Exercise and Nutrition after Concussions

Weill Cornell Medicine
SPORTS NEUROLOGY & CONCUSSION

Overview

Exercise and nutrition play important roles in both recovering from a concussion and managing its symptoms. The right lifestyle strategies can promote brain healing, reduce inflammation, and support mental and physical well-being.

Exercise:

Why is this Important?

- Reduces time to symptom and clinical recovery
- Improves blood flow to the brain
- Enhances mood, energy, and sleep

Recommendations:

- "Cocooning" (complete rest) is no longer recommended
- Relative rest for the first 48 hours: Light daily activities are okay — avoid strenuous effort
- **After 48 hours**, begin gradually increasing physical activity while monitoring symptoms:
  - Start slow: Light aerobic activity (e.g. 20 mins on stationary bike)
  - Progress gradually and monitor symptoms:
    - Increase intensity if symptoms do not worsen
    - Mild symptom increase -> continue at current level
    - Severe worsening -> stop activity

Nutrition

Why is this Important?

- Helps reduce inflammation
- Supports brain healing

Recommendations:

- Focus on antioxidant-rich and omega-3 fatty acid-rich foods
- The Mediterranean diet is an excellent model to follow
- Limit alcohol and caffeine
- **Eat more of:**

Category	Examples	Potential Benefit
Omega-3s	Fatty fish (salmon,	Reduce brain inflammation
Antioxidants	Berries, dark leafy greens, colorful	Protect brain cells
Hydration	Water	Prevent fatigue, headaches, brain

Continued on back

- **Supplements:**
  - There is no conclusive evidence that supplements prevent or treat concussion. However, limited data supports the use of the following in some cases.

Supplement	Typical Dose	Potential Benefit
Omega-3 (DHA/EPA)	1–3 g/day	Anti-inflammatory, supports neuroplasticity
Vitamin D	1,000–2,000 IU/day	Mood, cognition, immune support
Magnesium (Threonate or glycinate)	400 mg/day	Improves migraines, sleep, anxiety
Creatine	3–5 g/day	May support cellular energy in the brain
B-complex vitamins	As directed	Nerve function, energy metabolism
CoQ10	100mg 3x/d with food	Helps migraine and fatigue
Probiotics	5–20 billion CFU/day	Gut-brain axis support, reduces inflammation