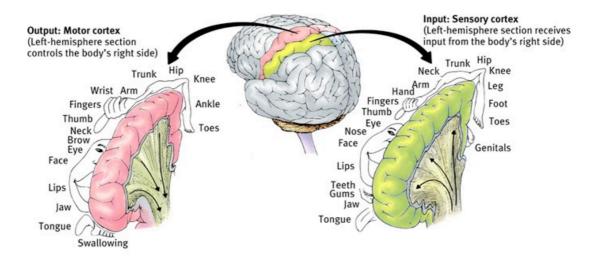
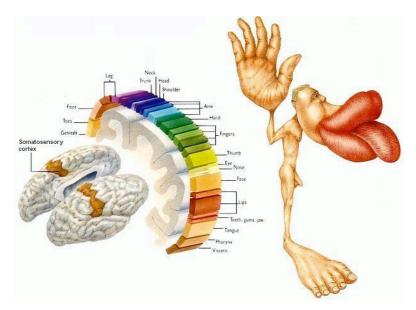


## LEFT AND RIGHT DISCRIMINATION AND PAIN

You are born with a virtual body in your brain. Your virtual body is a sensory map of your actual physical body inside your brain. The picture below illustrates this map.



Your virtual body lets you know where your actual body is in space. Your virtual body changes according to how you use your body during life. For example, a Braille user has larger index fingers in their virtual body and ballet dancers can have larger feet in their virtual body. The picture below illustrates how a virtual body tends to look in the general population. This explains why a minute pebble in your shoe can feel like an irritatingly large stone!



Persistent pain causes changes to occur in the brain – in the brain's actual size, its configuration and its usage. These changes affect the clarity of virtual body's representation by distorting it, smudging it and blurring the affected body area. For

example, a violinist with persistent pain in their fingers will have that aspect of their virtual body blurred.

These changes in the virtual body explain the phenomenon of phantom limb pain and are reflected in your ability to discriminate left from right of the affected body part. Asking you to identify left or right images of your painful body part can test this.

So someone in pain is slower and/or less accurate in determining whether an image of a painful body part is either left or right compared to someone not in pain. The ability to discriminate left and right appears to be important in your recovery from pain. The ability to discriminate left and right body parts can be trained, as the brain is changeable.

So try and improve the speed and accuracy of your ability to discriminate left and right by downloading the app onto your mobile device (<u>www.integratedh.com/shop.php</u>) and playing the app daily. Improving your ability to discriminate left and right will form part of your management plan to you living the life you want.

For more information of left and right discrimination, as well as and scientific references, please go to <u>http://www.gradedmotorimagery.com/leftright.htm</u>