

**ottobock.**

# Everyday life with MyoFacil

Your individual training concept



Quality for life



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# Training with MyoFacil

## The way to more freedom of movement

Gripping, holding, lifting – hands are essential to our everyday lives. They support us and establish connections to other persons. We can give signals with them or hold on to things. The MyoFacil myoelectric forearm prosthesis offers you extensive mobility. It responds to your muscle signals and can therefore be controlled in flowing movements. With some training, you will quickly learn to use the hand and integrate it in your daily routine as a matter of course.

On the following pages, we want to accompany you on the way to readily using the MyoFacil forearm prosthesis: from the time shortly after the surgical operation, to preparing for the prosthesis, to using it in everyday life. We want to help you get the best out of your MyoFacil prosthesis. Perhaps you will also have the help of a therapist, your family or friends. In any case, this brochure is an important companion for you on your way to more mobility.

### **Benefits of the MyoFacil prosthesis**

- More natural appearance
- Relief of the contralateral side for holding and grasping
- Maintaining body symmetry and body balance
- Preventing damage to the spine
- Reduction of phantom pain
- Positive influence on the feeling of self-worth
- Easier social interactions (family, friends, job, hobbies)
- Greater independence and improved quality of life

# MyoFacil at a glance

## The components of your forearm prosthesis

### Inner socket

The inner socket is fabricated according to an individual plaster cast. It connects the prosthesis to the body.

### Outer socket

The outer socket is the external frame of the prosthesis. The shape is modelled after a natural forearm.

### Rechargeable battery

The battery supplies energy to the electrical drive integrated in the prosthesis.

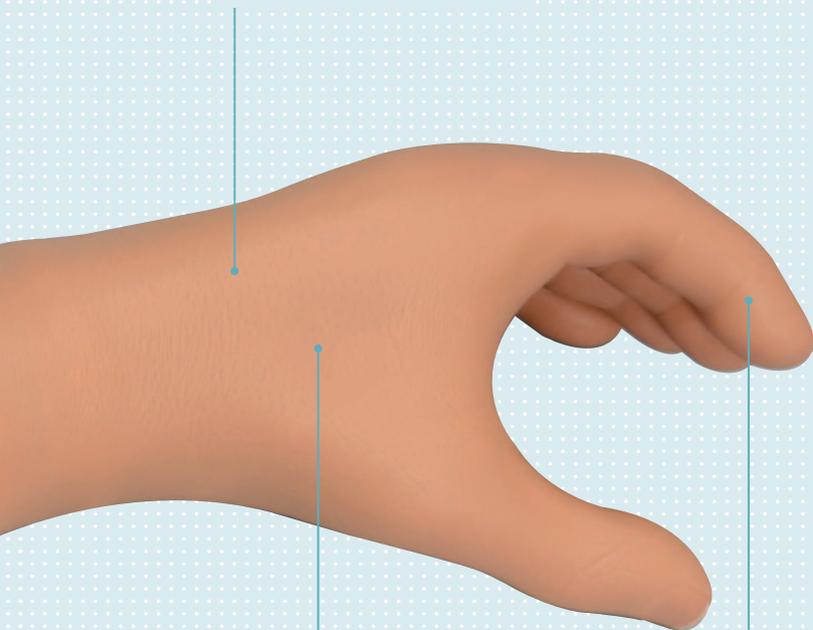
### The Electrodes

recognise the minimal electrical currents from your muscle movements, and convert them into signals to control the prosthesis.



### Hand switch

The hand can be switched on and off with a slide switch, no matter how far it is currently opened.



### Hand

You open and close the hand with your own muscle signals.

### The glove

covers the hand to keep out dirt, and gives the forearm prosthesis a natural appearance.

### How your myoelectric prosthesis works

You control the MyoFacil prosthesis by means of electrical signals. These signals can be measured on the skin surface as soon as you tense certain forearm muscles. Sensors in the socket, so-called electrodes, pick up the signals so that they can be converted and ultimately control the motor that moves the hand. This is how you open and close the hand.

# The prosthetic fitting

The individual steps for using MyoFacil

The application of the MyoFacil myoelectric forearm prosthesis takes place in several steps. In the ideal case, you are supported by a team including a doctor, therapist and technician. Family and friends provide valuable support as well. Accept this help, since it is an important element on the way to enhanced quality of life.

In this brochure, we want to inform you about the therapy that prepares you for wearing the prosthesis. And about the rehabilitation phase, in which you learn how to use the prosthesis.



## Therapy

Therapeutic measures follow with the purpose of preparing you for a prosthetic fitting.



## Examination

A personal interview and thorough physical examination are carried out at the beginning of a fitting.



## Continuous control

The fitting team maintains ongoing contact with you.



## Fitting recommendation

This is where you learn which prosthesis is most suitable for you and what personal objectives you can pursue.



## Taking measurements

The prosthetist records your body measurements and takes a plaster cast.



## Fabrication

Your prosthesis is individually fabricated in the next step.



## Trial fitting

During the trial fitting, the prosthetist adapts the prosthesis to your individual needs.



## Rehabilitation

In this phase you learn how to correctly handle the prosthesis in daily life.



## Quality control

You discuss your ability to use the prosthesis with the rehabilitation team.

### Physical Training



# Therapy

## Preparing for the prosthesis





In order to ensure that you are fully satisfied with the prosthesis, it is important for the fitting to be tailored to your wishes, needs and situation in life. The following aspects play a crucial role: the cause of the amputation or malformation, initial or follow-up fitting, unilateral or bilateral fitting, your social environment, your occupation, your interests and hobbies. Your motivation is crucial as well: how much training do you want to do, what are your objectives for progress?

Coordinate this with the people supporting you. Friends and family in particular can help you if you cannot get the assistance of a therapist all the time.

Before training actually starts, a detailed diagnosis is required; general and specific information about the affected side of the body will be asked for and subsequently verified.

#### Anamnesis and diagnosis

<b>General information about the person</b>	Body weight, body size, date of birth, dominant hand, occupation, recreational activities, environment, locomotion, etc.
<b>Information on the affected side</b>	One or both sides, residual limb length, etc.
<b>General state of health</b>	Heart disease, circulatory disorders, dizziness, allergies, pain and other complaints, other diseases, limitations of functionality, medical aids, medications, etc.
<b>State of health on the affected side</b>	Amputation or congenital deformity (dysmelia), pain, phantom pain, residual limb load bearing capacity, sensitivity, soft tissue coverage, scarring, joint diagnosis, contractures, muscle status, volume, etc.
<b>Abnormalities of the contralateral side</b>	Pain, sensory disturbances, skin condition, joint diagnosis, muscle status, etc.



The following therapy measures prepare you for wearing your prosthesis. This will make it easier for you to use the prosthesis optimally later on. We inform you about oedema therapy, skin and scar care as well as therapy in case of phantom pain.

Initial therapy measures begin shortly after the amputation. The wound is dressed and prepared for wearing a prosthesis. As soon as the surgical wound has healed well, the actual prosthetic fitting and rehabilitation process begins. In most cases, this will take up to six months.

Your personal involvement becomes more and more important in the course of therapy. Should you notice that certain measures listed in this brochure are not being carried out in your case, please talk to your therapist or technician. Your therapist or technician can evaluate whether these measures are advisable for you.



## Oedema therapy

Swelling of residual limb tissue after the surgical operation is expected. This swelling (oedema) is a normal reaction to the operation. It usually subsides after some weeks.

The wound is only dressed loosely until the sutures are removed. Initially, pressure must not be applied to the residual limb. The circumference of the residual limb should be measured regularly in order to assess whether the swelling is going down. Please note that the same measuring points must be used and the results should be documented on measurement forms. This makes the results comparable and changes in the swelling can be identified.

If swelling of the residual limb lasts a long time, the wound cannot heal as well so that more time passes before a prosthesis can be fitted.

### **Positioning**

Correct positioning and body posture is important immediately after the surgical operation. It helps prevent muscle shortening and stiffening of the joints. The swelling of the tissue can go down more readily.

Position the elbow in the extended position as far as possible. Under no circumstances should it be flexed for an extended period of time or elevated – e.g. on a cushion – since the muscles will otherwise shorten and residual limb mobility will later be reduced.

### **Mobilisation**

Move your residual limb several times a day in the shoulder and elbow joints. A towel can be used to assist mobilisation in the shoulder joint. This helps to ensure that the mobility of your joints is not lost. Get your therapist or technician to show you the right exercises for you at the respective time during rehabilitation.

### **Early compression therapy**

After the surgery, you will receive a wound dressing which will be changed regularly. Compression therapy with a compression bandage generally follows. The precise point in time should be determined by the attending doctor. The purpose of compression therapy is to reduce the residual limb oedema and prepare your residual limb for your subsequent prosthesis. Residual limb compression helps optimise the adaptation of your prosthesis. It also promotes circulation. This reduces pain and helps improve healing of the scar.

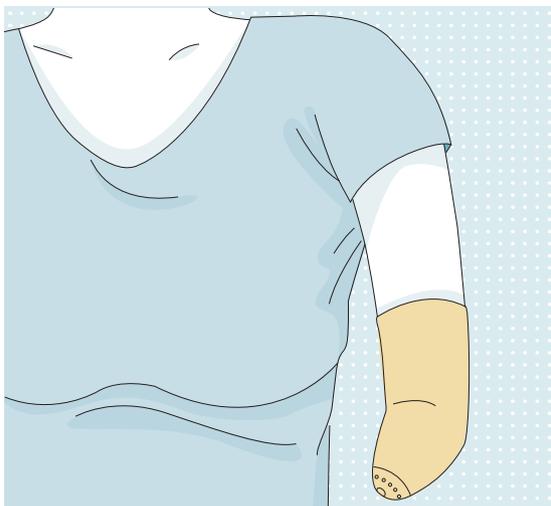
The photos show different possible compression therapy techniques: wrapping the residual limb or wearing a so-called silicone liner.

The fit of the compression bandage/liner can be assessed based on skin colour or temperature. In particular, the bandage/liner must be replaced from time to time in order to check the residual limb in case of circulatory and sensitivity disorders.

### **Compression bandage**

The compression bandage is used to regulate pressure from day to day, or even over the course of a day. Pressure should be greatest at the end of the residual limb and gradually decrease towards the body.

Elastic bandages held in place with surgical tape are used here. Since this method requires a certain amount of practice and experience, the bandage should either be applied by authorised personnel or you should be instructed in the proper wrapping technique by nursing staff. It is important to avoid constriction of the residual limb by the bandage; you should not experience pain.



### **Silicone liners**

While silicone liners are quick and easy to use, they cannot be adapted as individually as wrapping. They are available in a variety of prefabricated sizes.

In order to generate the most consistent, even pressure possible at the amputation site, it is important to ensure that no air is trapped at the residual limb end when putting on the liner!

Initially, you may experience increased perspiration inside the liner. This problem will self-correct after you have worn the liner for some time. In order to prevent possible skin irritation, you can apply Ottobock Derma Prevent to the skin of the residual limb near the edge of the liner. Moreover, cleaning the silicone liner after each use is also very important.

For more information, please consult the liner instructions for use.

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- ▶ After the surgical operation, swelling of the tissue must first subside. This is accomplished with a bandage or liner and the extended positioning of the elbow.

Move your residual limb several times per day.

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### **Further compression therapy**

As soon as the residual limb volume has stabilised over an extended period of time – that is, when the measured circumference of your residual limb is no longer changing much – the prosthetic fitting process can begin. Compression should be continuously maintained up to this time. Your therapist or technician will show you or your family how you can do this yourself.

If you only wear the prosthesis for short periods of time at the beginning of the fitting process, you should continue wearing your compression bandage or liner the rest of the time. Once you are wearing your prosthesis for extended periods of time, additional compression will no longer be required.



## Skin and scar care

### **Desensitising the skin**

The skin on the residual limb is frequently hypersensitive following the amputation. You can help correct this problem: take a soft brush or porcupine massage ball and use it to brush or tap the sensitive area. This decreases sensitivity. You can also rub down the residual limb with a rough towel or washcloth.

Always use materials that are pleasant to you for these exercises and work from the end of the residual limb towards the body.

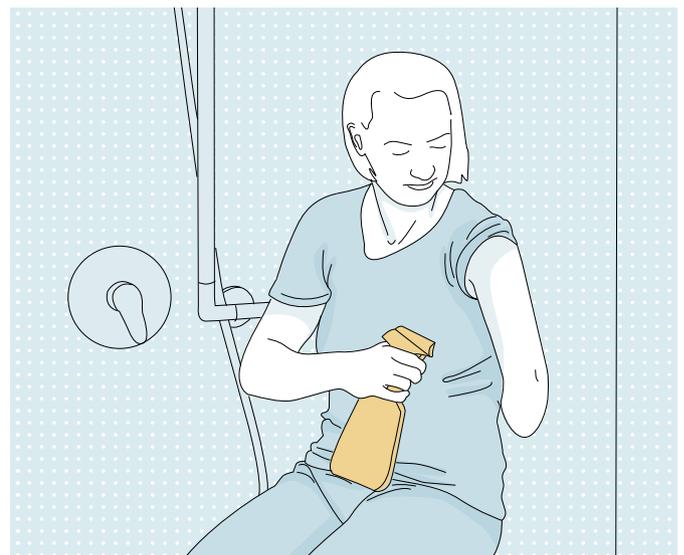
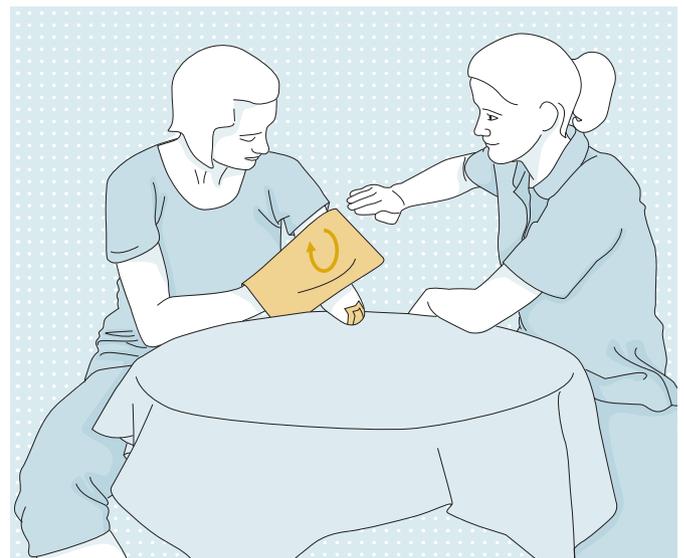
Residual limb hygiene is also very important following wound healing. The residual limb must be washed daily using water and unscented skin-friendly soap. Our Ottobock care products make residual limb cleaning easier.

### Scar treatment

In most cases, the amputation wound closes within the first three to four weeks and a scar is formed. But even if the scar appears to have healed well from the outside and only the colour of the scar tissue changes slightly from this point on, the overall scar healing process takes much longer. Approximately one and a half years will pass before it is fully healed beneath the skin.

You should definitely massage and moisturise your scar regularly from the outset since scar tissue lacks the ability to produce its own oils. Unscented creams are recommended. This ensures that the scar tissue remains soft and elastic while simultaneously becoming resilient. This is required so that you will be able to wear the prosthesis, since proper care prevents residual limb pain from developing in the prosthetic socket during movement.

Early compression therapy is also important to affect scar formation. In combination with the silicone liner, full-coverage compression is the best way to prevent the development of excess scar tissue.



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- ▶ Your residual limb should be made resilient and the scars should have healed properly. This prevents pain in the future when wearing the prosthesis.
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## Phantom pain and mirror therapy

Phantom pain is a phenomenon commonly experienced by patients following an amputation. While this pain fades over time with some patients, it is more or less permanent for many others. Mirror therapy serves to eliminate or at least reduce this pain. The principle here is once again quite simple: the patient sits in front of a mirror box, the affected arm behind the mirror, and looks at the reflection of the sound side. Then, various movements are performed and observed in the mirror.

The effectiveness of mirror therapy against phantom pain is probably due to the altered body representation of the limb in the brain. With mirror therapy but also by increased movement of the affected side, it appears that the changed body schema in the brain can once again be “normalised“ in some patients.

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- A simple exercise against phantom pain: imitate your second arm by mirroring your sound arm.
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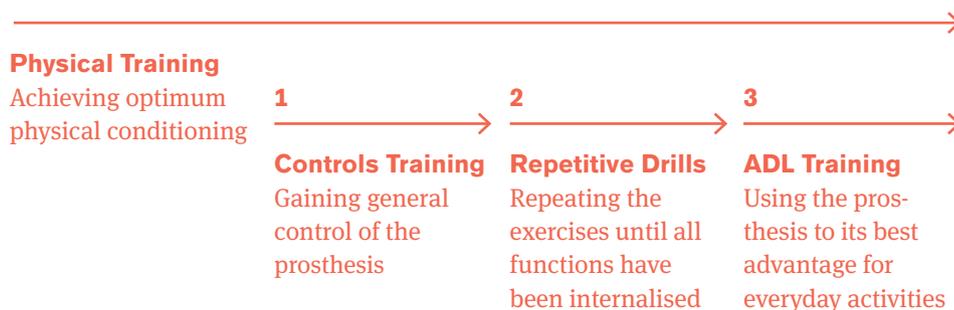
# Rehabilitation

## Using the prosthesis

Success in three phases: we have developed a training concept with several phases in order to optimally prepare you for everyday life. You can individually adapt it to suit your requirements.

In every phase of the training concept, you should practice until you feel confident and can use your prosthesis reliably. It is important to begin the training units with simple exercises, only transferring the applications to everyday life gradually. Do not demand too much of yourself at the outset. Your success will come gradually. You have to be patient.

Physical training goes beyond the three phases. It is not related to wearing the prosthesis and depends on your physical condition. Coordination, balance and dexterity as well as strengthening and stretching the muscles are important here.



# Training principles

## Finding the right way

Before training begins, we would like to give you a few tips. This is because you can tailor training to your needs. Watching your tempo is important. When you choose the exercises and objectives, focus on your interests, your occupation and hobbies.



### **Training duration**

Prosthesis training should definitely be adapted to your needs. Your experiences, your physical condition, your individual wishes and your personal pace of learning are important factors.

### **Training success**

Repeat the exercises in each phase until you have achieved the learning objective to at least 90 percent and ideally 100 percent. This means that you can perform the exercises precisely and consistently. If you have difficulties in a phase, talking to your technician and therapist is recommended. This allows the current situation to be jointly evaluated, considering which further steps are recommended for you.

### **Training focus**

Observe your overall body posture and how you are feeling throughout the course of training. Are you relaxed and focused during training? Avoid improper postures since they can lead to pain. If you are not yet sufficiently familiar with the exercises, it is better to decrease the tempo somewhat. Train less if you have the feeling that your attention is decreasing.

### **Duration of use of the prosthesis**

As an external body part replacement, an arm prosthesis is an additional weight which many affected individuals perceive as unusually heavy at first. All body structures, especially the muscles, tendons and ligaments adjacent to the residual arm, require some time to get accustomed to the additional weight of the prosthesis. This is why the daily duration of use for the arm prosthesis should be kept low directly after the fitting and then only increased gradually. Next to specific strength and endurance training, your musculature (arm, shoulder and neck musculature) is also strengthened tremendously by wearing and actively using the prosthesis. However, you should avoid overexerting and therefore fatiguing the musculature by wearing the prosthesis too long, especially if you are wearing it for the first time. Maintain a balance between training or wearing the prosthesis and periods of rest when you are not wearing the prosthesis. In doing so, you optimally prepare your body structures for the external weight and will be able to wear the prosthesis all day in the future.

### **Training variations**

Different training variations are available to systematically practice the controlled and precise use of the prosthesis. Give them a try! Ask a family member or your therapist for help. You will notice that you increasingly gain confidence. Here are the versions:

#### **• Initial positions**

It is best to begin the exercises in a sitting position. To increase the level of difficulty, perform the exercises in a standing position, then while walking, and finally while walking on uneven surfaces.

#### **• Support**

You can initially support the prosthetic arm on a table or in your lap.

#### **• Axes and planes**

Perform the exercises in various axes and planes: for example, close to the body and far away from the body, with or without crossing the centre of the body and at various heights – overhead, at the sides of the body or close to the ground.

#### **• Visual verification**

At the outset, you will maintain eye contact with your prosthetic hand during the exercises. In the course of training, attempt to complete the exercises with as little visual verification as possible (“automatic” gripping and releasing – without looking).

- 
- Perform the training with awareness and maintain a proper body posture. Avoid overtaxing yourself! Only proceed to the next step after you feel confident, and try to move naturally with the MyoFacil prosthesis.
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# Physical training

## Building foundations



Torso stability and a strong residual limb are crucial factors for prosthesis control. Physical training before, during and after the prosthetic fitting prevents postural problems, boosts self-confidence and improves your perception of your body. You should begin with physical training even before you receive your prosthesis.

Physical training prepares you for the fitting. However, you also need to continue it with the prosthesis. Always observe the following:

- Body posture
- Coordination and balance
- Strengthening the muscles

### Body posture

Ensure that you consistently maintain a correct body posture during all exercises. Check your own posture as often as possible with the help of the following information – also in a mirror. Over time you will increasingly get a better feel for this and heighten your self-awareness. This helps you achieve a relaxed, comfortable body posture more easily so it gradually becomes a matter of course:

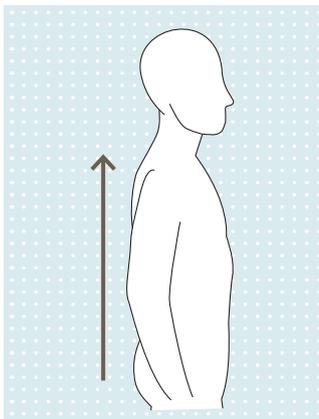
- 1 Is the body posture upright?
- 2 Is the body weight distributed evenly between both legs?
- 3 Is the spine rotated as little as possible or not at all?
- 4 Are both shoulders at the same height?

### Coordination and balance

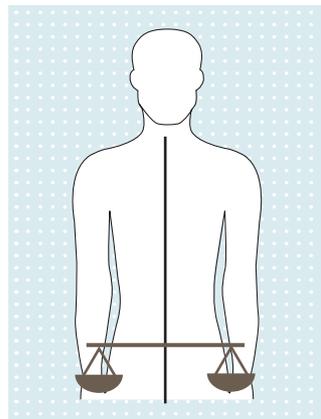
The human body attempts to compensate for the missing weight of an amputated arm. Wearing a prosthesis changes the body schema again, which can also affect balance. Targeted coordination exercises, especially with the help of a family member or your therapist, improve your physical balance. Exercises on uneven surfaces are particularly well suited for this purpose.

### Strengthening the muscles

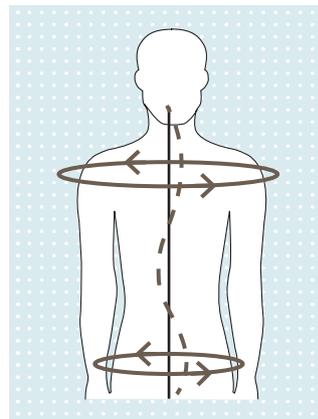
Exercises to strengthen the trunk muscles can, for example, be completed with a stretch strap (Thera-Band). Regular and long-term training is very important in all cases in order to achieve sustained success. Also build up your endurance with the exercises – and participate in sports as well.



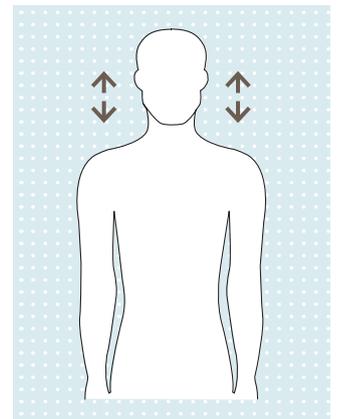
1 Upright, straight posture



2 Balanced stance



3 Avoid rotation of the upper body and spine



4 Shoulders at the same height (avoid raising)

# Training begins

## Stretching the residual limb musculature

The joints and muscles adjacent to the residual limb – the elbow and shoulder joint – should be stretched regularly. If you have trouble moving these joints actively, you can provide passive support with the help of a towel. Maintaining or regaining maximum joint mobility in all directions of movement is very important.



## Improving the dexterity of the sound side

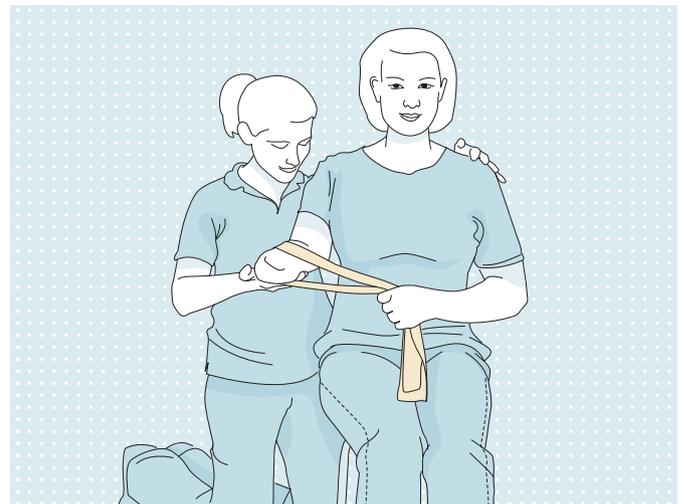
Whether your dominant or non-dominant hand is affected, train your sound side. Fine motor skills, dexterity and strength should be practiced. The more dextrous you are with your sound hand, the greater your independence in performing activities of daily living (e.g. personal hygiene). In particular, you should practice challenging activities such as writing or brushing your teeth until you are fitted with a prosthesis.



## Muscle development training of the residual limb

The objective of development training for the residual limb is to strengthen the musculature. Strength training exercises can be completed with light weights or rubber bands.

For example, the following exercise serves to strengthen the residual limb musculature that will later be used to control the prosthesis: you try to only tighten this musculature without moving the entire residual limb. Here the therapist or another helper initially puts his or her hand on certain parts of the residual limb. This helps you feel which muscle groups you are supposed to activate.



### **Muscle development training of the torso**

Activating your torso is particularly important after the amputation. In doing so, avoid excessive twisting of the spinal column.

Because the weight of the arm is missing, the statics of the spine and perception of the body's centre may be altered. Back strengthening exercises have to be performed in order to avoid malpositions and subsequent pain. A stable torso improves control of the musculature and makes it easier for you to use your prosthesis.

Once you start wearing the prosthesis, its mass results in corresponding weight compensation that counteracts possible malpositions. But if malpositions have already developed, you can perform special exercises to correct this or prevent further progression.

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- ▶ In the course of physical training, you begin to perceive your body more consciously. You prepare the muscles for the prosthesis and ensure an upright posture – an important requirement for the training steps that follow. Physical training should continue even after rehabilitation.
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## Standard exercises in physical training

### Objective

Building foundations – improving your muscular control, strength, coordination and balance.

### Recommendation

#### Position

Have a family member demonstrate various hand positions and imitate them. Do not reach for objects at this point.

#### Methods

Train both without and with the prosthesis.

#### Duration

As soon as you notice that the exercise is easy for you, intensify it – for example by doing more repetitions. Then proceed to the next exercise.

#### Check

Avoid evasive and compensating movements.

### Tip

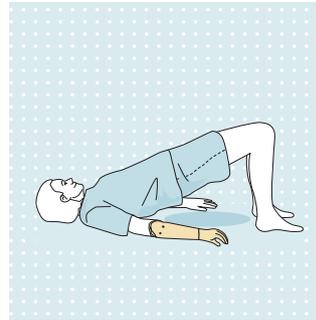
You should train regularly for physical fitness, i.e. also beyond prosthesis training. In order to do so, select exercises that you enjoy.



### Arm/residual limb strengthening

Resistance is gradually built up against the residual limb (e.g. pushing with the hand, against a wall). Contract the musculature against that. Change the direction of resistance: front, rear, lateral from the inside and outside.

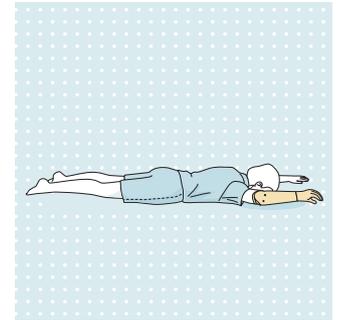
- Hold for a maximum of 10 seconds; repeat 10 times per direction



### Bridging

Lie on your back and bring your legs towards your body with the feet flat on the floor. Roll up your upper body one vertebra at a time (lifting the pelvis) until your weight is supported between the shoulder blades.

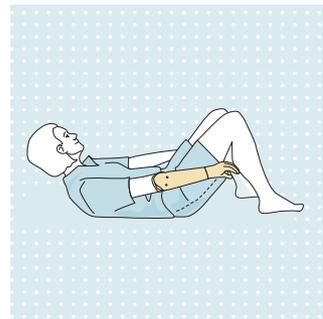
- Hold for 5 seconds; 10 repetitions



### Parachutist

Lie face down. The arms are slightly angled to the right and left above the head on the floor. By tightening the back muscles, lift the arms slightly off the floor.

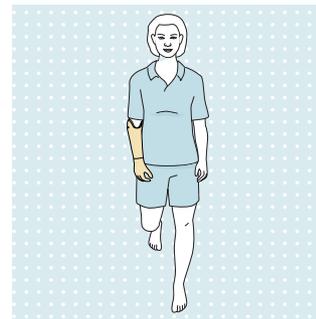
- Hold for 5 seconds; 10 repetitions



### Sit-ups

Lie on the floor on your back and raise your knees with your feet flat on the floor. Place your arms on either side of the body. Tighten the pelvic floor and abdominal muscles, and lift the head, arms and upper torso off the floor.

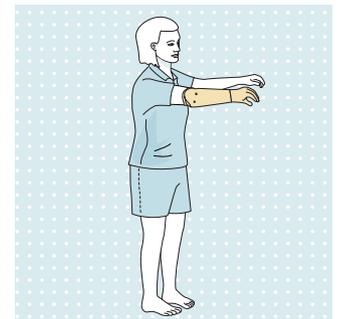
- Hold for 3 seconds; 10 repetitions



### One-legged stance

On a stable surface, stand with your feet hip-width apart and lift one leg off the floor. Stand on one leg for 30 seconds, then switch to the other leg.

- Integrate this exercise in your daily routine, e.g. when brushing your teeth or preparing a meal.



### Dumb-bell training

Stand in the lunge position; hold both arms extended to the front at shoulder level. Be sure to keep your shoulders relaxed and tighten your abdomen. Hold a water bottle in each hand to make this exercise more challenging.

- 10 repetitions to the front, then to the sides



With our free training cards, additional exercises are provided for you. Integrate these in your training. We wish you great success.



# The first phase

## Controls Training



### Gaining control

In the course of controls training, you initially familiarise yourself with the prosthesis. First the technician adjusts the electrodes in order to subsequently analyse the initial movements of the prosthetic hand.

The goal of controls training is for you to learn how to precisely control and efficiently use the prosthetic hand (this means that you gain “control” of your prosthesis).

# Using the prosthesis

You will find basic information about the use of the MyoFacil prosthesis in the sections that follow.

## **Charging the battery**

To charge the battery, remove it from the prosthesis and charge it using an external battery charger. LEDs indicate the status of the battery charger and the current battery charge level.

## **LED display for the current battery charge level**

When you insert the battery in the corresponding slot in the prosthesis socket, the colour of the LED indicates the current battery charge level.

## **Switching on and off**

Switching on and off is possible by inserting or removing the battery, or using the hand switch.

## **Donning and doffing**

There are various ways to put on and take off your prosthesis depending on the type of prosthesis and the characteristics of your residual limb. Whether you have orthopaedic fittings on one or both sides is a crucial point. As you learn how to use the prosthesis, your technician or therapist will show you which method is suitable for you.

You may moisturise your skin slightly in the area of the electrodes before putting on the prosthesis. This reduces skin resistance and improves conductivity between the muscles or the skin and electrodes in the prosthetic socket. Without moisture, it may take a moment before good contact is established and you achieve optimum prosthesis control.

## **Care instructions**

Proper care is essential in order to ensure the long-term optimum use of the prosthesis.

- Cleaning the inner socket: use DermaClean and a damp cloth
- Care and cleaning of the glove: regular cleaning with water and soap is usually sufficient to remove small amounts of dirt and keep the prosthetic glove clean. Heavier soiling can usually be removed with Ottobock Special Cleaner (640F12). (Further information: see the instructions for use)

## **Storage**

Please ensure that the hand is always opened prior to storing it.

# Opening and closing the hand

## Training the active functions

### Objective

Gaining general control – through exercises without objects

### Recommendation

#### Family

Have a family member demonstrate various hand positions and imitate them. Do not reach for objects at this point.

#### Adjusting the electrodes

The electrodes are adjusted using the MyoBoy and software.

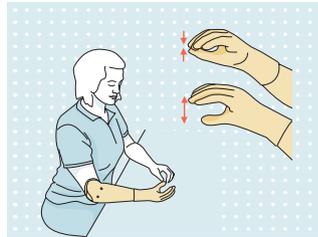
#### Variation

You can fully open and close the hand during the exercises. Vary the exercises by proceeding in 2 steps, first closing or opening the hand halfway and only then fully.

### Has the goal been reached?

- Are you able to perform the functions at 90 – 100 % ?
- Are your evasive and compensating movements minimised?

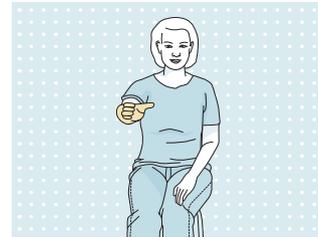
### Exercises in controls training



#### Sitting – supported arm

With the forearm resting on a surface: open and close the hand, also in 2 steps

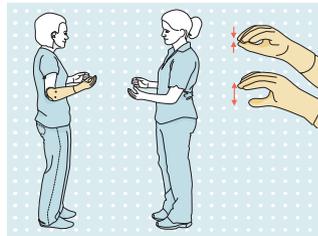
- For escalation, change the initial position of the arm (arm extended to the front, to the side of the body, arm crossed over the centreline of the body, above the head)



#### Sitting – unsupported arm

Without resting the forearm on a surface: open and close the hand, also in 2 steps

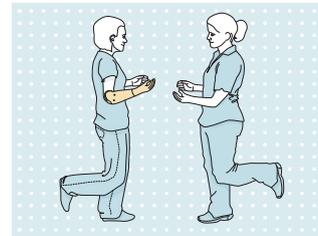
- For escalation, change the initial position of the arm (arm extended to the front, to the side of the body, arm crossed over the centreline of the body, above the head)



#### Two-legged stance

Open and close the hand, also in 2 steps

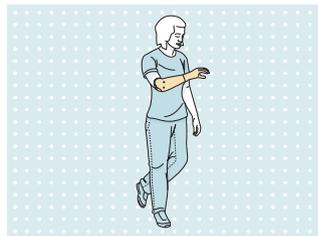
- For escalation, change the initial position of the arm (arm extended to the front, to the side of the body, arm crossed over the centreline of the body, above the head)



#### One-legged stance

The same exercises, combination of movement sequences with both arms and hands

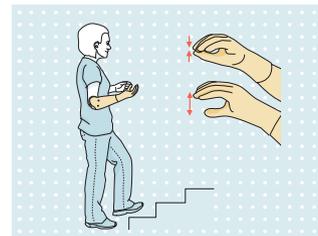
- For escalation, change the initial position of the arm (arm extended to the front, to the side of the body, arm crossed over the centreline of the body, above the head)



#### Walking/climbing stairs

Open and close the hand, also in 2 steps

- For escalation, change the initial position of the arm (arm extended to the front, to the side of the body, arm crossed over the centreline of the body, above the head)



#### Movement sequence when climbing stairs

Movement combinations of arms/hands while walking/climbing stairs/on ramps

- For escalation, change the initial position of the arm (arm extended to the front, to the side of the body, arm crossed over the centreline of the body, above the head)



With our free training cards, additional exercises are provided for you. Integrate these in your training. We wish you great success.



- 
- ▶ Controls training makes you more intimately familiar with your prosthesis. Practice opening and closing the hand, also in various arm positions.
-

# The second phase

## Repetitive Drills



### Gaining confidence

In this phase, you practice gripping and releasing various objects in different planes and axes. In choosing the objects, please select the greatest possible variety of sizes, shapes, surface char-

acteristics and resistance. You have to practice and repeat the exercises many times in order to internalise control of the prosthesis.

# Gripping and releasing

## Training with various objects

### Objective

Secure gripping and releasing of various objects

### Recommendation

#### Objects/materials

Start with heavy, large, solid objects, then switch to smaller, lighter, softer objects.

#### Check

Watch for and avoid evasive movements and compensating mechanisms!

#### Family

Hand each other objects repeatedly. In doing so, vary e.g. the height at which you grasp the object and the initial position.

#### Tip

Functional games that require the frequent repetition of certain movement patterns, e.g. card games or memory

### Has the goal been reached?

Are your evasive and compensating movements minimised?

### Training and variation

– in the course of repetitive drills, you increasingly develop a feel for your prosthesis. This is where you practice gripping and releasing various objects.



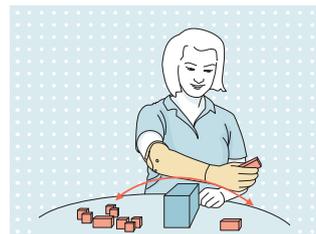
With our free training cards, additional exercises are provided for you. Integrate these in your training. We wish you great success.

### Exercises for repetitive drills



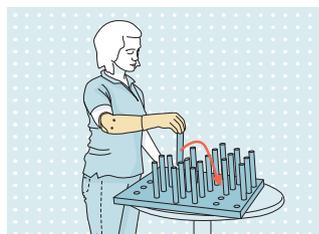
#### Initial grasping

Grip an object such as a wooden stick and put it down. Repeat this exercise multiple times.



#### Box and blocks

Transport the wooden sticks or blocks from one side to the other. A book can serve as an obstacle.



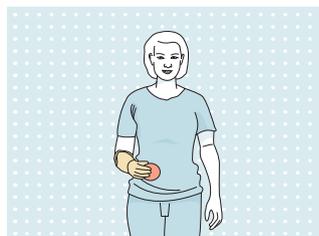
#### Solitaire

Pick a wooden stick up off the playing field in order to jump over another stick with it, which is then removed. The goal is to gradually remove all the sticks and to reach the centre with the last stick.



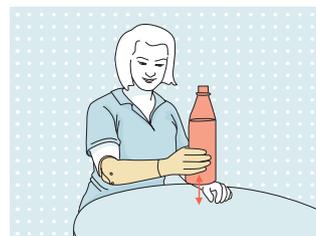
#### Grasping a pen

Sit at a table and put a pen in your prosthetic hand. Now grip it.



#### Grasping a sponge

Stand comfortably. Grip a sponge and then open the hand as far as possible without letting the sponge fall from the hand. Then grip it again.

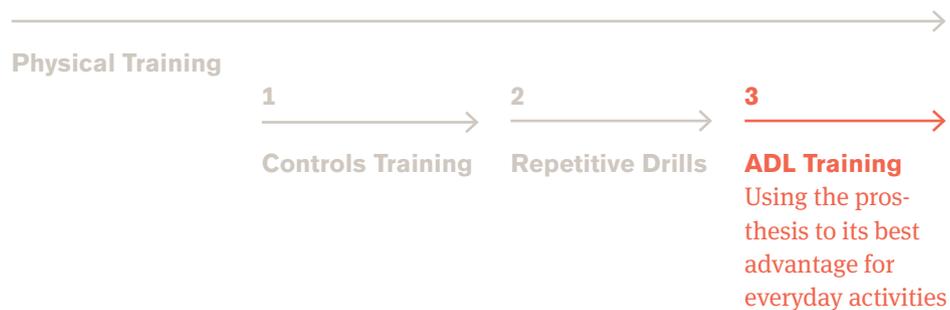


#### Grasping a water bottle

Sit at a table and grasp a full bottle standing on it. Lift it and then set it down again.

# The third phase

## ADL Training: Activities of Daily Living



### **Learning for everyday life**

As you become aware of your progress step by step, integrating the prosthesis into your everyday life will become easier for you as well. ADL stands for “activities of daily living.”

From now on, try to repeat the exercises frequently with objects you use often in everyday life. Mainly practice movements from now on that you want to perform during leisure activities, sports or also at work. Select both one-handed and two-handed exercises in order to develop the coordination of both hands. Increase the degree of difficulty from simple exercises (such as folding a towel) to more demanding tasks (such as preparing meals).

- 
- ▶ Now you consciously apply your abilities in everyday life. Note which movements are especially useful to you and practice at home.
- 



With our free training cards, additional exercises are provided for you. Integrate these in your training. We wish you great success.



## New freedom of movement

With your myoelectric prosthesis, you will discover entirely new freedom of movement for yourself. This should motivate you, even when training at times does not progress as fast as you may wish. Over time the movements become entirely natural sequences that keep getting easier for you.

What matters is that you can use your MyoFacil prosthesis in the situations where you want to. Therefore, you should use our training cards before, during and after your prosthetic fitting. You can easily perform the exercises on your own, with friends or with family. When you also use your prosthesis in everyday life, you maintain your training almost by itself. And you will notice that your independence improves from day to day.

# Measuring results, enjoying success

Use various tests at any time in order to document training progress and successes. Such documentation rewards you and encourages you to continue training consistently. Examples of such tests:

## **Videos**

Your therapist or a family member can make video recordings of you. Watch these videos together. This allows you to boost your awareness of posture and handling. Repeat the recordings at regular intervals in order to see your progress.

## **Ask questions regularly**

Together with your therapist, regularly review the prosthesis settings and conduct tests. This helps maintain your satisfaction in using the prosthesis.

## **Box and blocks test**

A motor function test: your task is to move as many blocks as possible from one compartment in the box to the other compartment in 60 seconds. Instead of a box with compartments, a book can also be used as an obstacle. Just ask your therapist for the box and blocks test. We wish you great success!



For further information, please visit:  
<http://ottobock-patient-care.com>

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