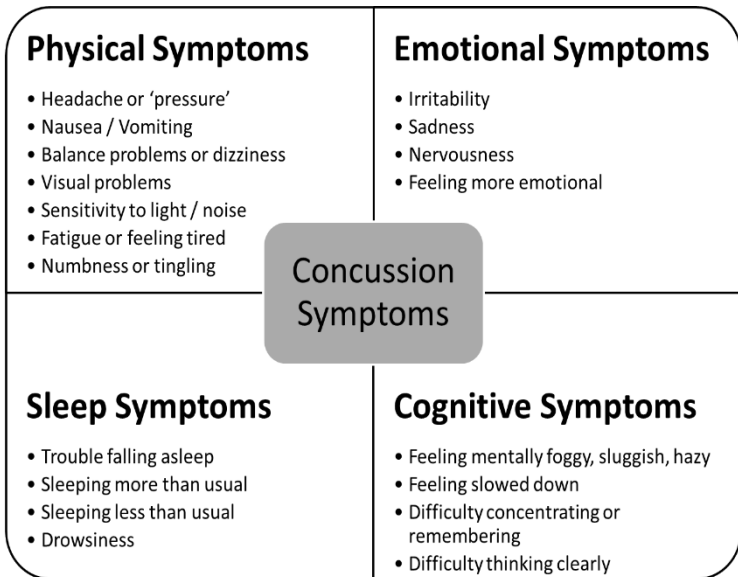


What is a concussion?

While there are many definitions of concussions, in 2017 the Concussion in Sport Group state, **CONCUSSION IS A BRAIN INJURY** and is defined as a complex pathophysiological process affecting the brain, induced by biomechanical forces and include immediate and transient symptoms. When the brain sustains significant accelerations and decelerations a neurometabolic cascade begins in the brain. This results in energy changes and challenges immediately as well as alteration and injury to the axons in the brain from twisting action. These processes are not visible with typical imaging protocols and so our main clue is signs and symptoms.



What are common signs and symptoms of concussions?

As you can see from the list of these symptoms, which can be immediate and transient, it is obvious why doing school work or playing a sport might be difficult.

You should also notice that it may affect emotions, mood and your response to certain situations. This can be disconcerting, but is not abnormal to experience.

How long does it take to recover from a concussion?

A majority of concussions, resolve in 10-14 days. Please keep in mind that the recovery from concussions is individualized and hard to predict. Tracking your symptoms and what makes them worse and/or better can really be helpful to your healthcare team.

Why is cognitive rest helpful?

As stated in the most recent consensus statement (McCrory et al., 2017), 'Prescribed rest is one of the most widely used interventions. The basis for recommending physical and cognitive rest is that rest may ease discomfort during the acute recovery period by mitigating post-concussion symptoms and/or that rest may promote recovery by minimizing brain energy demands following concussion. There is currently insufficient evidence that prescribing complete rest achieves these objectives. After a brief period of rest during the acute phase (24–48hours) after injury, individuals can be encouraged to become gradually and progressively more active while staying below their cognitive and physical symptom-exacerbation thresholds (ie, activity level should not bring on or worsen their symptoms). It is reasonable to avoid vigorous exertion while recovering. The exact amount and duration of rest is not well defined.'

How do symptoms relate to the timing of the injury?

During the initial energy crisis symptoms usually include a migraine headache, sensitivity to light and sensitivity to noise. This is when physical and cognitive rest are typically helpful. During this injury crisis, you are at risk for a second injury that can be fatal. The impairments in neurotransmission and the physical injury of the axons in the brain created by accelerations and decelerations as well as the twisting in the brain lead to impaired cognition, slowed processing speeds, and slowed reaction times. This can make it difficult to concentrate, make you feel foggy, and just overall a bit slow or off mentally. As symptoms begin to decrease you should gradually increase your cognitive load to get back into regular activities. Please keep in mind that the recovery from concussions is very individualized, be patient.

What are other resources me, my family or friends can go to for more information?

<http://www.cdc.gov/HeadsUp/>

What are components that will keep my body strong, reactive, flexible, and healthy?

This is a reminder that movement and exercise is good for health in so many different ways including preventative for balance challenges. There are many little things you can do daily that will make a BIG impact on your health wherever you may be starting.

Strength - Building & Maintaining

- Legs
- Core
- Upper body

Endurance

- Cardiovascular
- Muscular

Flexibility

- Expanding / maintaining range of motion

What are some things I can do to improve my strength and balance?

Engaging in movement and exercise that you enjoy is a great way to improve strength and endurance. Here are a few ideas that you can incorporate in your everyday and improve balance. Doing these multiple times a week will lead to huge benefits!

Everyday Strength and Balance Exercises

- Single and double-leg balance exercises
 - Stand on one leg while at sink (increase time)
 - Tree poses
 - Eyes open / eyes closed
 - Toe raises
- Counter push-ups
- Leg raises on chair (front/side/back)
- Stand from sitting w/o push up

..... use it or lose it

PRACTICE PROGRESS

PRACTICE PATIENCE

PRACTICE PRIDE