The Connection **Between Music** & Brain Health

Unlocking the Healing Power of Melodies



What happens in the brain when listening to music?



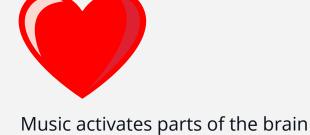
When sound enters our ears, it's turned into signals that our brain recognizes as music, thanks to a pathway involving nerves and brain structures.



There's a complex network in the brain that makes us feel pleasure from music, connecting our desires and feelings to our body's responses.



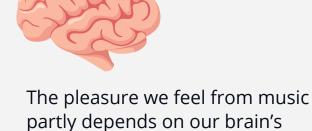
Our brains are wired to recognize and enjoy familiar music patterns and rhythms.



responsible for hearing, emotions, and memory.



is linked to increased dopamine release the nucleus accumbens. [the nucleus accumbens] Is connected to other regions involved in pleasure and motivation.



partly depends on our brain's natural pain-relief system.



Impact on Physical Well-being · Reduces anxiety, blood pressure, and pain.

- · Can improve sleep quality and mood.
- · Increases brain dopamine levels by up to 9%.
- Favorite music reduces pain by **22%** and depression by **25%**.
- · Brain imaging shows simultaneous activation of music and
- motor brain areas. Music activities lower heart rate, respiratory rate, blood pressure, and perceived pain.



· Engaging with music improves mental alertness and memory. · Taking piano lessons has shown to improve attention, memory,

(a) Mental and Psychological Benefits

- problem-solving abilities, mood, and quality of life in older adults. · Familiar music can help in recalling past memories.
- · 98% of older adults benefit from engaging with music in at least one health-related way.
- · 65% of the same age group find music beneficial for mental health. · 60% of older adults feel energized or motivated by music.

• **75%** of people aged 50 to 80 find music relieves stress.

Social and Cultural Impact

combating social isolation.

Practical

Applications:

· Black and Hispanic older adults attribute high importance to music, reflecting its cultural significance in fostering community bonds.

· 46% of older adults sing regularly, fostering social interaction. · 19% find music even more significant now than in their youth.

· Music serves as a universal language, connecting individuals and



- 85% of older adults listen to music weekly, showcasing its broad appeal. Live performances, TV, and online platforms offer diverse musical engagement.
 - **Music Therapy & Healthcare** Music therapy aids stress management, mood

Incorporate Music into Daily Life

Therapists use music to address various health issues, from depression to pain.

improvement, and overall well-being.



- **Learning Music**
- Taking music lessons, like private instruction or group classes, provides structured learning.
- Children learning instruments enhances cognitive development and instills a lifelong love for music. Exploring diverse genres expands musical

horizons and fosters creativity.

https://www.nia.nih.gov/news/could-musical-medicine-influence-healthy-aging