

# THE BENEFITS OF NUTRITION FOR CONCUSSION RECOVERY



**“I continue to get  
stronger, physically  
fit and have NO PAIN  
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*See Patient Success  
inside for more.*

**ALSO INSIDE** • EXERCISE & YOUR MENTAL HEALTH  
• PATIENT SUCCESS • HEALTHY RECIPE



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Have you or someone you love had a concussion? Do you notice that since hitting your head, you seem "off"? If you are looking for solutions to resolve your symptoms and get back to doing what you love, don't hesitate to call today! From manual techniques to exercise recommendations and nutritional advice, FitnessLab can help.

Concussions are a type of brain injury caused by a force/hit or sudden acceleration and deceleration to the head, neck, or body. A significant reason for the concerns regarding concussions is that the forces transmitted to the brain can impair your physical and mental capacities for an extended period of time.

Although concussions can be debilitating and restricting, concussion therapy can help provide the guidance you need, so you don't have to figure out a recovery plan on your own.

## How Nutrition Helps Concussion Recovery

Recent research for concussion recovery has demonstrated that the most effective treatments include proper nutrition. Our diet and intake of micronutrients influence our recovery, and adding this to the recovery plan can aid in achieving optimal results! The goal is to do what it takes to allow the brain to heal.

There are specific nutrients that aid in the repair and functioning of cells acquired through your diet. The initial concussion injury results in several destructive processes within the brain that result in an overproduction of free radicals, leading to more stress and inflammation in the brain. This will lead to problems in cell function and persistent symptoms.

A study published by Applied Physiology, Nutrition, and Metabolism titled "*Sports-Related Concussions and Subconcussive Impacts In Athletes: Incidence, Diagnosis, and the Emerging Role of Epa and Dha*" by Lust et al. explains the benefits of nutrition for patients with concussions.

The study states there is also growing research examining the role of nutrition in brain injuries in reducing inflammation and promoting recovery following brain injury and leading to better long-term health outcomes.

After suffering a concussion, some people experience a lack of the macronutrient omega-3 or micronutrients, including:

- Vitamins C, D, and E
- Magnesium
- Zinc

Proper advice regarding nutrition following a concussion is critical to make sure you are making the right food choices to ensure essential vitamins and minerals intake. Proper nutrition ensures the body can respond to the injury and repair/heal properly. Green leafy vegetables are very good because they have many vitamins and minerals that are important in head injury recovery.

Concussions often lead to impairments in the brain's normal function, including the inability to focus or memory loss and confusion. These changes make it difficult for some to make healthy choices, including choosing the wrong types of foods.

*Continued inside.*

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## The Benefits of Nutrition for Concussion Recovery

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The following foods are not recommended following a concussion:

**Inflammatory foods:** People may choose inflammatory foods like highly processed/refined foods after head injury. These foods can inhibit the healing process and lead to chronic concussion symptoms.

**Alcohol:** All types of alcohol can further impair cognitive functioning and negatively impact mood. Avoiding any mood-altering substances is essential to have the fastest recovery.

**An improper ratio of omega-3s to omega-6s fatty acids:** Using sunflower and corn oils, all high in omega-6s, can lead to an imbalance and an increased risk of prolonged symptoms. Using olive oil and choosing foods rich in omega-3 fatty acids like fatty fish eggs, nuts and seeds can help maintain the proper ratio for proper healing.

**Red meats:** Although it is crucial to find quality protein sources, eating red meats may inhibit our cellular and tissue production/repair. Choose lean meats (i.e., chicken and turkey), vegetable proteins, eggs, nuts, seeds, and beans to get adequate protein for optimal healing.

Having a proactive approach to concussions will lead to the best outcomes. Research on concussions is evolving, and as we continue to learn, we realize that nutrition plays a significant role in a successful outcome.

While it is true that moderate rest is still important during the early stages following injury, doing nothing but rest may be creating worse outcomes. Manual therapy is a meaningful way to help you feel better. Learning how to restore strength to atrophied muscles and improving endurance safely can ensure a positive outcome. This can be achieved through a combination of muscle-training activities and aerobics. This is why choosing the right concussion therapy program is critical!

It is important to find an expert skilled in concussion management to help you feel your best in the fastest possible way. Concussions are a significant issue, and the comprehensive concussion therapy offered at the FitnessLab will provide you with the treatment and recommendations to assist you in your recovery.

**We can get you started on the initial steps toward developing your recovery plan and achieving your objectives towards a stable and sensible return to activity! Rest assured that you're supported in your journey to getting better!**

# HEALTHY RECIPE



## Creamy Cucumber, Radish & Tomato Salad

### Ingredients

- ½ cup mayonnaise
- ½ cup crumbled feta cheese
- 1 tablespoon chopped fresh chives, plus more for garnish
- 1 tablespoon chopped fresh dill, plus more for garnish
- 1 tablespoon lemon juice
- ¼ teaspoon salt
- ¼ teaspoon ground pepper
- 1 large English cucumber, diced
- 1 pint cherry tomatoes, quartered
- 1 bunch radishes, diced
- ½ medium red onion, finely diced

**Directions** Whisk mayonnaise, feta, chives, dill, lemon juice, salt and pepper in a large bowl. Add cucumber, tomatoes, radishes and onion and toss to coat. Garnish with more chives and dill, if desired.



**FitnessLAB**  
Functional Movement & Rehab Specialists

**CALL 303.800.2829  
TODAY!**

## PATIENT SPOTLIGHT!

Mike Brock was 5 star all the way. He worked with me after my total knee replacement for 4 months. Not only was he very knowledgeable and professional, he was kind, listened to my concerns, encouraged me and made me laugh. I was one of the few that always looked forward to my PT appointment. I needed all the encouragement and professionalism he provided. —Annette D.

## GIVE US A SHOUTOUT!

We want to hear your success story! Use the links below to tell your PT story and leave your review. We look forward to hearing from you!

HIGHLANDS RANCH

 REVIEW US!

GREENWOOD VILLAGE

 REVIEW US!

GET CONNECTED!

[FOLLOW US!](#)



## EXERCISE & YOUR MENTAL HEALTH

Everyone knows that regular exercise is good for the body. But exercise is also one of the most effective ways to improve your mental health. Regular exercise can have a profoundly positive impact on depression, anxiety, ADHD, and more. It also relieves stress, improves memory, helps you sleep better, and boosts overall mood. And you don't have to be a fitness fanatic to reap the benefits.

- **Exercise and depression.** Maintaining an exercise schedule can prevent you from relapsing. It promotes all kinds of changes in the brain, including neural growth, reduced inflammation, and new activity patterns that promote feelings of calm and well-being. It also releases endorphins, powerful chemicals in your brain that energize your spirits and make you feel good. Exercise can also serve as a distraction, allowing you to find some quiet time to break out of the cycle of negative thoughts that feed depression.
- **Exercise and anxiety.** Anything that gets you moving can help, but you'll get a bigger benefit if you pay attention instead of zoning out. By adding this mindfulness element — really focusing on your body and how it feels as you exercise — you'll not only improve your physical condition faster, but you may also be able to interrupt the flow of constant worries running through your head.
- **Exercise and ADHD.** Exercising regularly is one of the easiest and most effective ways to reduce the symptoms of ADHD and improve concentration, motivation, memory, and mood. Physical activity immediately boosts the brain's dopamine, norepinephrine, and serotonin levels — all of which affect focus and attention.

- **Exercise and PTSD and trauma.** Evidence suggests that by really focusing on your body and how it feels as you exercise, you can actually help your nervous system become "unstuck" and begin to move out of the immobilization stress response that characterizes PTSD or trauma. Instead of thinking about other things, pay close attention to the physical sensations in your joints and muscles, even your insides as your body moves. Exercises that involve cross movement and that engage both arms and legs — such as walking (especially in sand), running, swimming, weight training, or dancing — are some of your best choices.

When you're under the cloud of an emotional disorder and haven't exercised for a long time, setting your self-extravagant goals like completing a marathon or working out for an hour every morning will only leave you more despondent if you fall short. Better to set yourself achievable goals and build up from there.

**Our Physical Therapists can help you get started on a safe and effective fitness plan tailored to your needs and goals. Call today for an appointment and start feeling better.**

## ⚡ **PATIENT SUCCESS**

**"I continue to get stronger, physically fit and have NO PAIN anywhere!"**

"Matt and his team at Fitness Lab are Terrific!! I've been a Triathlete for years, met Matt at a free "get to know us" event and have been going regularly ever since. I did not need physical therapy and had no idea how much I needed his Functional Movement therapy. I continue to get stronger, physically fit and have NO PAIN anywhere! How fun to win the Podium so many times — thanks to Matt & his training. And importantly, I feel a part of the "family," during a session, Matt (or whoever I'm seeing) pays 100% attention to me — understands me and ensures I do the exercises correctly, with the correct weight, reps & form, etc. I'm so impressed and so very grateful. Thank you Matt & Team!!" — **D.J.**



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Functional Movement & Rehab Specialists

## INVEST IN YOURSELF

**If you are in pain or have suffered an injury, don't put it off, take care of it. Waiting may make it worse and lead to surgery and medications.**

**Call the FitnessLab for a complimentary injury consultation. We will guide you so you can get back to the activities you love. And most likely save you some money in the process. No Referral Required!**

**Get Started Today — Call  
303.800.2829**