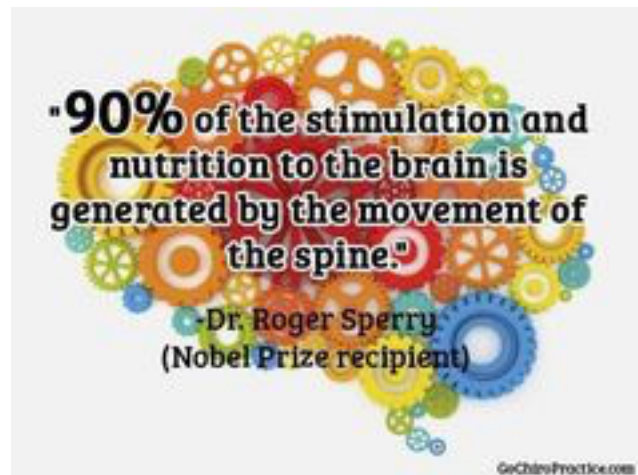


***90% of the stimulation and nutrition to the brain is generated by movement of the spine. Dr. R. Sperry***

This statement is of absolute importance in supporting the benefits of Pilates and its use in rehabilitation and encouraging correct spinal alignment and articulation.

Dr Sperry was the joint recipient of the Nobel Prize for his split-brain research. He states that the spine is the motor which drives the brain. According to his findings 90% of the stimulation and nutrition to the brain is generated by movement of the spine.



He further demonstrated that 90% of the *“energy [of the brain] is used to process and maintain the body’s relationship with gravity with only 10% going into thinking, metabolism, healing and immunity.”*

We could think of the spine as a garden hosepipe. If it is twisted, blocked or kinked the flow is disrupted and reduced. Keep the pipe lengthened and free of blockage and the water flow is unrestricted. This can be similarly applied to the spinal cord. If a nerve is pinched or under pressure due to misalignment (subluxation) or incorrect movement of the spine, then the flow of neural impulses to the brain are restricted.

An area which is most at risk is the cervical spine and loss of this curve. Ideally we should have a 40-45 degree curve in the neck-this is sometimes referred to as the arc of life. The curve protects the brain stem and spinal canal for the spinal curve and nerves to travel unrestricted to every part of the body.

Forward head posture can add about 30lbs of abnormal weight to the spine, affecting its entire alignment. This in turn may result in the loss of 30% of vital lung capacity according to Rene Caillot of the University of California. Oxygen deficit profoundly affects the body and its function.

Pilates is the perfect Method to address these spinal imbalances and misalignments by encouraging equality of movement, sequential articulation of the spine and ensuring optimal brain function and recovery after trauma.

### *Resources*

[https://en.wikipedia.org/wiki/Roger\\_Wolcott\\_Sperry](https://en.wikipedia.org/wiki/Roger_Wolcott_Sperry)

<http://www.drmac.co.nz/http://drmac.co.nz/90-of-the-stimulation-and-nutrition-to-the-brain-is-generated-by-the-movement-of-the-spine/>