Why this Office is Equipped with the HF27 Ultrasound



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Whether you are a first time user or have had multiple treatments with ultrasound, this information will help answer your questions and enable you to understand the benefits of the HF27 therapeutic ultrasound used in this office.

#### What is Therapeutic Ultrasound?

Therapeutic ultrasound is a way of treating various internal ailments with a sound frequency far beyond the maximum that can be detected by the human ear. This noninvasive and painless treat-



ment is F.D.A. approved and has been used throughout the world for over 50 years.

#### How is Ultrasound Energy Generated?

Ultrasound is generated by high frequency vibration. The vibrations are generated by applying an electrical voltage to crystals. When these crystals are energized, they vibrate at a very high frequency. The crystals are contained in what is called a soundhead.

## How Does Ultrasound Treat Various Ailments?

Ultrasound uses high frequency vibration as energy to excite cells creating physical, chemical, and electrical changes within the body. This vibration can penetrate into the body at a depth of up to 2 inches.

### Why is a Gel Pad used Between the Soundhead and Patient?

A coupling agent is necessary in the application of ultrasound to transmit the ultrasound waves and to prevent air between the skin and the soundhead. The HF27 utilizes a special gel pad that allows the soundhead to contour to the patient's body.

# What are the Non Thermal Effects of the HF27 on the Body?

As published in many texts, ultrasound's nonthermal effects at the cellular level are tissue regeneration, soft tissue repair, a decrease in muscle spasm and pain, bone repair, and swelling reduction. The effects on the musculoskeletal system are decrease in swelling, decrease in muscle spasm, promoted bone healing, and a decrease in pain.



