



# *Music Therapy*

**Intervene** & find out more

## *What is it?*

Music has been used in medicine for thousands of years. Ancient greek philosophers believed that music could heal both the body and soul. New studies indicate that listening to music affects the release of powerful brain chemicals that can regulate mood, reduce aggression and depression, and improve sleep.

## *Why music?*

Music can serve a means of communication for those where the function of language has become very challenging or lost. Language appears to be a relatively new function of the brain in human history, whereas music is pre-verbal and is pancultural. Music is a pre-verbal and sometimes non-verbal brain function, predating the ability for language. Furthermore, music is processed by many different parts of the brain rather than just one center, as in language. The elements of music such as rhythm, pitch, and melody and are all processed differently. The emotions are also tied in with music, thus activating the limbic system. Oliver Sacks (Professor of neurology at Columbia University Medical Centre), an advocate of music therapy, says that we listen to music with our muscles. The arousal is in the brain stem and the dynamic registers in the basal ganglia. With music being received and processed at the brain stem level, it shows how basic and primeval sound is to humans. This is why, as Sacks says, deeply demented people respond to music.

## *What is music therapy used for?*

- + encourage emotional expression
- + promote social interaction
- + help reduce pain
- + deal with anxiety
- + relieve chemotherapy-induced nausea and vomiting
- + reduce stress
- + lower heart rate
- + lower blood pressure
- + lower breathing rate
- + aid healing
- + improve physical movement

- + enrich a patients quality of life Specifically for Alzheimer's disease

## *What does music therapy involve?*

- + making music
- + listening to music
- + writing songs
- + talking about lyrics

Music therapy may also involve imagery and learning through music.

## *Science behind music therapy*

For centuries, music has been known to calm people down and provide relief from stress and tension. One possible explanation for its effects is found in a study by researchers at the University of Miami's School of Medicine in Florida, led by Dr. Ardash Kumar.

The study assessed how music therapy affected secretion levels of five brain chemicals (melatonin, serotonin, norepinephrine, epinephrine, and prolactin).

"For centuries, music has been known to calm people down and provide relief from stress and tension. Music therapy can be a useful therapeutic tool to promote interactive communication."

After a month-long program (30 minutes a day, five days a week), the team found that music therapy led to increased secretion levels of melatonin, a hormone associated with mood regulation, lower aggression, reduced depression and enhanced sleep. The higher melatonin levels persisted even six weeks after music therapy sessions had stopped. Secretions of epinephrine and norepinephrine rose immediately after music therapy sessions but did not remain for long after the sessions had ceased. Music therapy did not influence secretions of serotonin and prolactin.

## *Getting started*

### **Maximizing With Music Therapy**

There is not a single music that is good for everyone. People have different tastes. It is important that you like the music being played.

**The following are general guidelines to maximize the effectiveness of the music.**

- + To wash away stress, try taking a 20-minute "sound bath." Put some relaxing music on your stereo, then lie in a comfortable position on a couch or on the floor near the speakers. For a deeper experience, you can wear headphones to focus your attention and to avoid distraction.
- + Choose music with a slow rhythm - slower than the natural heart beat which is about 72 beats per minute. Music that has repeating or cyclical pattern is found to be effective in most people.
- + As the music plays, allow it to wash over you, rinsing off the stress from the day. Focus on your breathing, letting it deepen, slow and become regular. Concentrate on the silence between the notes in the music; this keeps you from analyzing the music and makes relaxation more complete.
- + If you need a stimulation after a day of work, go for a faster music rather than slow calming music.
- + When going gets tough, go for a music you are familiar with - such as a childhood favorite or favorite oldies. Familiarity often breeds calmness.
- + Take walks with your favorite music playing on the walkman. Inhale and exhale in tune with the music. Let the music take you. This is a great stress reliever by combining exercise (brisk walk), imagery and music.
- + Listening to the sounds of nature, such as ocean waves or the calm of a deep forest, can reduce stress. Try taking a 15- to 20-minute walk if you're near the seashore or a quiet patch of woods. If not, you can buy tapes of these sounds in many music stores.