



CONCUSSION

NUTRITION FOR CONCUSSION RECOVERY

Stage 1 Impact

The trauma causes force to the head in two directions: linear or rotational. These forces literally cause your brain to “slosh” within the cerebrospinal fluid and bump up against the skull.

Stage 2 Inflammation

Trauma to the brain can damage neurons, the cells that govern the flow of chemical messengers. This damage can cause memory loss, blurred vision, dizziness, headaches & nausea.

Stage 3 Hibernation

Your brain's cortex detects an imbalance and tries to fix the neurons. Neurotransmitters constrict blood vessels delaying healing. Your brain function slows until blood flow returns to normal.

Stage 4 Recovery

Healing the neurons within your brain can take several weeks. Staying away from the potential of re-hitting your head, rest, and proper nutrition will facilitate the recovery process.

What Is a Concussion?

A concussion is a type of traumatic brain injury caused by a bump, blow or jolt to the head or body that causes the head to move rapidly back and forth. Unfortunately, concussions are not uncommon in our sport and need to be taken very seriously. The most common causes of concussions are falls, car accidents, impact sports and explosions. Ironically, the trauma that occurs when the brain hits the skull is often not evident because the damage is on the inside. It is known as the “silent injury” according to Dr. Lovell from the University of Pittsburgh’s Medical Center which researches concussions.

Once common mistake for riders and racers is assuming that because you did not get “knocked out,” the hit to your head was minimal. If you experience vomiting, dilated pupils, loss of smell or taste you should visit with a neurologist immediately. Additional negative symptoms after a head impact are headaches, dizziness or memory loss lasting more than five days or delayed memory of easy questions (i.e. what did you eat for breakfast yesterday morning?)

Nutrition for Recovery

The quickest way to facilitate recovery is by eating real, raw foods. Maintaining a healthy balance is key for effective recovery from concussion.

One of the best types of foods that help replenish the nutrients lost in your brain during an injury are those that contain high levels of flavonoids. Flavonoids are great because not only do they contain antioxidants that help reduce inflammation, they also stimulate the production of BDNF (Brain-derived Neurotrophic Factor) that helps trigger the creation of new brain cells. Foods high in flavonoids include blueberries, cranberries, apples, pomegranates, blackberries, red grapes, tree fruits, red kale, and dark chocolate.

Additional sources that facilitate concussion recovery include:

- **Healthy fats** - avocados, fish oil, nuts, and seeds (see GORP recipe in [Coach Robb's Snack Cookbook](#)), raw coconut - help promote brain function. Extra virgin olive oil is a healthy fat that can also boost your production of BDNF.
- Foods rich in **Vitamin K** such as broccoli, kale, mustard greens, spinach, Brussel sprouts, parsley, and cabbage. Vitamin K helps improve cognition and memory, but what makes it especially great for brain health is that it is vital for the synthesis of sphingolipids. Sphingolipids are a type of fat that is densely packed into your central nervous system and helps your brain cells send signals.
- **Lean Proteins** - Sources high in protein such as grass-fed and pasture-raised lean meats and eggs
- **Organic Dairy** such as cheese, milk, and yogurt - produced by grass-fed cows
- **Fruits and vegetables** that are high in antioxidants. Generally, the brighter the color, the more antioxidants it will contain.

Avoid foods that are high in saturated fats and processed sugars. These foods decrease BDNF levels in your brain and slow down the recovery process.

RECOMMENDED SUPPLEMENTS



Coach Robb only recommends taking supplements when you are not getting enough of the necessary vitamins and minerals found in real food. Supplements for added brain health benefits include:

- [Concussion Rehab Bundle](#)
- [Krill Oil](#) or [Omega 3D II](#)
- [Best Whey Protein](#)
- [Lean Greens](#)
- [Pro Purples](#)
- [Pro Reds](#)

