Scientific Study Shows Chiropractic Helps Immune Function

A scientific study that a biochemist would love was published on May 28, 2008 in the scientific journal, Chiropractic & Osteopathy, by the Chiropractic & Osteopathic College of Australasia. This study used biochemistry to show that chiropractic care enhances the body's immune response.

This study was designed to see if certain blood cells would produce more of a substance called Interleukin-2 (IL-2) after chiropractic adjustments, which the study authors referred to as Spinal Manipulative Therapy (SMT). Interleukin-2 or just IL-2, is a signaling molecule, that is produced by certain blood cells and is instrumental in the body's natural response to microbial infection and in discriminating between foreign (non-self) and self. In essence, **if the blood cells produce enough IL-2 the body can fight infections more readily. This IL-2 molecule is also important in helping the body to know what is a foreign threat of infection**, and what is naturally inside the body.

In this study a group of 76 individuals were used and blood samples were taken. These blood samples were then tested in a culture dish to see if they produced IL-2 when exposed to a bacteria. The subjects of this study were separated into 3 groups. One group was used as the control and received no adjustments. The other two groups received adjustments with one group getting an adjustment that made the familiar popping sound and the other group receiving adjustments that made no sound at all.

Blood samples were taken from the group just prior to the adjustments, immediately after the adjustment, and then again at 20 minutes and at 2 hours after the adjustment. Cells from the blood samples were then again placed into culture and infected to see the level of IL-2 that would be produced in response to the introduced infection.

The results documented that both groups that had some form of adjustment showed an increase of IL-2 at both the 20 minute and 2 hour times. The group that was tested at those same time intervals but had not received a chiropractic adjustment did not have a rise in IL-2 levels and therefore would not have been as receptive to fighting an infection.

This study was different than others in that it did not check the participants levels of fighting infections, but rather it looked at their individual cells to see if their blood cells themselves had changed due to the adjustments. To rule out other factors, one of the requirements of this study was that all subjects be free of symptoms at the time of the study. The researchers were therefore able to conclude that one single manipulation to the thoracic (mid-back) spine of asymptomatic subjects causes a significant enhancement in IL-2 production by blood cells when tested in a culture dish.