# Don't let PAIN be the ONLY guide: A Sports Medicine Perspective

Pain is an unpleasant sensory and emotional experience, perceived by your brain. There is nothing objective about pain. We are not hard wired to feel pain as an accurate scientific measure of tissue damage. Descartes drastically oversimplified his model.

Nociception is the term used to describe the physical, noxious stimulus of pain receptors at the site of injury- and this is designed to tell our brain about *potential* harm.

But the road between the nociception and pain experience is filled with different influences that can totally change the pain perception for the exact same stimulus.
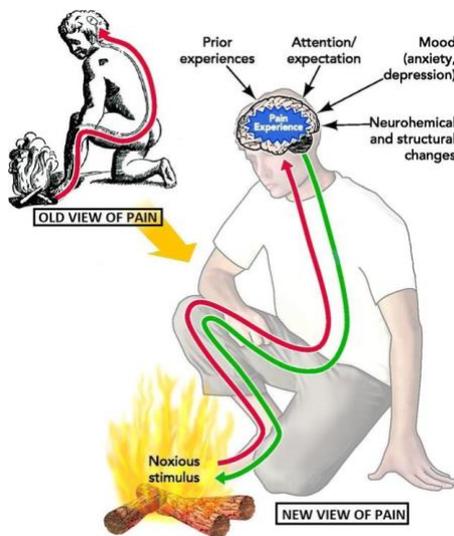
We have all heard the stories of the feats of human endeavour in the face of life-threatening situations, where people may have done things to save themselves or others despite horrendous injuries without feeling any pain. On the other side, we all know how much more injuries hurt when we lose a competition or it affects our participation in something we love.

Ultimately it is most important to realise that THE BRAIN DECIDES when you will perceive pain. This is not to say that pain is not a useful sensation- but we cannot use it as the only yardstick to measure recovery because:

PAIN ≠ TISSUE DAMAGE
FUNCTION ≠ TISSUE HEALING

So for most injuries, we need to balance the BIOLOGY of healing (how long should it take for tissue recovery) and the FUNCTIONAL state of the patient. ***This means finding just the right balance of stress (exercise) and rest for adaptation- of both the BRAIN and the TISSUES.*** The brain needs to learn that it is safe to start using the injured body part, whilst the body part needs to heal with the right stressors to produce growth and recovery. It's like playing an educated game of blackjack- you need to get as close to 21 without "busting".

For most injuries, this is really the key skill of a good rehabilitator: sensible guidance that does not put all the focus on pain is what you should be looking for.