Injury Description

Brain injuries are caused by a bump or blow to the head, which causes the brain to collide with the skull and disrupts normal function of the brain. These can range from mild (most concussions) to severe (an extended period of unconsciousness or memory loss). This abrupt motion can lead to bruising, swelling, and damage of brain tissue. Sport-related concussions are commonly seen in hockey, football, combat sports, cycling, water sports, basketball, and soccer.

Strategies for Optimal Recovery

1. **Consult with a sports medicine team** to develop a comprehensive recovery plan.

2. **Headaches, dizziness, and nausea** are **common side effects** of a concussion and may decrease appetite.
   - Eat small, frequent meals every 2-3 hours of nutrient-dense foods to ensure adequate energy for healing
   - Avoid skipping meals
   - Eat cold foods without strong smells to combat nausea

3. **Prioritize protein rich foods** to promote healing.

4. **Stay hydrated** to facilitate nutrient delivery to the brain.

5. **Increase sleep and rest hours** to help your brain to heal. Don’t try and “tough it out”.

6. **Seek assistance** with food preparation if necessary.
Nutrients Important for Healing

**Omega 3 fatty acids** may help to reduce the inflammation associated with brain injury.

**Creatine** plays a role in maintaining cellular energy reserves in the brain, which are required for proper brain function.

**Zinc** is found in high concentrations within the brain, and plays an important role in nerve transmission and neurological function.

**Flavonoids** exert antioxidant, anti-inflammatory, and angiogenic effects, which may decrease brain swelling associated with concussion and help induce cerebral blood flow to help heal damaged brain tissue.

*Note: Further research is needed to determine optimal dosages and length of supplementation for brain injury recovery. If considering supplements for treatment, consult with a sport dietitian or medical provider. Keep in mind food sources may be beneficial for healing based on nutrient function.*

Food Sources of Key Nutrients

**Omega 3 fatty acids** - fatty fish (salmon, mackerel, sardines, tuna, trout), flaxseed, walnuts, canola oil

**Creatine** - wild game, red meat, poultry, fish

**Zinc** - oysters, beef, fortified cereals, pork, beans, dark meat chicken, yogurt, cashews, and chickpeas

**Flavonoids** - berries, grapes, citrus fruits, kale, broccoli, apples

Meals & Snacks to Aid Recovery

- Yogurt with flaxseed and berries
- Fortified cereal with milk
- Kale salad with chickpeas, cashews, and orange slices
- ¼ cup walnuts and cashews with an apple
- Dark meat chicken salad with grapes and cashews
- Grilled salmon with broccoli
- Turkey burger with a side of fruit salad

Athlete Recommendations: