



## **Guide on Traumatic Brain Injury (TBI) and Concussion Protocol**

Traumatic brain injury (TBI) and concussions are serious injuries that require immediate medical attention and a proper recovery plan. Functional medicine approaches focus on optimizing brain healing and reducing long-term effects.

### **1. Immediate Care Post-Injury**

- **Rest:** Physical and mental rest are critical. Avoid activities that require concentration (e.g., screen time, reading, intense physical activity).
- **Ice Therapy:** Apply ice to the head or neck to reduce swelling (for the first 48 hours).
- **Seek Medical Attention:** Get checked for any signs of severe brain injury, such as loss of consciousness, vomiting, or confusion.

### **2. Nutritional Support for Recovery**

- **Anti-inflammatory Foods:** Focus on omega-3 fatty acids, antioxidants, and anti-inflammatory nutrients.
  - **Foods:** Fatty fish (salmon, sardines), flaxseeds, chia seeds, walnuts, berries, turmeric, ginger.
- **Protein:** Essential for tissue repair and recovery.
  - **Sources:** Lean meats, eggs, legumes, tofu, quinoa.
- **Magnesium and Zinc:** Support brain function and reduce oxidative stress.

- **Sources:** Dark leafy greens (spinach, kale), pumpkin seeds, nuts, legumes.

### 3. Supplements for Brain Healing

- **Curcumin:** Found in turmeric, helps reduce inflammation and supports brain recovery.
- **Omega-3 Fatty Acids:** Support neural regeneration and reduce inflammation.
- **Vitamin D:** Essential for brain function and healing.
- **B Vitamins:** Especially B6, B12, and folate, support nerve function and repair.
- **Magnesium:** Known to help with relaxation and reduce the risk of post-traumatic stress and anxiety.

### 4. Gradual Return to Activity

- **Physical Rest:** Limit physical activity until cleared by a healthcare provider. Begin with light activities and gradually increase intensity as tolerated.
- **Cognitive Rest:** Limit tasks requiring intense concentration, such as reading, using computers, and watching TV, in the first few days