

Acute Rehabilitation	2
What can you do after injuring yourself?	2
ACCEPTING AND RESOLVING	2
PAIN DETERMINATION	4
PAIN SCALE & TESTING	5
ADDITIONAL	6

**I am not defined by my relapses, but by my decision to remain in recovery despite them.**



# Acute Rehabilitation

## What can you do after injuring yourself?

### ACCEPTING AND RESOLVING

This small addition refers primarily to current, acute injuries and the rehabilitation measures that now follow. For long-term injuries in particular often other things apply. We strive for an active way of rehabilitation and recommend you to do so as well. To do something is better than doing nothing is our motto.

While training to achieve strength and mobility goals is, of course, an individual process, injuries and recovering from them is a much more personal journey and experience. It is therefore difficult to make a template program for rehabilitation. Therefore, what follows will be some thoughts and questions on rehabilitation (rehab) which should support you and give you an orientation for the future.

Maybe the most important thing first: **It's going to be fine!**

Almost all injuries resolve over time. For example, more than 25% of adults have experienced back pain within the last three months. This is often considered to be a huge sign of danger, but most of it resolves within 2 weeks. We all know the terrible flashes of semi-coherent thoughts that pass through our heads when we get injured: "Will I ever... again?", "I wonder if it's...?", "Maybe X therapist can FIX my injury!" and so on...

What we have learned over the years is for me a very decisive and important first step on the path to healing: Stop identifying with the injury or, best of all, don't identify with it at all. Accept it for what it is and find your way to work with it. There is always a reason for it and besides all the negative aspects it always offers new chances - you *just* have to see them. As always with such wisdom, this is of course easier said than done, especially for people who generally define themselves very much through their functioning body. However, not easy does not mean impossible. We also recommend to see this as an independent process and to give you time with it. Over the years it will become more and more successful and you will notice how much it helps in the rehabilitation process.

If you have accepted the injury, then you can investigate the following questions:

- Can you maybe even find a way around the pattern that hurts?
  - For example, if you move your arm in a circle, you can traverse the same area that normally hurts without pain.
  - Another example: If you hold on to something with your other hand, you can move the other hand without pain with the added feeling of security.
- Can you find new goals that keep your sessions interesting? Can you find new ways to approach your goal without it hurting too much?

Besides accepting, it is also important to understand that things take time. An injury needs time to heal. This time should be granted to yourself and your body. So find your peace with it, work for an improvement of the situation without overdoing it - and otherwise: Just focus on **all** the things you can do!

After an injury, especially if you have not had many injury experiences, thoughts and worries such as "I am afraid that I will never train as I used to", "I am angry about the setback that this injury causes me", "I feel demotivated! understandably come up easily. When a new injury occurs, it makes perfect sense to find people who will train with you in this phase and to look for positive training experiences and body perceptions.

A more playful and confident approach can help to make a difference. Movement games with a partner are great to forget the injury in that moment. And since your partner will most likely put you in situations that you would not go into yourself because of fear or respect, rehabilitation can be favored, especially from a post-traumatic point of view.

This brings me to another important point. Often the hardest thing about rehab is the fact that most rehab exercises are insanely boring!

A "normal" training plan could include some auxiliary sessions that you can do with strength, knowing that they will make your goal easier. However, if motivation is already low, the idea of motivating yourself to go to the gym, lie on a bench, do an external rotation exercise, just to get back to the level you were at before, might not be very feasible.

Of course this is an **important** part of rehab, but it does not have to be the **only** one. As described above, partner exercises and other exchanges can be very supportive. Another suggestion is to pick up other practices which can be beneficial to your rehab.

Some examples:

- Juggling (after wrist, elbow or shoulder injury)
- Soft Floorwork (after spine injury)
- Balancing weights
- Learning to rope climb
- Trying to do some of your exercises in super slow motion

This is the first part of this lecture. I really recommend you to take these lines to your heart and learn them because it will help you a lot in the first phase of your rehab.

On the next page I continue with "Part 2", so don't stop reading at this point. If you like, you can go through the previous lines again and note or save important sentences and notes.

## PAIN DETERMINATION

Again, as has been stated, it is very hard to talk about rehabilitation in general terms and we probably have to look at each case individually. However, here are some further thoughts.

### **PURPOSE**

The purpose of the “second” phase of rehab (though the process is on a continuum spectrum) is to merge the rehab exercises with the exercises we want to get back to. Before that is done we need to ask ourselves if the pain is mostly **range of motion (ROM)** or **intensity** or **volume/fatigue** based?

This is an important tool in terms of planning your rehab process. Mostly, when we haven’t verbalized these questions (internally or externally) we have a tendency to push our injury where it gets the most aggravated. While this isn’t always bad, it can create negative spirals:

- Constantly moving the knee into a range that hurts → Constantly being reminded that it hurts → Constantly feeling injured.
- Getting fatigued/unmotivated/feeling pain after a few reps → Feeling stubborn and always trying to cram in extra reps, which gets you more fatigued → Rarely feeling motivated to rehabilitate your injury.

### **1. ROM-based pain**

If your pain is RoM-based the easiest answer is to not move your body into that ROM. Simply decide on a limit to how far you go into that specific movement. Be consistent with your training and set a goal: increasing reps, sets, or adding intensity to the current movement. After a while, you can most probably increase the RoM slightly. Additionally you can couple this with *isometric holds* (fairly high intensity) in the range just before where it starts to hurt. You can start by tensing your own muscles at the area and later add a bit of weight to increase the intensity. Alternatively, you can try to find different ways of moving into the RoM. For example if you can’t do it in a straight line: You can’t flex your knee without pain when squatting? High reps of knee circles might help you get into the RoM without feeling pain. Back extension hurts? Maybe spinal waves will help get the body into extension without it hurting.

### **2. Intensity-based pain**

If your pain is intensity-based again, a fairly simple answer: Do a lighter version of that exercise and rack up the volume. Set some goals: Maybe if you are unable to do a certain movement, find regressions with less load/in less difficult positions, if you cannot drop into a movement fairly fast, do it slowly maybe while holding onto something.

### **3. Volume/Fatigue-based pain**

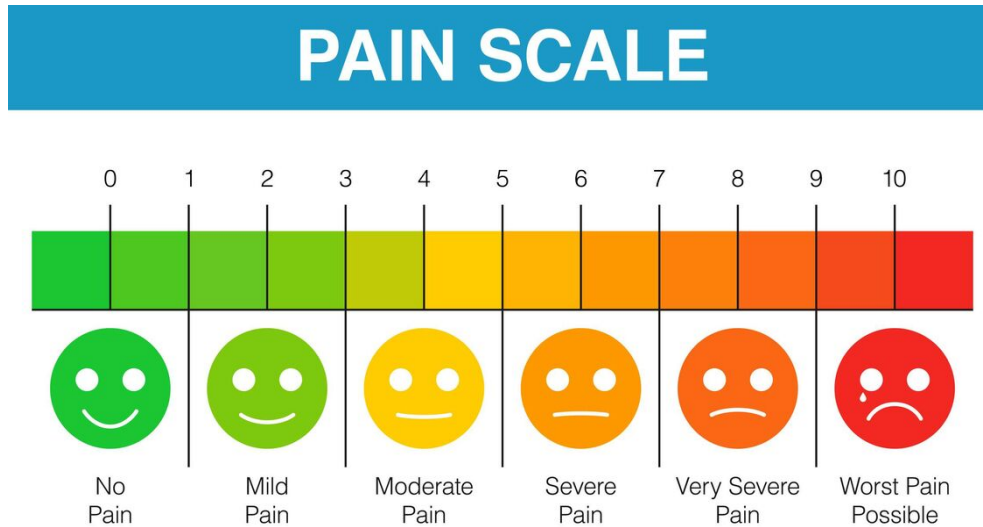
If it takes very few reps to fatigue, take some months-off from this exercise: After all, what is most important, the next couple of months or your training career in its entirety? If it takes over 10 reps in a row for the pain to set in, do more sets with fewer reps in each set. Maybe add some intensity but then again maybe don’t.

Again, the journey to recovery is personal but these thoughts might help when trying to program your rehab. Ask us if you need any further help.

## PAIN SCALE & TESTING

Finally, a few words about general **training intensity** and your **perception of pain**.

You should never go into a pain range above 5 (out of 10). That means on a pain scale of 1-10 you should always be between 4 and 5 when doing an exercise.

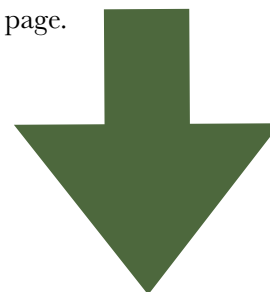


It is important to realize that an injury is always painful in some way, yet we need a stimulus that works in the **moderate pain level**. For you, this means that you need to keep testing in your rehab process:

- Is the intensity too low, am I having no effect?
- If the intensity is too high, I might have a counterproductive effect?

So slowly work your way up until you find that the intensity is **adequate** and you are in the 4-5 range of the pain scale. Test this week by week or even day by day to constantly set a positive adaption stress and make progress within your rehabilitation process.

Find some additional useful things for your rehab process on the last page.



## ADDITIONAL

A few other things that have proven helpful with almost any injury:

- **Swimming** - In the water we are virtually weightless which means that our joints do not have to carry a load. This allows us to move mostly unrestricted in the water. In normal breaststroke alone, we move all our joints in a certain rhythm over a certain continuous period of time. This promotes blood circulation in all areas, including the injured region, without overloading them. Especially for small joints like the wrist, this has proven to be an extremely effective supplement.

- **Nutrition** - Joint pain and muscle stiffness result from inflammation in the body, which we logically want to get rid of. This means we must not promote inflammation. It is important that we maintain our acid-alkaline balance. So this is all about diet.

I don't want to turn you into a vegan here, but it can be beneficial - especially in a rehab process - to cut out certain foods. This includes dairy and meat in particular, as well as caffeine and sweets. All of these contain a lot of acid and are often out of proportion to alkaline foods. Potatoes, vegetables and fruit can help to improve the alkaline balance.

Here is a video in which the woman talks about foods that help against inflammation. On her website you can also find helpful & delicious recipes on this topic.

- **Supplements** - Some supplements can support your rehabilitation since they help to reduce inflammations.

This is mainly about the **fatty acids** we add to our body. It is important to know that omega 6 fatty acids promote inflammation and **omega 3** fatty acids reduce it. Does not mean that we should not consume omega 6 fatty acids, but that we want to create a healthy balance. Means we need to create a better ratio between omega 6 and 3 fatty acids.

Another supportive supplement can be **glucosamine** (a joint fluid component). Glucosamine (also called D-glucosamine), is an active ingredient that belongs to the group of amino sugars. As a component of connective tissue, cartilage and synovial fluid, it occurs naturally in the human body. Glucosamine has cartilage-building, anti-inflammatory and analgesic properties.

**Vitamin D3** is also an important supplement, but it can also be absorbed through the skin via sunlight, especially in the summer - but only if you expose your skin to it. If you are outside all day wearing a suit, you will not absorb much vitamin D3. During an injury, it may make sense to check your vitamin D3 intake and increase it if necessary.

Why does the body need vitamin D? Vitamin D3 is involved in many metabolic processes. It has long been known to aid in the absorption of calcium from the digestive tract and the hardening of bones. It also regulates calcium and phosphate metabolism and affects muscle strength.

- **Nourishment** - This means that you give attention to your body and brain. Make sure to get enough **quality sleep**, have a good nutrition, adequate physical intensities and anti-inflammatory and blood flow enhancing activities such as cold therapy (cold shower, ice bucket, ice bath or other cryotherapy) or heat (baths/sauna).