

Reaction Time

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Author's note: Each patient education article in this column details research documented in *Somatovisceral Aspects of Chiropractic: An Evidence-Based Approach*, co-edited by Dr. Masarsky and Marion Todres-Masarsky, DC.

Often in chiropractic, we focus on the occasional "miracle" cases, while ignoring the everyday miracles that take place in our patients' most ordinary moments. In the following article, patients are introduced to research on chiropractic and reaction time. The connection of this information to their everyday existence is made very explicit. Please feel free to use this in your practice newsletter, on your bulletin board, or for tableside lectures.

While driving to work, the supermarket, soccer or baseball practice, etc., it is not unusual to have a "close call." Maybe someone cuts you off, a car stops suddenly in front of you, or you hit a slick spot on the pavement. Usually, you react quickly enough to avoid an accident and go on with your day. A few minutes later, you've probably forgotten all about it; it's just an ordinary moment in your life. Yet, your quick reaction prevented a health-threatening injury, not only for yourself and your passengers, but for other people on the road, as well. In all likelihood, your quick reaction time protected the health of people you have never met.

Quick reaction time depends on the efficiency of nerve function. Recent chiropractic research suggests that misalignments or restrictions of the spinal joints - called spinal subluxations - can disturb nerve function and cause reaction time to slow down. When these subluxations are corrected, reaction time often speeds up.

In the early 1990s, a chiropractic research team followed two groups of athletes in various sports.^{1,2} One group received chiropractic adjustments (experimental group), while the other group was simply monitored (control group). Reaction time was measured before the season began and at six weeks. In the control group, the improvement in reaction time at the six-week check-up was less than 1 percent. On the other hand, the experimental group's reaction time was 18 percent faster.

More recently, another chiropractic research team investigated changes in reaction time in two groups of students.³ Students in the experimental group received a chiropractic adjustment to correct subluxations in the upper part of the neck, while control students were simply monitored. There was an improvement of 8 percent in the controls, but the students receiving chiropractic adjustments improved by 14 percent. This significant difference was not obtained in six weeks of follow-up, as in the previous study; the improvement in reaction time was noted immediately post-adjustment.

A slightly slower reaction time is not something that you are likely to notice. Unlike back pain, stiff neck and headache, people do not commonly call my office and complain that they have slowed down by a fraction of a second. However, nerve functions, such as reaction time, help to keep us

healthy during the ordinary moments of life. If you are not already doing so, please consider scheduling monthly chiropractic check-ups, even if you are pain free.

References

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