) (www.ossur.com/prosthetic-solutions/ossur-mobility-clinics) offer the opportunity to learn to walk and run correctly and safely.

These classes are scheduled in various regions of the country throughout the year.

Keep your body healthy and strong.

Good endurance and strength are essential for any amputee who uses a prosthesis and wants to avoid musculoskeletal injuries and the resulting pain. Studies show that walking with a prosthesis can require much more energy than walking with an anatomical leg. Bilateral lower-limb amputees who use two lower-limb prostheses require even more energy. Likewise, the use of body-powered prosthetic arms can put a lot of stress on the back, shoulder, and arm muscles.

When you use a prosthesis, you are also at risk for overuse and/or impact injuries to the opposite arm or leg since you may use it more to compensate for your lost limb. Having strong limbs and core (midsection) muscles ➔

PROSTHESIS-RELATED SOLUTIONS GIVE BOMBING SURVIVOR HOPE



From left: Donna Jackson (Bradley's friend), Eric Kimsey, BOCF, Bradley, and Billy Brimblecom Jr.
Image by Fairlight Hubbard.

When Daina Bradley was featured on *The Today Show* in a story marking the 20-year anniversary of the Oklahoma City bombing, she was shown limping badly on a prosthetic leg.

Daina and her sister, both of whom were at the federal building on that tragic day in 1995, survived, but their mother and Daina's two young children were killed in the blast. Beyond the emotional scars the sisters have carried for two decades, there have been lasting physical effects as well. ➔

➔ Daina, who was pinned under debris, had to have her right leg amputated above the knee to get free from the rubble. For years, she has been dealing with an outdated and ill-fitting prosthetic leg because she was unable to get a new one. The prosthesis wasn't working properly, and she couldn't bend the

knee. As a result, her mobility was unnecessarily limited and her body was suffering.

At the end of *The Today Show* segment, the hosts noted that maybe someone would see the program and offer to help Bradley.

That someone was Billy Brimblecom Jr., executive director of the Steps of Faith Foundation, a nonprofit

organization dedicated to providing prosthetic care, hope, and comfort to amputees needing financial support.

After being sent a link to Bradley's story, Brimblecom felt compelled to help.

"I was simply very moved by her story and knew that we needed to do everything we could to make sure she's taken care of," says Brimblecom, who is also an above-knee amputee as a result of Ewing's sarcoma and understands the need for proper ➔



Bradley takes her first steps with a new prosthesis and socket as Hanger Clinic prosthetist and clinic manager Kimsey, watches. Images by Billy Brimblecom Jr.



"WE LEARNED A LOT FROM DAINA AND HER AMAZING STORY. I TRULY FEEL THAT EVEN AFTER ALL WE DID FOR HER, WE GOT MORE OUT OF IT THAN SHE DID WITH ALL SHE SHOWED US ABOUT LIFE." — Billy Brimblecom Jr.

➔ can help prevent or minimize injuries. In some cases, orthotic devices can also be used to lend support to your limbs.

Maintain a healthy, consistent weight. If your endurance, muscles, and joints are already stressed because you are an amputee, extra

body weight will exacerbate these problems.

If you are overweight and plan to lose weight, make sure to discuss your plans with your prosthetist. Since weight fluctuations will affect how your prosthesis fits, you'll need a strategy to deal with them until your weight is stabilized.

Effective and safe use of your prosthesis is essential for getting the most benefit from it and avoiding prosthesis-related problems. Start by getting the right prosthesis. Then get its fit and alignment, your technique for using it, and your body at the optimal level so that you can do the things you want to ➔

➔ On June 23, Steps of Faith brought Bradley to its office in Nashville, Tennessee, to give her the new, better-fitting, higher-functioning prosthesis she needed.

“We made some calls and were able to bring in several folks to help her beyond her prosthetic needs,” Brimblecom says, noting that Bradley’s body and muscles needed treatment after wearing a prosthesis that didn’t work properly for so long.

“She received two deep-tissue massages from Franklin Massage Center, two chiropractic adjustments from Batson Chiropractic Group, a personal training fitness session from Life Fitness Academy, and a new pair of shoes donated by Fleet Feet Sports.”

Bradley stayed in Nashville for four days, and her travel and hotel were also provided as a donation from Steps of Faith. Hanger Clinic and Steps of Faith covered all the costs for Bradley’s new leg.

“The difference a new prosthesis will make in her life will be felt not just physically, but mentally and emotionally as well,” says Brimblecom. “We couldn’t wait to help add a new, positive chapter to Daina’s already amazing story of survival, hope, and perseverance.” 🏆

For more information about Steps of Faith, visit www.stepsoffaithfoundation.org. For information on other organizations that assist amputees with prosthetic devices, visit www.amplitude-media.com/Resources/Links.



Bradley after her personal training session with Terry Barga, right, of Life Fitness Academy.

➔ do without hurting yourself. Keep in mind that preventing problems is much better than trying to fix them later. Since your prosthesis is a key to your ability to accomplish your daily activities and personal goals, your happiness may largely depend on your success in using it. 🏆

This article is for general informational purposes only and does not constitute medical advice. Always seek the advice of a qualified healthcare professional for your specific situation.