

# OPTIMAL HEALTH UNIVERSITY

Presented by Dr Peter and Dr Yaron



## Are You and Your Car a Perfect Fit?

Do you strain and stretch your right leg to reach the gas and brake pedals of your car? Are you scrunching down in your seat every time you need to look out of your vehicle's side mirrors? Does your back go into spasm every time you exit the driver's seat?

If you answered "yes" to any of these questions, it's a safe bet that you aren't driving an ergonomically correct car.

The more time you spend behind the wheel, the more important it is to make sure you and your car are a perfect fit. Dr Peter and Dr Yaron can help you make this determination and work to correct postural imbalances caused by years of over-stretching, scrunching and twisting behind the wheel.

Consumers today are becoming increasingly aware of the benefits associated with ergonomic design. Consequently, automobile makers are responding with a variety of options, such as multi-position driver's seats that move horizontally and vertically. For instance, the new Lincoln Navigator has a power-adjustable pedal system that allows the accelerator and brake pedals to be moved forward or backward to suit the driver's dimensions.

During the design phase of an automobile, details mock-ups of the interior are built to study the design and evaluate ergonomic issues. Several designers have recently started using virtual-reality technology to gather needed data.

## Ergo .... What?

How many times have you tried on a clothing item labelled "one size fits all" and actually had it fit? If you are like most people, not very often. That's because, as Dr Peter and Dr Yaron know from years of studying human physiology, no two people are exactly alike.

Ergonomics takes height, weight and various body proportions into account when considering the design of everything from office chairs to the placement of the accelerator pedal in a car. The primary objective of ergonomics is to make the machine serve the user – as opposed to the user serving the machine.

## In the Driver's Seat

Poor car seat design can be hazardous to your spine by forcing you into improper postures. The spine is comprised of individual bones called vertebrae, each supported by an array of muscles and ligaments. Vertebral subluxation occurs when spinal movement is restricted or when vertebrae become misaligned. Vertebral subluxations are associated with a variety of health ailments including ear infection, headache, neck pain, back pain and carpal tunnel syndrome. Doctors of chiropractic correct these "hot spots" with gentle and safe manoeuvres called "chiropractic adjustments".

If your car seat is not ergonomically correct, there are a number of products on the market to remedy the situation. Ask Dr Peter and Dr Yaron to recommend the right product for your specific needs.

Often, simply attaching a quality back support to the driver's seat can put you on the fast track to ergonomic excellence. These supports prevent and alleviate back pain and reduce fatigue, associated with sitting for long periods. Back support is particularly critical for people who spend the bulk of their workday behind the steering wheel.

In extreme cases, you may want to consider replacing the seat itself. This is actually much easier than it sounds – and definitely worth the effort.

## **Steering Clear**

An ergonomic steering wheel? Absolutely!

Steering wheels were initially made out of metal or equally unyielding dense materials. They were also larger than they are today. The advent of power steering led to smaller, softer and more ergonomic steering wheels.

The original purpose of the steering wheel hasn't changed since the days of Henry Ford. Today, however, the steering wheel usually houses an airbag and a horn. Many ergonomically-correct models also incorporate radio and cruise control elements.

## **Maybe It Should Be Called a "Neckrest"**

If you think your car's headrest was designed for your head, you are partially right. You are also partially wrong. The headrest, properly placed is actually intended to protect your neck.

Unfortunately, headrests are not always spine or posture friendly. This lack of spinal support, resulting from the gap between the headrest and driver's neck, may actually contribute to whiplash.

One American company is manufacturing an ergonomically-correct cushion that attaches to a car's existing headrest. Following the natural curve of the cervical spine, it provides full support and encourages a relaxed, neutral posture that reduces back and lower-back pain – and may avert whiplash.

Headrests are equally necessary in the back seat to protect the neck from extension-related injuries; when the head lurches forward and backward in a rapid motion. "The headrest, whether in the front or back seat, should be high enough to prevent the head from falling backwards," explains Dr. James Casper, a chiropractor based in Utica, New York, who has extensively studied car ergonomics. "If the headrest isn't in the proper place, it becomes a fulcrum for the head to snap back over – as opposed to stopping the head's backward momentum".

## **Mirror, Mirror, on the Windshield ....**

To prevent poor driving posture, Dr. Casper suggests tilting your rear-view mirror upward. "This will cause you to sit up straight to look into the mirror, thereby improving the proper alignment of your spinal column and strengthening those posture muscles."

"Most people spend several hours of their day in the car. You can do things to hurt yourself while driving (such as slouching and turning yourself into a human pretzel), or you can actually improve your health in the car by doing some subtle exercises that won't cause you to become distracted."

Simply flexing the foot back and forth at the ankle can easily stretch calf muscles. (Caution: if you are driving, wait to flex the right foot until you are out the car!)

### **“I’m Driving Now .... Please Leave a Message”**

A cell phone that is not hands-free is perhaps the most ergonomic-unfriendly product on the planet. Cradled between the top of the shoulder and the ear, it’s a cervical spine nightmare. Even Houdini would have problems with some of the contortions people twist themselves into while trying to drive, talk on the phone, change the radio station and eat lunch.

Some luxury cars feature the ultimate in hands-free phone use: voice-activated systems. By stating the name of the person to be called, or reciting the phone number, the system automatically does the dialling. The same holds true with the car’s voice-activated navigation system.

As anyone who has studied ergonomics will tell you, no two people are created exactly alike. If we were, this would definitely be a one-size-fits-all world. That’s why it’s important to include your chiropractor in your quest for an ergonomic-friendly car. Make an appointment today and let your doctor of chiropractic help put you in the driver’s seat: the ergonomically-correct driver’s seat, that is!

### **Here’s your Homework:**

The next time you settle into the driver’s seat of your car, think for a moment and consider your surroundings.

- Can you reach the accelerator and brake pedals easily?
- Is your steering wheel at the correct height?
- How much space is behind the back of your neck and your headrest?
- Do you have a hands-free cell phone?
- Is your seat comfortable?
- Do you ever experience sciatica pain while driving?

Become fully conscious of your physical environment. If you answered “no” to any of the questions listed above, plan to make the necessary adjustments. Ask your doctor of chiropractic for recommendations specific to your needs.