

EMG Information Sheet

New to Active Chiropractic's available treatments is the EMG machine. This information sheet is for your reading and knowledge purposes so that you are clear as to what EMG as biofeedback is trying to accomplish and why we use it as a treatment tool!

What is EMG:

"Electromyography (EMG) is an experimental technique concerned with the development, recording and analysis of myoelectric signals. Myoelectric signals are formed by physiological variations in the state of muscle fiber membranes." So basically, we will attach electric muscle reader devices (electrodes) up to the muscle group(s) of concern and use their correct use to help you re-train how to properly fire these muscles in order to increase your healing and recovery time and decrease your risk for future re-injury!

Assessment Procedures:

The primary focus is to help you understand what muscles work during different movements and how to properly use them. Once the electrodes are on, we will be taking you through a variety of movements. You will have a computer screen in front of you so that you can see exactly what's going on. The screen will display red and green lines which denote different muscles and we will help you to get the correct muscles working in the correct order! This is called biofeedback. Biofeedback simply is the *visual* cue you will receive when the correct muscle is contracting. This will help you get the proper *feeling* for how to use your muscle correctly. We want to get the correct muscle firing and working properly because this will help the injured muscle heal , prevent atrophy (or muscle shrinking), and prevent over-use or repetitive strain on muscles.

Benefits of EMG:

There is wide spread use and benefits for using the EMG machine. EMG is used everywhere from medical research, to rehabilitation, ergonomics and sports science. It has been around for about 50 years and continues to grow in terms of use and effectiveness. For medical benefits it is good for medical research, orthopedic uses, surgery, functional neurology, and gait and posture analysis. For rehabilitation it is useful for post-surgery/accident re-training, neurological rehabilitation, physical therapy, active training therapy and increasing muscle mass to prevent atrophy and general muscle weakening. As for ergonomics it can be useful for analysis of demand, risk prevention and ergonomics design. Finally, EMG is used for sports science for biomechanics, movement analysis, athlete's strength training and sports rehabilitation.

You may find it hard to believe just how hard it is to get some muscles to work properly after so many years of it not doing what it's supposed to do!

Conclusion:

Our goal is to help you move to the very best of your ability. We offer this service to do just that! We want to regain the muscle mass you may have lost after injury or improve your performance for sport and conditioning. We will track your progress and help get you to the point where you no longer need the biofeedback to use your muscles properly- it will become habit and a part of all of your daily movement patterns. We want to give you an exercise program that will allow you to move more efficiently and of course decrease your pain symptoms! We are here to help you each step of the way and will work with you to reach your personalized goals. We look forward to working with you!



<u>Price:</u> Initial EMG Biofeedback (approx. 60 Minute Treatment) - \$40 (includes 5 pads) EMG 1st follow-up (approx. 30 Minute Treatment) - \$20.00 EMG 2nd Follow-up (approx. 15 Minute Treatment) - \$10.00

The goal is to first "move well, then move often"!