

# Music, Physical Development, and Health

At their first public conference on “The Musical Brain,” the Royal Institution in London presented information on music affecting people’s health. Professor Michael Thaut showed how **the use of rhythm protocols are helping stroke victims to walk.**

“Through the use of rhythm, we can **stimulate the improvement of neurological processing and cortical reorganization in the injured brains.** This technique is proving to be more effective than conventional physiotherapy” (American Music Conference, [www.amc-music.org/musicmaking/brain/royal.htm](http://www.amc-music.org/musicmaking/brain/royal.htm)).

A study by Dr. Frank Wilson, an assistant clinical professor of neurology at the University of California School of Medicine, San Francisco, found that instrumental practice **enhances coordination, concentration, and memory.** It also **improves both eyesight and hearing.** He further reports that the process of learning to play an instrument **refines the development of the brain and the entire neurological system** [Mueller, M. (1984). Right brain strategies for the full development of the individual through study of the arts, *A Review of General Session II ACC-VACC Conference, Sacramento, Ca. February 21, 1984.* San Francisco, City College of San Francisco].

In a speech at the California Music Educators Association State Convention on March 17, 1989, Dr. Wilson shared data from UCLA brain scan research studies which show that **music more fully involves brain functions (both left and right hemispheres) than any other activities studied.** Dr. Wilson said that he has found that people become an active participant in their own physiological development through music. His research has shown that **involvement in music connects and develops the motor systems of the brain in a way that cannot be done by any other activity.**

According to the Institute for Music and Neurologic Function, “notable success has been achieved with patients suffering with amnesia, memory problems and all types of dementia including short-and long-term memory responses. [Patients show] **decreased agitation and enhanced reality orientation**” [Institute for Music and Neurologic function: an affiliate of the Beth Abraham Family of Health Services. [www.bethabe.org/Resource\\_Center97.html](http://www.bethabe.org/Resource_Center97.html) Retrieved August 10, 2007].

According to the Institute for Music and Neurologic Function, music therapy is used to help awaken, rehabilitate, and heal patients who suffer from Alzheimer’s Disease and other dementias, Parkinson’s Disease, traumatic injuries, stroke, acute and chronic pain, and depression. Patients with Alzheimer’s Disease and other dementias use familiar songs **to unlock memories, improve communication, and overcome withdrawal.** Parkinson’s patients use moving to music to help **improve their gait, balance, and range of motion.** Patients with traumatic injuries use music-assisted physical therapy to **improve gross and fine motor functioning, coordination, and visual and auditory perception.** Patients who have suffered a stroke use **musically-assisted speech to treat non-fluent aphasia.** Patients with acute and chronic pain use music therapy to provide

relief by **inducing relaxation and easing anxiety**. Finally, patients with depression use music as a powerful modality for **connection to their feelings, expressing their thoughts, and overcoming isolation** ” [Institute for Music and Neurologic function: an affiliate of the Beth Abraham Family of Health Services. Music Therapy. [www.bethabe.org/Music\\_Therapy95.html](http://www.bethabe.org/Music_Therapy95.html) Retrieved August 10, 2007].

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According to the Center for Timing, Coordination, and Motor Skills, students who can perform complex rhythms are **more capable of making faster and more precise corrections in both academic and physical situations** [(2000). *Rhythm seen as key to music's evolutionary role in human intellectual development*. Center for Timing, Coordination, and Motor Skills].

According to a Swedish study, people who participate in the arts **live longer** than those who don't [(1996). *British Medical Journal*].

According to a French study, the use of melodies in speech therapy **stimulated speech recovery in stroke victims** [(December 1996). *Neurology*].

Music therapists working with Alzheimer's patients have found that listening to or participating in rhythmic activities **increases focus and concentration, enhances verbal and behavioral response, improves ability to respond to questions, improves social interaction, decreases agitation, and eliminates demented speech** [Prickett, C. & Moore, R. (1991). The use of music to aid memory of Alzheimer's patients. *Journal of Music Therapy*].

Medical researchers have found that patients were able to **lower both their systolic and diastolic blood pressure** as much as five points (mm/Hg) and **reduce their heart rates** by four to five beats per minute after listening to music. It was discovered that people with high blood pressure could help keep their blood pressure down by listening to tapes with relaxing low frequency music in both the morning and the evening [Wigram, T. (1995). The psychological and physiological effects of low frequency sound and music. *Music Therapy Perspectives*].