The overall postural structure associated with TMJ disorders is part of the TMJ Therapy concern. Chiropractic manipulation has helped realign the joints in your TMJ, neck, and low back and along with The TMJ Therapy process your initial symptoms have found resolution. Why continue Chiropractic care?

There are many mechanisms of why manipulation works, and many presumptions as such, although all is not completely understood. One thing that is understood is that it does work. The most recent research points to a more complex reason for the therapeutic effects of chiropractic manipulation. It is suggested that many things are occurring at the same time that provide the benefits.

Here are some of the known things that can begin to explain why manipulation works.

1. Proprioceptive stimulation triggers the release of endorphins. These endorphins cause a near instant and temporary relief similar to pain medication making you less aware of the problem. This trick of the body can cause a secondary benefit, that of relaxing local tissues such as trigger points or tight musculature that may be pinching nerves.

2. Manipulation provides improved nutrient supply. The cartilage and other structures inside of a joint have no blood supply. These structures get their nutrients through motion. The blood supply goes to the outside of the joint and nutrients move into the synovial fluid of the joint. Joint motion moves this fluid around thus providing fresh nutrients to all parts of the joint, as well as removing waste. If a joint becomes locked down by muscle spasm, scar tissue, a cast, or any other means, for a prolonged period of time the joint begins to feel stiff. You know the feeling of needing to stretch after sitting in the car for a long time.

The facet joints in your spine are particularly vulnerable to this problem because they work in tandem and because of the body's amazing ability to compensate. Your facet joints all work together, if one is injured it can become locked down to prevent further injury. When this happens you may get the desire to stretch or move your back. This usually works, but if all of the other joints compensate for the problem joint and take that added stress of movement on themselves then the problem joint stays locked down. Specific manipulation induces full range of motion and synovial fluid movement.

3. Manipulation can reduce pressure on the nerves. Your nervous system is the control center of your body, and it is not without weaknesses. Nerves and nerve bundles are soft tissue. They don't function well under physical pressure. In fact it has been shown that inflammation, a bulging disc, or fragment floating around can interfere with proper nerve conduction. The stuck joint as discussed previously can also physically be stuck pressing on a nerve, or could be causing inflammation that is pressing on the nerve, or could just be moving in a way that rubs the nerve. In any case, the adjustment can cause a relief of this pressure. through movement of the joint to the correct position, or motion.

4. Proprioceptive retraining allows for improved function. The brain also records these proprioceptive signals from the joints motion. Especially for chronic conditions the brain is in need of retraining regarding the motion of that joint. Manipulation takes a joint through its full range of motion. This new input is then stored and replayed in the brain, similar to muscle retraining that physical therapists will do, or physical training of athletes, when the body has done the motion enough times it remembers it. This retraining provides a functional correction that may provide pain relief.

Here are some of the more controversial observations, benefits, and mechanisms of chiropractic. (I must note that just because specific research has yet to prove how it works, doesn't mean that it doesn't.)

Somato-visceral (body/internal organ) effects- That they exist is not so much controversial as is the predictability. We know that the spine can effect the visceral organs, but we can't really say that if you adjust this level this often in this way that you will get the pancreas to produce this much more insulin. The mechanism, more likely, is one of many things acting on the organs. As with everything else in the body it is more complicated than one single interaction. With no ill side effects or adverse long term effects, why wouldn't you continue care? The next page is a chart showing the effects of spinal misalignments.

The TMJ Therapy Effects of Joint Manipulation SOMATO-VISERAL EFFECTS OF SPINAL MISALIGNMENT



Vertebrae	areas	effects
C1	blood supply to head, pituitary gland, scalp bones of the face, brain, inner & middle ear, sympathetic nervous system	headaches, nervousness, insomnia, head colds, high blood pressure, migraine headaches, nervous breakdowns, amnesia, chronic tiredness, dizziness
C2	eyes, optic nerves, auditory nerves, sinuses, mastoid bones, tongue, forehead	sinus trouble, allergies, crossed eyes, deafness,eye troubles, earache,fainting spells, certain cases of blindness
СЗ	cheeks, outer ear, face bones, teeth, tri-facial nerve	neuralgia, neuritis, acne or pimples, eczema
C4	nose, lips, mouth, eustachian tube	hay fever, catarrh, hearing loss, adenoids
C5	vocal cords, neck glands, pharynx	laryngitis, hoarseness, throat conditions
C6	neck muscles, shoulders, tonsils	stiff neck, pain in upper arms, tonsilitis, whooping cough, croup
C7	thyroid gland, bursae in shoulder, elbows	bursitis, colds, thyroid conditions

Vertebrae	areas	effects
T1	arms: elbows down to hands, wrist, fingers, esophagus and trachea	asthma, cough difficult breathing, shortness of breath, pain in lower arms and hands
T2	heart valves and coverings coronary arteries	functional hear conditions and certain chest conditions
Т3	lungs, bronchial tubes, pleura, chest, breast	bronchitis, pleurisy, pneumonia, congestion, influenza
T4	gall bladder, common duct	gall bladder conditions, jaundice, shingles
Т5	liver, solar plexus, blood	liver conditions, fevers, low blood pressure, anemia, poor circulation, arthritis
Т6	stomach	stomach troubles, nervous stomach, indigestion, heartburn, dyspepsia
T7	pancreas, duodenum	ulcers, gastritis
T8	spleen	lowered resistance
Т9	adrenal and supra-renal glands	allergies, hives
T10	kidneys, ureters	kidney troubles, hardening of the arteries, chronic tiredness, nephritis pyelitis
T11	small intestines, lymph circulation	skin conditions, acne, pimples, eczema, boils
T12	large intestines, inguinal ring	rheumatism, gas pains, certain types of sterility
L1	large intestines, inguinal ring	constipation, colitis, dysentery, diarrhea, some ruptures or hernias
L2	appendix, abdomen, upper leg	cramps, difficult breathing, acidosis, varicose veins
L3	sex organs, uterus, bladder, knees	bladder troubles, menstrual troubles, painful or irregular periods, miscarriages, ed wetting, impotency, change in life symptoms, many knee pains
L4	prostate gland, muscles of lwer back, sciatic nerve	sciatica, lumbago, difficult/painful or too frequent urination, backaches
L5	lower legs, ankles, feet	poor circulation in the legs, swollen ankles, weak ankles and arches, cold feet, weakness in the legs, leg cramps
sacrum	hip bones, buttocks	sacro-iliac conditions, spinal curvatures
соссух	rectum, anus	hemorrhoids (piles), pruritis (itching), pain at end of spine on sitting

This book is intended to be used in conjunction with the individualized instruction and treatment in The TMJ Therapy process and the associated doctors. Do not attempt to do any exercises, stretches, or diet modification without the direction of the doctor.