Medical Xpress

Laziness increases back pain risk

June 14 2007

The researchers participated in the Agency's Berlin Bed-Rest Study, monitoring 20 healthy, young men who spent 56 days lying in bed.

Lead researcher Dr Daniel Belavy said prolonged inactivity shrunk the deep muscles that protected the mens' backs.

He said that in some cases it took six months to recover but even then the muscles did not return to their normal size.

Dr Belavy said surface muscles closer to the skin, stomach and back became overactive, a condition which persisted for up to a year after returning to normal activity levels.

“If you sit around too much long-term, such as a desk job with no sport in your spare time, the muscles can slowly change in a bad way, giving you a bigger risk of hurting your back,” Dr Belavy said.

He said short-term inactivity such as sitting at a desk for a couple of hours was not a major risk.

But a long-term habit of driving to work, working a desk job, going home watching TV and then going to bed would increase the chances of back problems.

Targeting inactivity could also be used in intervention and rehabilitation programs to decrease low back pain and future health care costs.

“I make sure my workspace is well set up so that I can sit with good posture and concentrate on sitting well,” he said.

“This with regular attention to posture and regular ‘earth-like' exercise such as walking and jogging can help to keep all the muscles fit and functioning.”

UQ's Dr Julie Hides, Dr Stephen Wilson, and retired Associate Professor Carolyn Richardson also worked on the project.

The research has been published in Spine, an international journal for the study of the spine and also in the international Journal of Applied Physiology.

Dr Belavy gained his PhD under a joint study program between UQ's School of Information Technology and Electrical Engineering and the School of Health and Rehabilitation Sciences.

He has also been made the study coordinator of the upcoming 2nd Berlin Bed-Rest Study which starts in September.

Twenty-four subjects will spend 60 days in bed with their heads tilted six degrees down to simulate the body's fluid shift that occurs in microgravity of space.

The aim is to study muscle control changes and the effects of vibration exercise.

He will be based at the Centre of Muscle and Bone Research in the Charité University Medicine Berlin.

Source: Research Australia