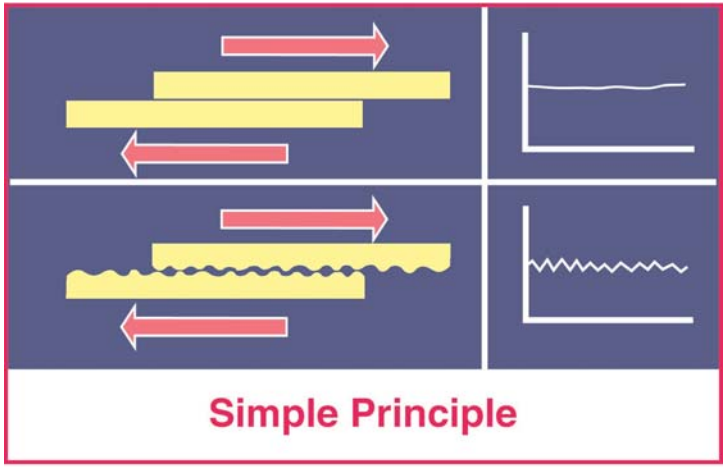
BioRESEARCH Assoc. Inc.

BioJVA™


Med Freq
Slant Distance
Est. Velocity
Max. Slant
Lat. Deflection
Joint Vibration Analysis
Narrative
Seconds
TIMJ-R
TIMJ-L
Vert
Joint Vibration Analysis

Bio-JVA

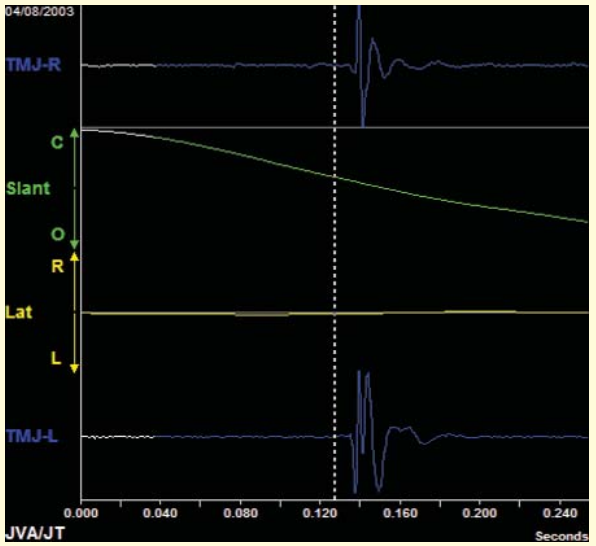
Joint Vibration Analysis is based on simple principles of motion and friction: When smooth surfaces rub together, little friction is created...and little vibration.



If these surfaces become rough, then friction and vibration are created when these surfaces articulate.

Human joints have surfaces which rub together in function. Smooth, well lubricated surfaces in a proper biomechanical relationship produce little friction and little vibration. But surface changes, such as those caused by degeneration, tears, or displacements of the disk, generally produce friction and vibration. Different disorders can produce different vibration patterns or "signatures". PC-assisted vibration analysis helps identify these patterns and helps you distinguish among various TM disorders.

Joint Vibration Analysis is the only system that records joint vibrations as they pass through the tissue. This seemingly small improvement over old "sonography" equipment provides an incredibly clear view of the pressure waves created by the TMJ's.



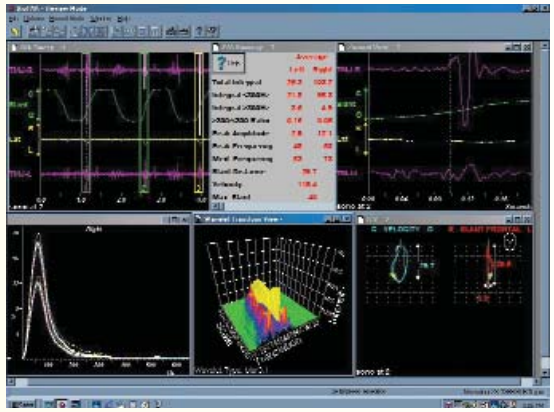
JVA provides a fast, non-invasive, and repeatable measurement of TMJ function to aid in your diagnosis of TMJ function. Understanding TMJ function is vital anytime you are changing the vertical, lateral, or A/P position of the mandible. Common treatments that change mandibular such as TMD treatment, Orthodontics, Reconstruction and Sleep Dentistry can benefit from JVA testing.

Now you can assess immediately the impact your treatment is having on the function of your patients TMJ in your office. JVA is designed to be recorded by your staff in under 2 minutes, and only interpreted by the clinician.

For more information on Joint Vibration Analysis, visit www.biojva.com or call us today at 800-251-2315.

Joint Vibration Analysis Performance Specifications

JVA System Bandpass:	25 Hz to 10,000Hz
JVA System Frequency Resolution:	< 4.0 Hz
Maximum (unlimited) input amplitude:	0.0 to 0.5 KiloPascals (1000 N/m2)
JVA System input amplitude resolution:	0.2 Pascal (8 bit ISA A/D)
Total Integral Range:	0.15 Pascal (12 bit PCMCIA/PCI A/D)
(Amplitude multiplied times fequency)	0.0 to 1000 PaHz (Pascal-Hertz)
Amplitude x Frequency Integral Resolution:	0.1 PaHz
Time of a single recording:	10 seconds < T < 3.0 minutes (180 seconds)
Time resolution (2,000 samples/sec):	0.5 millisecond
> 300 Hz / < 300 Hz (Ratio)	rounded off to two decimal places
Frequency Means (Increments)	0 - 50 Hz, 51 - 100 Hz, etc. .
Common mode Rejection Ratio	> 120 dB (noise rejection)
Format for FFT / Wavelet display	256 points, 1 KHz Sample Rate (512 points, 2 KHz Sample rate)
4 Required data channels	Right joint vibrations Left joint vibrations Vertical position (optional) Lateral position (optional)
Computer Requirements	Operating System must be Win NT or later Available 5 volt PCMCIA slot for laptop systems Available PCI slot for desktop systems Highspeed internet connection recommended



To learn more about the products, services and seminars offered by BioRESEARCH Assoc. Inc.

call 800-251-2315

or visit *www.biojva.com*

BioRESEARCH Assoc. Inc.
9275 N. 49th Street
Suite #150
Milwaukee, WI 53223
800-251-2315 (toll free)
414-357-7545 (fax)
www.biojva.com
support@biojva.com