the chair disease

– DON'T LET IT KILL YOU

The human body evolved over time to hunt, run, jump and walk. It is not meant to sit for long hours at a desk. Yet most of us spend more than eight hours a day bound to our computer or desk. Don't think that your ergonomically-designed workstation or your 45-minute workout will save you from poor health.

With the technological onslaught of devices in our lifestyle comes pain, suffering, and stress related to prolonged computer work and excessive use of our hands and fingers on our tablets and smartphones. Such a sedentary lifestyle is causing chronic postural changes and taking its toll on our spine. Studies show that office bound workers suffer the most from pain in the neck, shoulder, upper back, wrist, and arms. They also have increased risk of heart disease and diabetes.

"As a result of sitting for prolonged periods, we have seen a change to the natural curve of the spine," explains Dr. Kimberly Spares, chiropractor at the Southern Vales Family Chiropractic in McLaren Vale, SA. "This has resulted in an increase in tension of the postural muscles at the base of the neck, chest, and hip flexors; along with a weakening of the upper thoracic and lumbar spine muscles". There are three natural curves in the spine giving it a soft 'S' shape when viewed laterally. These curves help the spine withstand great stress by providing even distribution of body weight. This weight is ideally distributed while standing; when we sit, we distort this natural curve and the back muscles, discs, and ligaments have to adjust themselves to support our body weight against gravity. According to the research conducted by Department of Orthopaedics and Rehabilitation at the University of Vermont, lumbar disc herniation can be a direct mechanical consequence of prolonged sitting. Other studies conducted at the University of South Australia have observed spinal shrinkage after sitting. They measured a person's height before and after prolonged sitting and detected that one gets shorter after long hours in the chair. According to The Institute of Ergonomics and Human Factors, studies have shown that prolonged inactivity (or even low-level activity such as sitting) leads to impaired oxygenation of muscle tissues, and has been implicated as a cause of back pain.

Most of us are familiar with our core muscles, which are the stabilisers of the pelvis. In addition, there are the tiny muscles that criss-cross across the vertebrae of the spine; muscles that stabilise the neck, shoulders, knees and feet. All these muscles need movement ,and sitting down for most of the day does not activate them. "It's the deterioration of these stabilisers which results in the greatest long-term degeneration of the spine and posture," explains Dr. Catherine Wilkins, chiropractor at The Sydney Institute of Holistic Medicine. "When the stabilisers don't work, the joint doesn't move in the right plane, a bit like a door that hasn't been hung properly. The joint keeps going 'off track' and the weight ends up in places that aren't designed to take it. That's how the joints end up damaged and we end up in pain."

A recent survey of 900 workers conducted by the University of Sydney found a direct correlation between the amount of time spent at the computer,