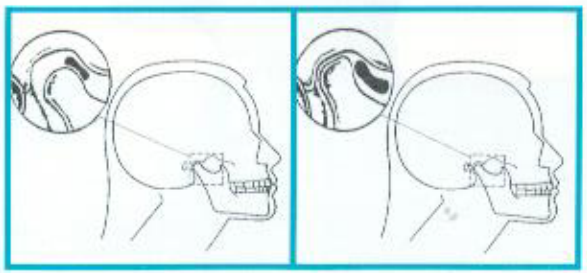
TM JOINT VIBRATION ANALYSIS is a quick, non-invasive method for your dentist to examine how your jaw joints function. The vibration from each patient is like your own personal signature – determined by loudness, duration and frequency.

Our office uses a new device called Joint Vibration Analysis (JVA) to help determine if patients have a TM joint (jaw joint) problem. Joint Vibration Analysis has the acceptance of the American Dental Association. The dentist has the primary responsibility for diagnosing disorders of this particular joint. Utilizing the JVA procedure aids the dentist in making an accurate diagnosis and demonstrates the severity level of the disorder.

ABOUT THE TM JOINT

The Temporomandibular Joint -- TMJ -- consists of bone, cartilage and ligaments. Like most joints, the TM joint functions best when these parts are in proper relationship to each other. Just as the shoulder or hip can become displaced, so can the TM joint.



Normal TM Joint Displaced TM Joint

The TM joint can be also be affected by arthritic changes - like the knee or elbow joints. Jaw joint disorders may be accompanied by many symptoms including:

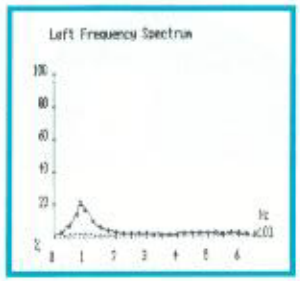
- Headaches
- Dizziness
- Neck, shoulder pain
- Jaw pain or soreness
- Worn or cracked teeth
- Difficulty swallowing
- Earaches or ringing
- Limited mouth opening
- Clicking or joint sounds
- Locking jaw
- Sore facial muscles
- Sensitive teeth

TM joint disorder is often progressive. A minor joint sound now may mean major pain down the road, so dental professionals suggest early diagnosis of TM joint problems. This is where the new test, Joint Vibration Analysis, enters in.

WHAT IS VIBRATION ANALYSIS?

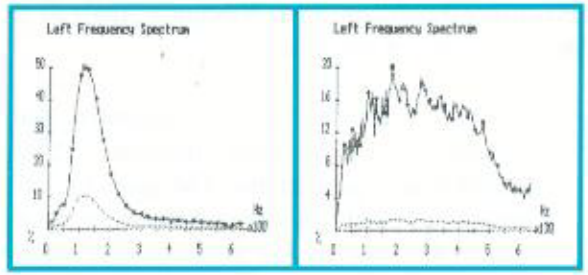
When you open your mouth, the various parts of the TM joint rub together. When a well-lubricated, healthy joint works normally, this movement generally produces little friction and hence, little vibration or sound. However, when there is a joint problem, the parts rub together in a different way. This motion creates a sound or vibration you may be able to hear, but some vibrations are outside our audible range.

Decades of research show that certain TM joint problems can create a specific type of vibration - almost like a signature. For instance, the "signature" of a *normal* TM joint might look like this →



Your "signature" is analyzed by measuring differences in loudness, duration and frequency. This provides information to determine:
(1) if a joint problem is present
(2) the nature of the problem

The "signature" of a TM joint *with* problems or dysfunction might look like this:



Signature of displacement Signature of Degenerative Arthritis

If a TM disorder does exist, the severity can be checked again at the next appointment to see if it is stable, worsening or improving. In fact, your "signature" reading may be redone anytime as a guide to assess the treatment outcome.