

Researchers find Active Music Making Expands the Brain

In the April 23, 1998 issue of Nature, Researchers at the University of Munster in Germany reported their discovery music lessons in childhood actually enlarge the brain. An area used to analyze the pitch of a musical note is enlarged 25% in musicians, compared to people who have never played an instrument. The findings suggest the area is enlarged through practice and experience. The earlier the musicians were when they started musical training, the bigger this area of the brain appears to be.

In a May 5, 1998 New York Times article it states:

"The discovery, described in the April 23 issue of the journal Nature, was made after scientists put musicians and others into a magnetic brain imaging machine pointed at the auditory cortex, where sounds are processed. This part of the brain contains cells, called neurons, which are sensitive to different sound frequencies. Neurons that fire in response to the same frequency tend to cluster into little islands, forming a kind of sound frequency map in the auditory cortex."

"The researchers said that skilled musicians use more neurons for processing sounds from a piano or better synchronize those sounds because of their training. Furthermore, the younger the musicians started playing their instruments, the greater their response to piano notes. Musicians with perfect pitch or absolute relative pitch showed no differences. The increased response to piano tones was the same in those who played piano, woodwinds or stringed instruments, although most of the musicians said that they had received early training on the piano."

We are about to see an avalanche of information which will go on to show the incredible impact music making has on the overall development of human beings OF ALL AGES.

This is just one more important piece of the puzzle!

Source: Nature, New York Times <http://www.nytimes.com>