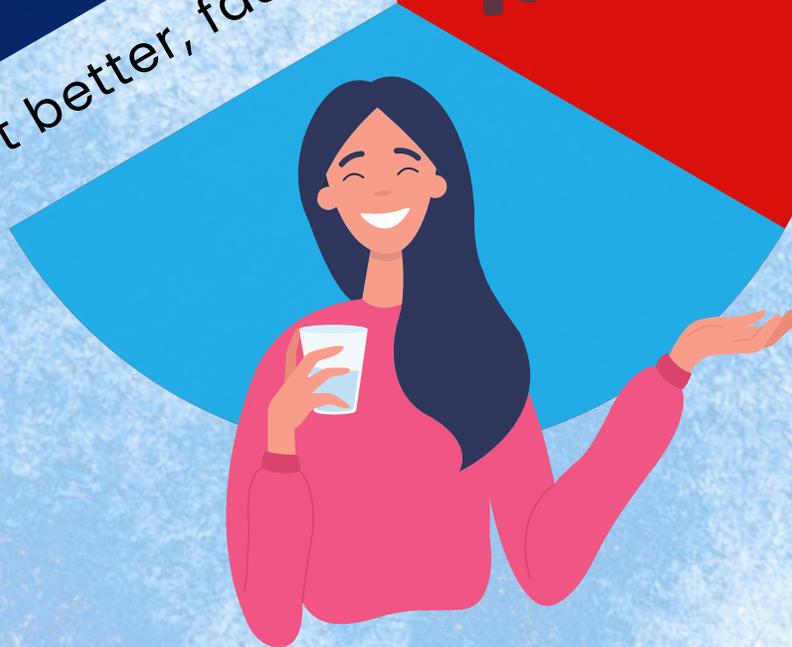


SmartInjury® Recommendations

Easy-to-follow tips
for how to improve
your injury recovery!



Get better, faster!



YOUR RECOVERY

Injury recovery is not to be taken lightly, as “injury is the most common primary initiating event to the disease called chronic pain.” What that means is that injury leads to high risk for long term residual complaints (symptoms that do not fully go away). Spinal ligament injuries are one of the leading causes of long term residual complaints.

This is caused by the spinal instability that this injury causes. Everything involved in your care now will be geared toward your full recovery. We are very good at developing a SmartInjuryCarePlan® that is specific to your needs.

In this booklet, you’ll find important advice concerning your recovery and important factors such as hydration, rest, and diet.

INJURY RECOVERY BASICS



1. We need your help! Your compliance and active participation in your own recovery is the key to optimal results.



2. We are not treating your insurance company, the at-fault insurance company, your attorney or anyone else for that matter. Everything that we do is geared to assist *you* with an optimal recovery.



3. We use state of the art injury imaging technologies and we may recommend imaging procedures that are done by other facilities. This is done to assist us with fully determining both the location and the severity of your injuries, which in turn helps us to further define more targeted recovery procedures. All facilities that we use have been fully vetted as the best in their procedure and you will be informed if we are referring out for any of these services.

4. The dose of treatment with your treatment plan is very specific to the phase of treatment that you are in and for your ongoing optimal recovery. At first, all treatment plans will be somewhat similar in the first 28 days of your recovery. From there, treatment plans begin to individuate based on your individual response to care. The most important part is your compliance with the plan. If you need to miss a visit, we need you to make it up within the same week, if possible. If you need to travel, we may need to find a provider in the area of your travel to render some care. The essential point is the dosing is important to the results, so be as compliant as possible.



5. If you need to change appointments, just get with scheduling and do so. If you are going to be gone for a while, consult with me and we will see what can be done to keep the continuity of your care.



6. If something with your plan does not seem right, communicate it right away. There can be some pain or discomfort with recovery, but it should not be at a high level or continuous.



7. We may make some recommendations for active care, which are things that you do for yourself outside of our clinic. These are equally important to your full recovery and we would ask that you follow them as closely as you can.



8. When your injury recovery is nearing completion, it may be optimal to stabilize the results with some supportive care. This is care that is necessary to sustaining the results. We will not know this until we get a lot deeper into your care and observe the speed and the results of your recovery.



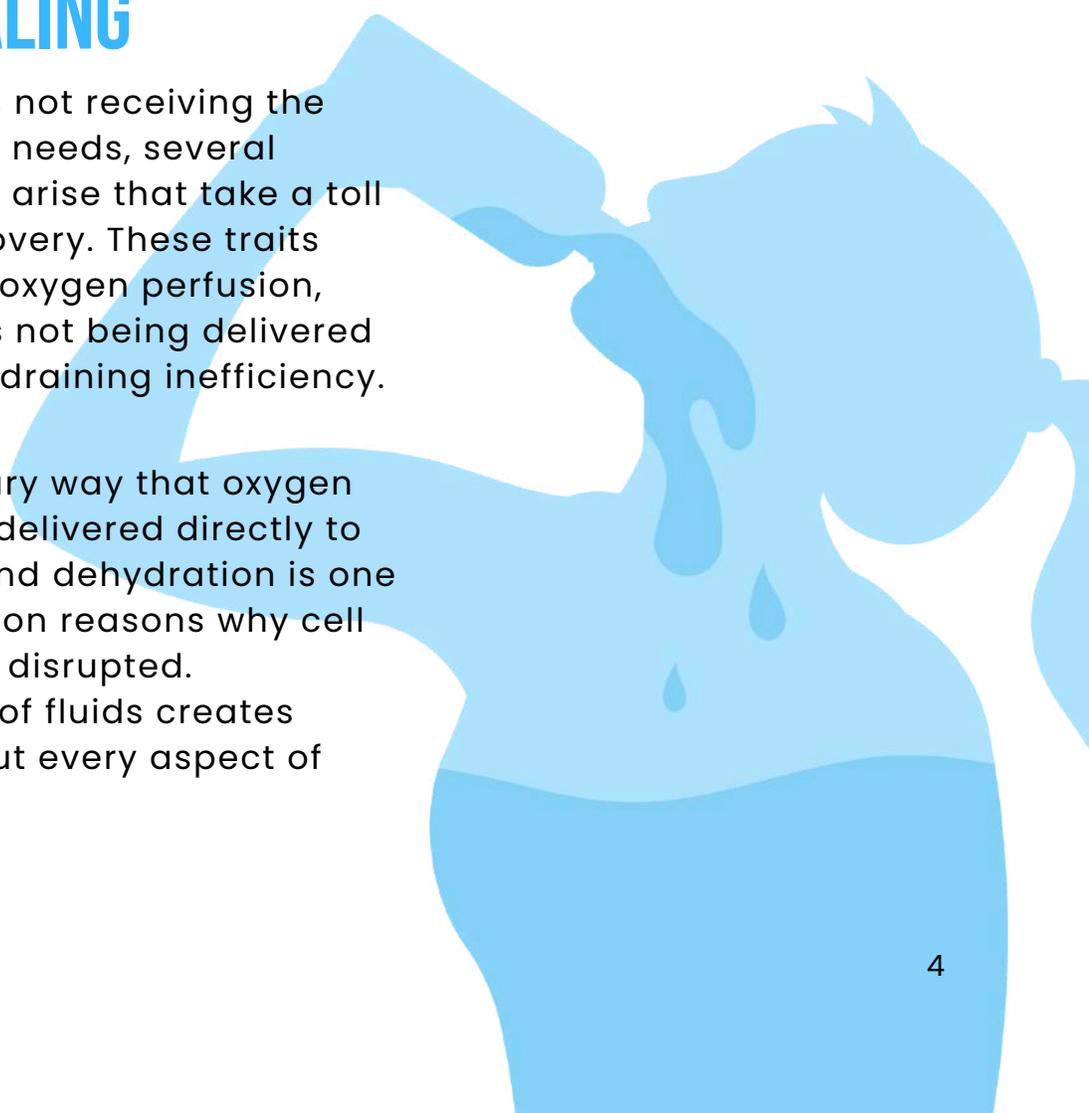
HYDRATION: A KEY COMPONENT TO INJURY RECOVERY

Proper hydration is essential for helping your body in the wound healing stages. A lack of body hydration will halt cellular migration, decrease oxygenation of the blood and vastly delay the wound treatment process.

DEHYDRATION AND ITS IMPACT ON WOUND HEALING

When your body is not receiving the amount of fluids it needs, several abnormalities can arise that take a toll on your injury recovery. These traits may include poor oxygen perfusion, essential nutrients not being delivered to the wound and draining inefficiency.

Water is the primary way that oxygen and nutrients are delivered directly to the spinal injury and dehydration is one of the most common reasons why cell function becomes disrupted. Essentially, a lack of fluids creates delays in just about every aspect of **wound healing**.



HOW TO PROPERLY HYDRATE

Typically, the body fluctuates with water making up anywhere from 60 to 70 percent of its total weight. This means that maintaining a positive level of hydration will require no less than 64 ounces of water to be consumed daily, which is practically the equivalent of eight glasses. Keep in mind that this is the bare minimum and someone trying to recover from an injury will want to drink even more water to assist in the process of cells traveling to the injury site to supply oxygen and nutrients. The easiest way to tell if you are not drinking enough water is to analyze your urine, which should be relatively clear and odorless, if you are properly hydrating. Your body is constantly losing water through a variety of factors, so the most important thing to remember is to drink plenty of water to maximize successful injury care.



Our recommendation is to drink half your body weight in ounces per day.

PROPER SLEEP FOR INJURY RECOVERY



Spinal injuries are often not taken seriously. That is perhaps why they are the number one cause of pain and disability in the world today. We are not trying to scare you, but here is a list of common symptoms from a simple spinal ligament injury that can cause spinal instability.

SYMPTOMS OF A SPINAL LIGAMENT INJURY

(SPINAL INSTABILITY)

- NECK PAIN
- LOWER BACK PAIN
- SHOULDER PAIN
- SCAPULAR PAIN
- PAIN RADIATING DOWN THE ARMS
- PAIN RADIATING DOWN THE LEGS
- NUMBNESS, TINGLING OR A SENSE OF WEAKNESS OR HEAVINESS IN THE LEGS
- NUMBNESS, TINGLING OR A SENSE OF WEAKNESS OR HEAVINESS IN THE ARMS
- HEADACHES
- MIGRAINE HEADACHES
- FACIAL PAIN
- EAR PAIN
- VISUAL DISTURBANCES
- RINGING IN THE EARS (TINNITUS)
- DIFFICULTY SWALLOWING
- DIFFICULTY BREATHING
- BLADDER OR BOWEL DYSFUNCTION
- SEXUAL DYSFUNCTION
- SEVERE FATIGUE
- LOSS OF VOICE
- DISTURBANCES IN CONCENTRATION
- DISTURBANCES IN MEMORY
- CONCUSSION SYNDROME
- AND MORE!



Now, here is the problem. When you look at the list, you may have a few or many of these symptoms as they are common! What we don't want is for any of these symptoms to become permanent and that is why we have a full set of recommendations which are designed to give your body every opportunity to heal.

Here are a few key ways in which sleep deprivation negatively affects the **wound healing** process:



It slows down tissue growth.

Of course, for injuries to heal successfully, healthy tissue growth is key. When does this essential growth happen? While you sleep. According to the National Sleep Foundation, the growth and repair of tissue occurs in the third and fourth stages of sleep, which happen after you have completed about 70 percent of your rest. This means that getting a full, uninterrupted night's sleep is crucial.



It directly impacts your immune system.

A healthy, strong immune system is crucial to all types of healing. Without a strong immune system, you cannot properly create healthy tissue, fight infections and stay on the path to a successful recovery. Health Line explained that when you do not get enough sleep during the wound healing process, your immune system can become depleted, raising your risk of elongating healing time and developing infections.



It can compromise healthy eating habits.

When you are constantly tired, your body is seeking ways to create more energy. This can lead to cravings for sugary, fatty foods that are not good for your bodies recovery, and that may further delay the healing process. Shape magazine noted that people who do not get enough sleep are also more likely to consume bigger portions, which can lead to unwanted weight gain, which in and of itself is another inflammatory process.

WHAT IS ENOUGH SLEEP FOR OPTIMAL RECOVERY?

According to Mayo Clinic, this is optimal sleep:

AGE GROUP	RECOMMENDED AMOUNT OF SLEEP
Newborns	14 to 17 hours a day
12 months	About 10 hours at night, plus 4 hours of naps
2 years	About 11 to 12 hours at night, plus a 1 to 2 hour afternoon nap
3 to 5 years	10 to 13 hours
6 to 13 years	9 to 11 hours
14 to 17 years	8 to 10 hours
Adults	7 to 9 hours

Please get at least this amount of sleep per night. Remember, the beginning of your injury recovery sets the tone for your whole recovery and is very important, so please get enough sleep.

DIET RECOMMENDATIONS TO FACILITATE HEALING

Injury is the number one cause of chronic pain! We want to speed up the body's recovery! The sooner we can get you out of pain, the better your recovery may be. Your injuries recover in phases and what you eat during each phase greatly impacts your results.

HOW INJURIES TO YOUR BODY WORK:

Body damage, regardless of cause: work injury, auto injury, slip and fall, fight, etc., starts a **three-phase tissue recovery cycle**.



PHASE 1: INFLAMMATION

1-4 Days

Pain, redness, heat and swelling draws healing chemicals to the area.



PHASE 2: PROLIFERATION

4-21 Days

Damaged tissue is gotten rid of and new temporary tissue is built with new blood supply lines that are being formed.



PHASE 3: REMODELING

21 Days - 2 Years

Permanent tissue is being built, replacing the temporary tissue. All tissue is remodeled for optimal function.

Good nutrition can significantly help these healing phases.

NUTRITION FOR THE INFLAMMATION PHASE

Inflammation is a healthy part of any injury, as it triggers the beginning of the repair process. Too much inflammation can be a problem, so we want to be able to control the inflammation and reduce it in an optimal way.

↑ Eat more anti-inflammatory fats like:



Fish



Olive Oil



Mixed Nuts and Seeds



Flax Oil



Avocados

↑ Include more inflammation-managing herbs and spices:

Garlic

2-4 cloves a day or 600-1200mg of aged garlic extract.



Turmeric

7 tsp a day of powder or 400-600mg in supplement form.



Bromelain from Pineapple

2 cups of pineapple a day or 500-1000mg in supplement form.



Cocoa, tea, and berries

Eat daily or supplement with blueberry or grape extracts, green tea extracts, citrus extracts and bioflavonoid supplements.



↓ Eat fewer inflammatory things like:



PROCESSED FOODS HIGH IN SATURATED FATS



OILS LIKE CORN, SUNFLOWER, AND SOYBEAN



FOODS WITH TRANS FATS

DIET & SUPPLEMENTS FOR THE PROLIFERATION AND REMODELING PHASE

Energy intake can be an issue, as the metabolism can increase by 15-50% when your body is injured, therefore, it is very important to get the right types of foods during this period. Remember, this period lasts from 4 days to 2 years post injury.



Eat the rainbow.

Include a diverse mix of fruits and veggies.



Eat enough carbs.

You'll need fewer carbs than when training, but enough to support recovery; include minimally processed carbs like whole oats, whole grain rice, sprouted grain breads and quinoa.



Eat adequate protein.

Minimal processed meats, legumes, eggs, plant-based proteins, protein supplements.



Balance dietary fat.

About 1/3 of fat intake from saturated, 1/3 from monounsaturated, and 1/3 from polyunsaturated.

To give you more knowledge about your injuries, request a copy of “The Three Main Injuries Any Spine Can Have” from your provider.

