## SquareONE Rehabilitation Educational Tips

"it feels like my joint is out of place"

## Has your painful body part ever felt weird?

Does it feel like it doesn't belong or as if it is out of place? Do you feel like you are off balance or something just doesn't feel "right". You might feel weaker or almost as if you just can't control that body part as well as the other one. We know most joints DON'T go out of place unless there is some big trauma (like a shoulder dislocation). It's just not possible, but it sure feels like it sometime. So how do we explain this.

First, this is not uncommon. And many people feel this. And some of that comes down to how your brain controls movement and how it "feels" and perceives your body in space. The joint just feels wrong, distorted and in the wrong place - even though it is perfectly stable! Its pretty amazing actually and not at all weird even though it seems like it. Or you could say "its weird but its explainable".

Pain does odd things. One thing it can do is influence how the brain controls movement and how you perceive your body. All of us have something like a map of our body in our brain. You know where your body parts are and you know how to control them. This is called a representation. With persisting pain that representation or that map can become distorted. Less precise. It's like spilling coffee on a real map. If you are out in the wilderness you want as much information on your map as possible to know how to navigate. You want borders, elevation changes, rivers, paths etc. You want to know when a bridge has been knocked out and how to get around it. The better your map the better you can navigate and control where you are. With pain, its like that spilled coffee on the map blurs borders, erases a bridge or covers up a mountain. Suddenly, your map is out of date and you can't get around as well when you are in the Swiss Alps.

## Pain does the same thing with the maps in your brain

They get smudged. You feel weird. Your pain can travel. You can feel off balance. Your body part can feel distorted. You might feel like your joints are locked or out of place. It can even be harder to do imagined movements. ALL OF THIS IS NORMAL...and you can train to improve this.

Athletes have known this for years. They know that it is the brain that really controls movement and so sometimes the best way to control movement is to practice training the brain. That's why you see downhill skiers visualizing the course before they do their run. Or a diver imagining their dive before the plunge. Movement starts in the brain so its a good idea to train it. This why movement, and not avoiding physical activity could be beneficial. When you move you can make that map more precise. You "learn" about your body part again. You sop up that spilled coffee.