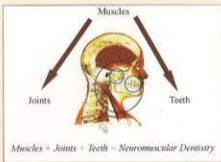


Neuromuscular Dentistry (NMD) – Beyond the appearance of a smile.

The way that your upper and lower teeth come together (your bite or occlusion) is part of a system of teeth, muscles and joints. If your teeth do not fit together properly (misaligned bite), the muscles and joints accommodate – work to get them together.

A misaligned bite often leads to muscles that are overworked when they should be relaxed, leading to various painful conditions.



Neuromuscular dentistry considers the entire system that controls the positioning and function of your jaw.

The neuromuscular dentist seeks to establish a jaw position based on a harmonious relationship of the three main factors affecting occlusion – the teeth, muscles and jaw joints. The resulting jaw position is called the neuromuscular bite.

How is NMD Performed?

Your dentist may be considering various types of dental treatment – to improve your



smile, to correct a misaligned bite or to relieve a painful condition. To provide you with an optimum bite

that gives you a beautiful smile as well as healthy muscles and joints, your dentist will evaluate and study the complex relationship between your teeth, jaw joints and muscles. Your dentist will then apply neuromuscular principles to build your bite.

NMD begins by relaxing the muscles around the jaw with the use of a TENS device (Myomonitor). The Myomonitor is a battery operated electrical muscle stimulator that delivers mild electrical stimulus to the muscles of the facial/jaw area, and possibly the neck and shoulder area, to “exercise” these muscles and to cause them to relax.



Activity level of jaw muscles before and after relaxation by a muscle stimulator.

Your NM dentist may also perform tests using computerized technology that provide very detailed information about the status of your muscles and joints. These tests give your dentist a “picture” of what is happening with your muscles and joints.

Computerized Mandibular Scanning or Jaw Tracking allows the NM dentist to measure and study the pattern of the jaw opening and closing through its full range of motion. Electromyography (EMG) tests provide information on the activity of key muscles that control the jaw during various functions as well as at rest.

Sonography is another option available to the NM dentist that allows the dentist to assess the status of the articular disk and jaw joint function.

This information is then used in the doctor’s diagnosis to assist in determining the precise point at which your jaw should be in relation to your upper teeth. Rather than relying on your present jaw position as being the best for you, the NM dentist uses this additional objective information to determine if your bite should be left as is or be adjusted to a more optimal occlusion.

Once the dentist has determined where your new bite should be, you will be given a plastic appliance called an “orthotic” to keep your bite in its new position. You may wear this orthotic as an interim



step to a more permanent treatment.