**Why Music Listening Makes Us Feel Good: The Chemical Link Between Music and Emotion**

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It can be argued that music is a core function in our brain. Our brains are wired from the beginning to process and understand music. Yet music has always been sort of a mystery, especially since it's not typically considered "necessary" for survival. That is reserved for the trifecta of food, sex, and sleep.

A study came out this month that adds another important piece of information as we continue to figure out how our brain processes music. When we satisfy our desire to eat, to sleep, or reproduce, our brain releases dopamine--the "feel good" neurochemical involved when we experience pleasure and reward.

Turns out this same chemical is released when listening to music.

**The "Music Listening Releases Dopamine" Study**

A study was conducted by researchers at McGill University in Canada. An initial 217 participants were narrowed down to 8 who consistently responded the same way when listening to music regardless of the listening environment.

For the study, the researchers used a combination of PET (positron emission tomography) and fMRI (functional magnetic resonance imagining) techniques to scan the brains of the 8 participants as they listened to music over the course of three sessions. In addition, the participants completed a questionnaire in which they rated how pleasurable they found the music.

This is where it gets a little more technical--the PET scan showed the researchers that dopamine was released in the striatum during peak moments of emotional arousal when listening to the music. The fMRI scan helped show a distinct difference in timing and structures involved--the caudate was active when anticipating the peak emotional arousal and the nucleus accumbens was more involved when actually experiencing the peak emotion.

In layperson's terms? When we 1) anticipate and then 2) actually experience a pleasurable response while listening to music, our brain reacts in distinct and specific ways to release the "feel good" chemical dopamine.

**What Does This Mean?**

From an academic standpoint, this is a fascinating study. According to the researchers, this may be the first study to show that an abstract reward such as listening to music--as opposed to a tangible reward such as eating and sleeping--releases dopamine. We've traditionally considered abstract rewards to be processed on a more cognitive level, but this study shows that our ancient reward circuits can be involved.

Additionally, it points to a shared neural network involving tangible and abstract rewards. We already know that skills such as speech production use shared neural networks to those used to sing. This study shows a similar relationship, demonstrating shared neural circuitry involving how our reward circuits process tangile and abstract rewards.

From a practical standpoint, this will not affect your average day-to-day listening. Just know that, when you experience an emotion while listening to music, ancient reward circuits are flooding your brain with a chemical designed to make you feel good.