- Music—psychological aspects / Music therapy

Our brains respond to music, whatever our age

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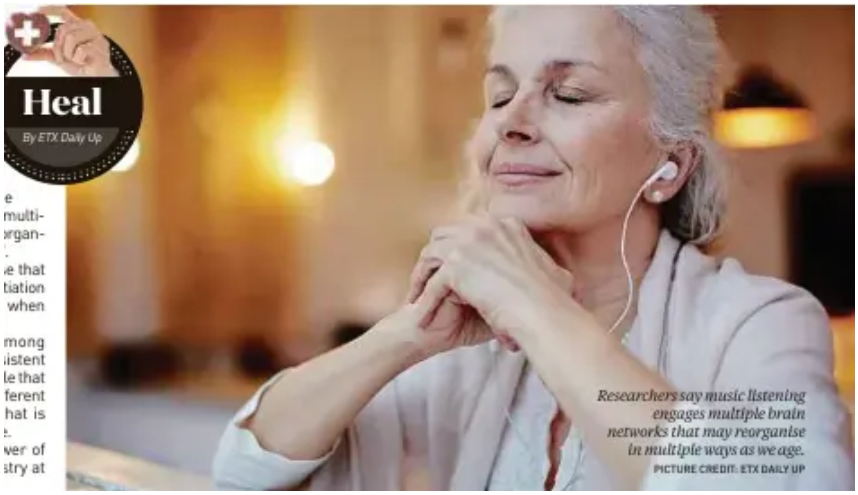
MUsIC seems to provoke a multitude of emotions in those who listen to it, whatever their age.



A Canadian-American study recently published in the journal ‘Network Neuroscience’ has investigated this phenomenon.

The researchers used music to study the brain function of older and younger individuals. They monitored the brain activity of two cohorts of participants while listening to music: one composed of young adults with an average age of 19, the other of seniors with an average age of 67.

The academics played 24 recordings, including excerpts from wellknown and easily recognisable songs, as well as songs the participants had chosen themselves.

They also introduced them to melodies that had been specially designed for the purposes of the study. The volunteers had therefore never heard them before.

It turns out that the young adults’ reward circuitry was activated when they listened to music they were familiar with or enjoyed.

surprisingly, in seniors, the brain’s reward system was found to be activated even when they listened to music that was previously unfamiliar to them, or that they said they didn’t like.

The researchers conclude that “music listening engages multiple brain networks that may reorganise in multiple ways as we age”.

The researchers hypothesise that older people show less differentiation between liking and familiarity when listening to a new song.

“If familiarity is lower among older adults, but liking is consistent with younger adults, it is possible that older adults would engage a different network response to music that is unfamiliar but liked,” they write.

This demonstrates the power of music to activate brain chemistry at any age.