



ottobock.

Rehabilitation for Leg Amputees

Individual training after your prosthetic fitting

Quality for life

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Rehabilitation in the Ottobock Competence Centre

Welcome to our Centre!

In this section, you will learn what to expect during the rehabilitation process within our Centre. Before the prosthetic fitting and rehabilitation process begins, our expert team will examine your physical situation in detail with you. Together you will discuss and set your personal goals, which helps to design your individual rehabilitation programme.

At this stage the prosthetic fitting process starts. Your personal certified prosthetist will accompany you during this whole fitting process. At the end of

this you will have a prosthesis suited to your individual needs. With the support of your therapist, you learn the first crucial points about the use of your prosthesis. This includes how to put on the prosthesis and take it off properly, a stable stand on both legs, standing up and sitting down as well as balance and gait training. The prosthetic components selected for you play a major role. Your rehabilitation programme is tailored to these components.

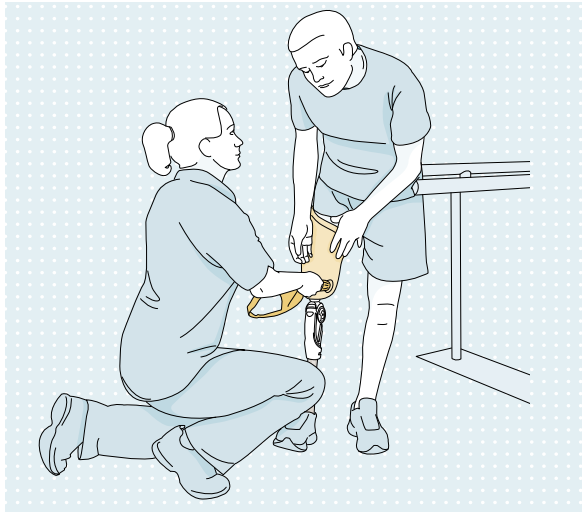
Now you are ready for the training with your prosthesis!

1. Using the Prosthesis

1.1. Correct Donning and Doffing

Putting the prosthesis on and taking it off independently is important for daily use. Your family may have to help you at first. However, the goal is for you to learn how to do this independently.

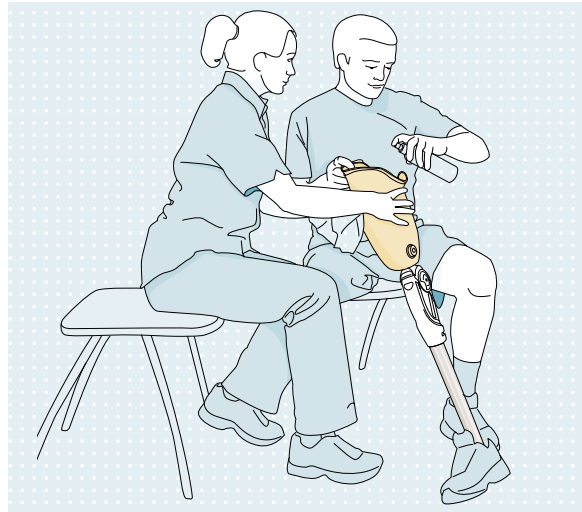
There are various ways to put on your prosthesis depending on the type of prosthesis and the characteristics of your residual limb. Your therapist will show you what is best for you.



1.2. Cleaning the Prosthesis

You have already learnt how to care for your residual limb. The prosthesis also has to be cleaned and cared for on a daily basis. In order to remove perspiration and skin particles, wipe the inner socket of the prosthesis with a damp cloth. A clean contact surface helps preventing skin irritation.

If you wear a liner, please care for it daily according to the instructions for use.

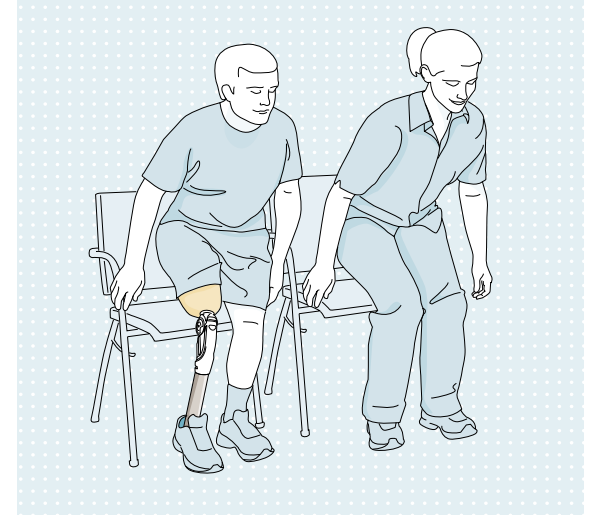


1.3. Sitting Down and Standing Up

Once you know how to put on the prosthesis and take it off, sitting down and standing up are the next possible activities you will learn.

The required exercises depend on the components used in your prosthesis. For example, it is possible to put weight on both legs equally while sitting down with an above knee fitting that includes the C-Leg® knee joint. This results in significant relief for the sound side and your spinal column, which helps prevent premature excessive strain problems.

You should also put the same amount of weight on both legs when sitting down and standing up with a below-knee prosthesis for the same reason.



2. Gait Training

2.1 Objectives of Gait Training

Once you are generally confident in handling the prosthesis, actual gait training can begin. The objectives are as follows:

- Improving balance and coordination
- Sufficient weight bearing on the prosthetic side
- Anatomical position of the pelvis and upper body
- Walking securely with the prosthesis

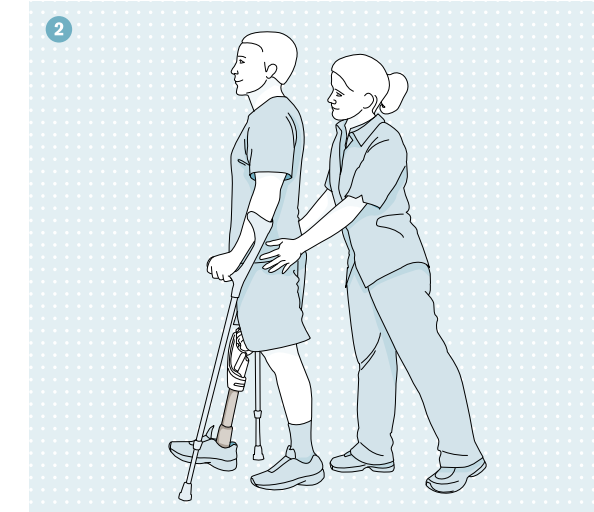
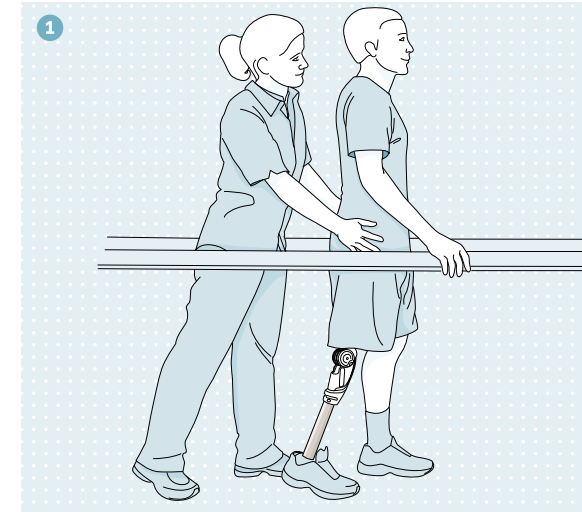
You should also continue strengthening your muscles because strong muscles are essential for a stable body posture while walking.

2.2. Walking on Level Surfaces

The first step is to learn how to shift your body weight between parallel bars (1). It is important not to support all your weight with your arms and sound leg; you should learn to load the prosthesis too.

As soon as you can walk between parallel bars, unsupported gait training will follow (2). The first objective is to gradually reduce the use of walking aids. This is achieved through a combination of correct walking technique, in addition to strengthening the torso musculature.

Avoiding gait deviations is part of all gait training exercises. At first, your therapist is always at your side to help you if required. Over time, the amount of assistance you will need is reduced.



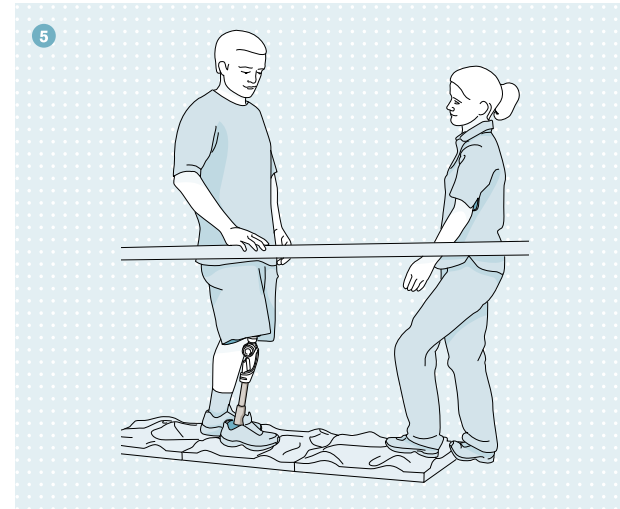
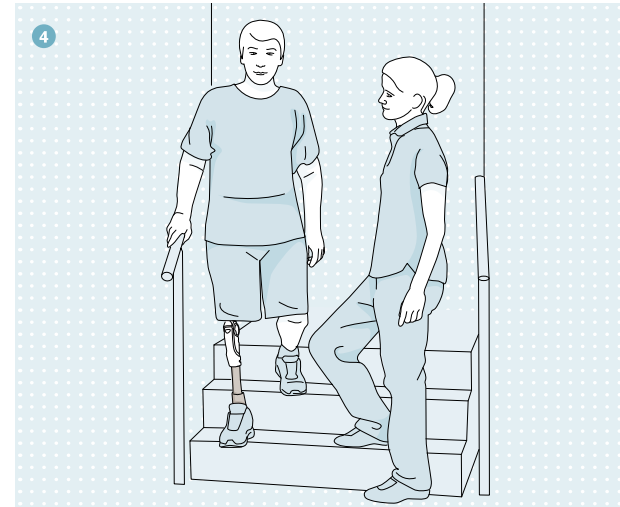
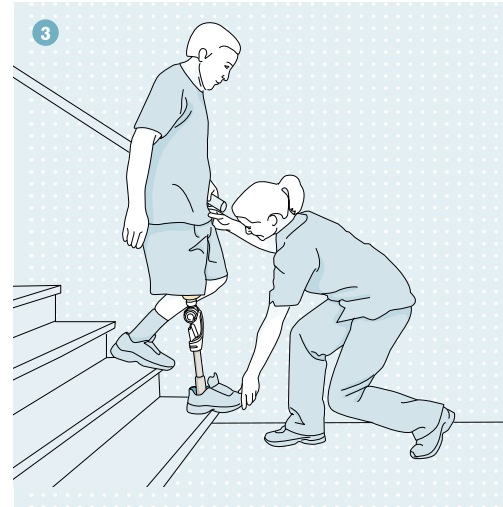
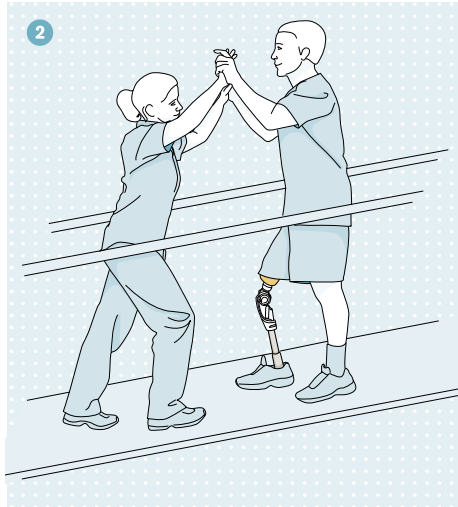
2.3. Walking on Ramps and Stairs

You will always encounter obstacles in daily life, e. g. stairs outside or in the home and a ramp leading up to the garage. The components of your prosthesis are crucial in determining how to handle these obstacles, as different prosthetic knee joints require different walking techniques. For example, correctly positioning the foot or using the handrail can play an important role (1-4).

2.4. Terrain Training

You should also be able to move safely with the prosthesis on uneven terrain. This is why you and your therapist extend the skills you have learned with outdoor exercises (5). For example, steps of various heights and depths are good challenges to conquer.

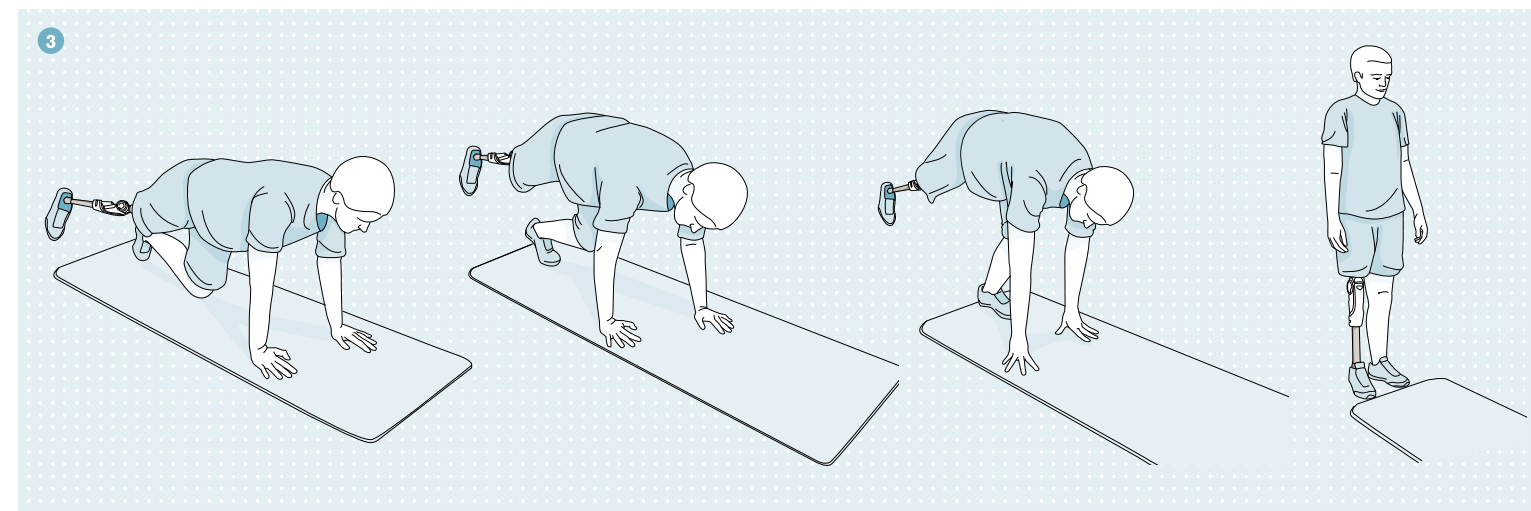
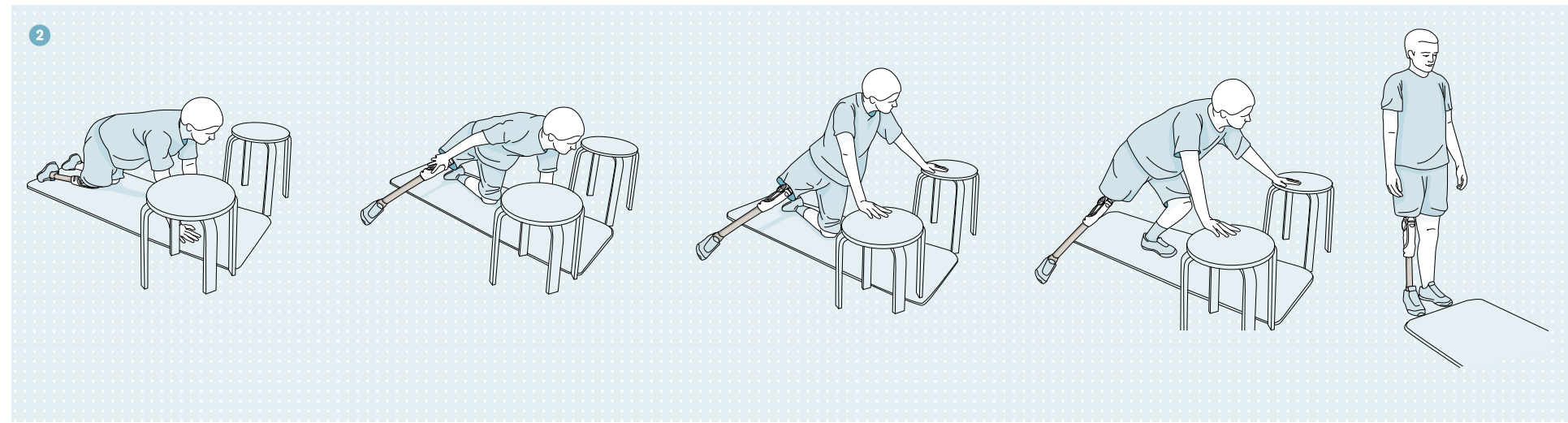
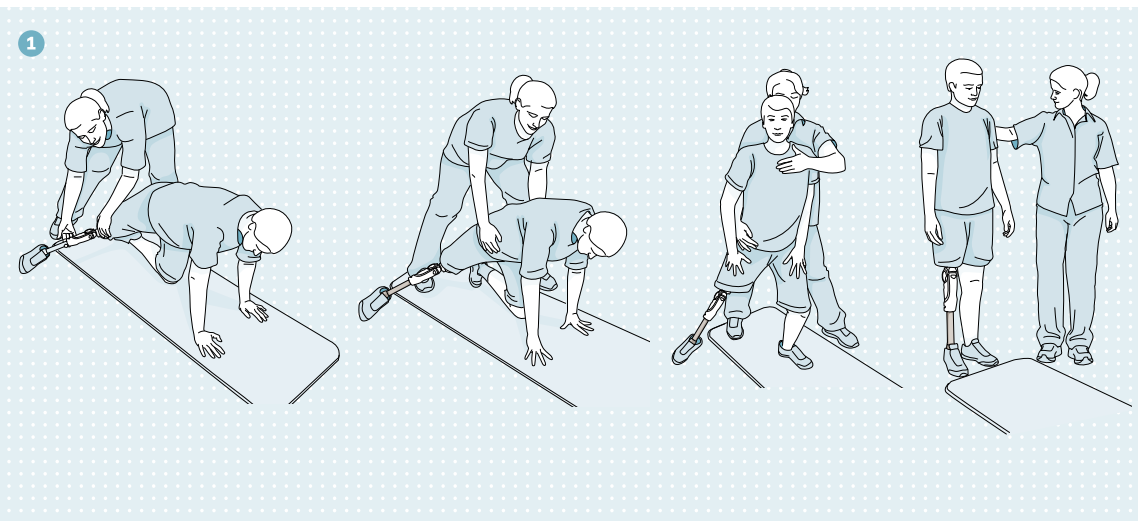
You will learn how to handle such daily circumstances.



2.5. Standing up from the ground

An important exercise with your new prosthesis is learning how to get up and down from the ground. You will practice how to move securely towards the ground and stand up again (1). It will help you remove obstacles from the ground or pick them up.

According to your physical status and amputation level you will learn how to rise from the ground with a crutch, chair (2) or even independently (3).



Every exercise is crucial.
Every day you might make progress.

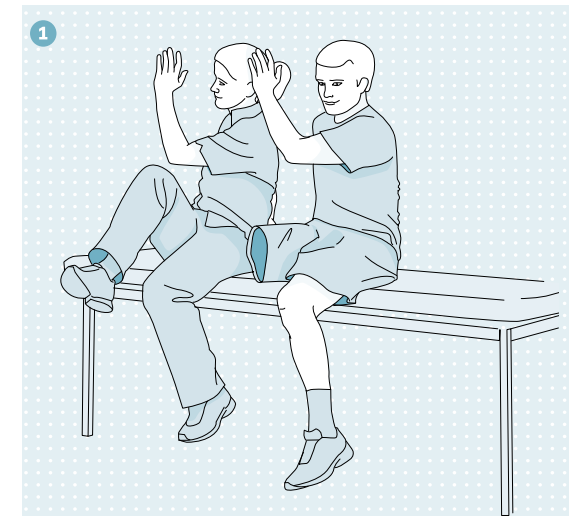
3. Muscle Strength Training for Torso and Pelvis

3.1. Stabilisation

Secure walking does not only require the leg musculature but also the torso and pelvis musculature are of big importance. They allow you to walk freely and maintain a good posture.

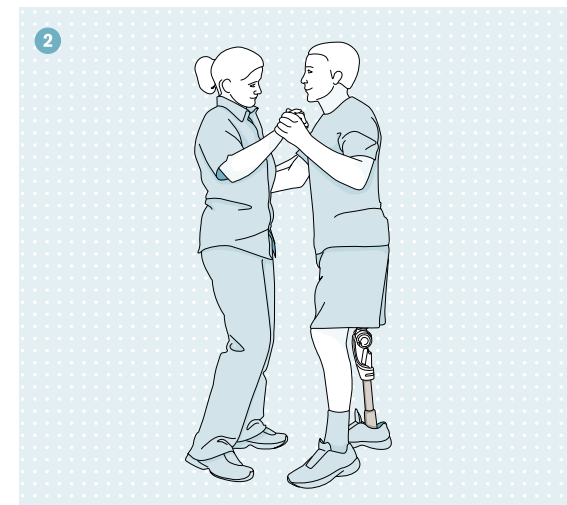
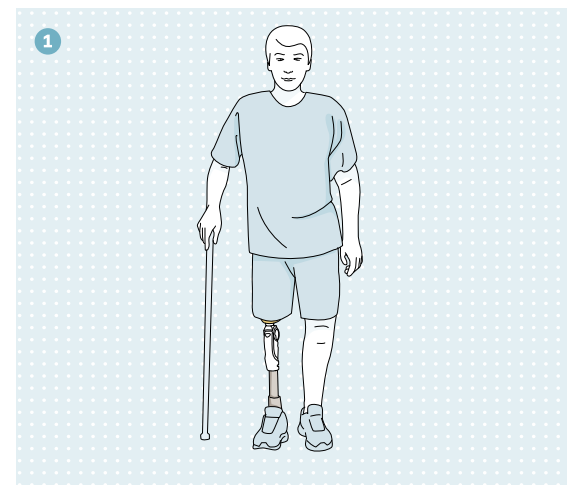
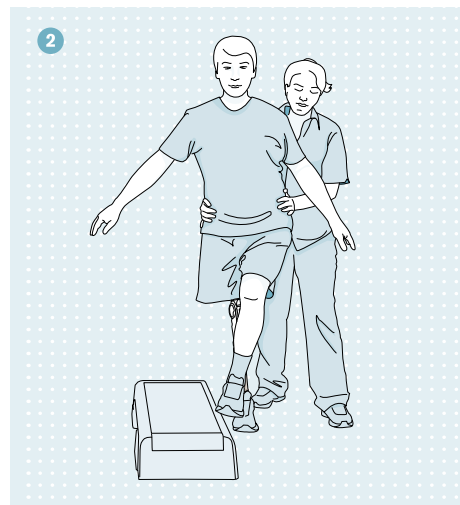
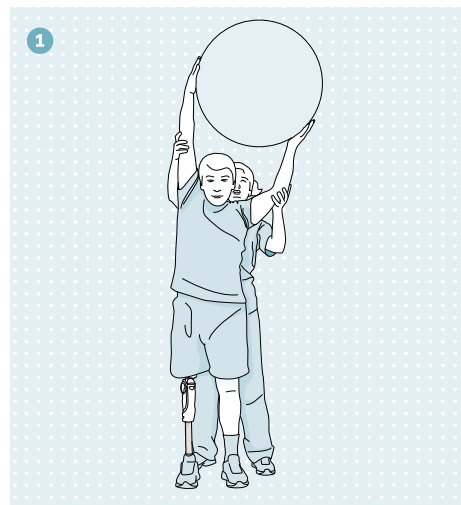
These two types of muscles are often severely weakened following an amputation and have to be trained (1).

Further therapeutic exercises teach you how to stand and walk securely on your prosthesis.



3.2. Balance and Coordination Training

In addition to muscle training, balance and coordination training with the prosthesis should also be undertaken. Accessories such as a swiss ball, balance board, seesaw and gymnastic bench are suitable for these exercises. Balls or balloons can also be used (1,2). Playing soccer and dancing can be used for further coordination and dexterity training.



3.3. Assistive Device Consulting

If you experience difficulties with your new prosthesis while performing certain activities, various assistive devices may be used to increase your independence.

Your therapist can determine whether this is an option for you.

However, the "less is more" rule applies to all devices; the fewer devices you need, the greater your day-to-day independence.

3.4. Leisure and Sports

Your everyday prosthesis should allow you to pursue active leisure activities. However, this prosthesis is usually not designed for extremely strenuous sports such as jogging. Special sports prostheses are generally available for this purpose and for many other sports. Please talk to your prosthetist.



Your requirements are our goals

Besides having an appropriate device, therapy and rehabilitation are very crucial for your fitting success. Through our pre and after fitting therapy programmes we strive to fulfill your needs and expectations.

We hope we have provided you with comprehensive information and wish you great success in your rehabilitation.

Should you still have any questions or doubts please feel free to contact us anytime. In our Competence Centre we offer you a continuing care and will be pleased to welcome you in our centre again.

Please contact us for an individual consultation

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