Dear Alice,

Does ecstasy drain spinal fluid? Or is this a dumb myth?

Answer

Dear Reader,

It’s... drum roll, please... a myth! Ecstasy has a lot of effects, but draining spinal fluid isn't one of them. Ecstasy (3,4-methylenedioxymethamphetamine or MDMA) is a synthetic stimulant drug, with effects similar to amphetamines and the hallucinogen mescaline. Its use was initially associated with raves and dance parties, but nowadays it shows up in a wider range of contexts. Typically, users report feelings of euphoria, increased energy, and emotional closeness while on the drug. Through the years, research has been done to help provide more information about what ecstasy is and how it affects the body. For more about how ecstasy reacts in the brain, check out Ecstasy's side effects — Are any permanent? and other related questions in the Go Ask Alice! Alcohol and Other Drugs archive.

So if it doesn't drain spinal fluid, what does it do? Ecstasy increases the levels of neurotransmitters along the dopamine and serotonin pathways — the boost of serotonin, in particular, affects mood, appetite, and arousal. The spinal fluid rumor may have originated from earlier ecstasy use studies, in which researchers used a needle to obtain samples of the subjects’ spinal fluid to assess the levels of serotonin breakdown products. It seems that, somehow, this procedure was distorted into a myth that the drug itself depleted spinal fluid. Another possible root of the myth could be that some folks are confusing serotonin with spinal fluid. Long-term use of MDMA can significantly deplete the serotonin levels that the brain produces, so perhaps some people were interpreting this depletion of serotonin as a depletion of spinal fluid.

It's great that you're asking these questions to understand more about the effects that ecstasy can have on the body. Although there are other factors associated with ecstasy use that may prove to be harmful to your health, the theory that it drains you of your spinal fluid holds absolutely no water. If you're interested in learning more about this substance or are concerned about substance misuse, you may want to meet with a health promotion specialist who can
provide additional information.

Alice!
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Related questions

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Resources

Columbia Health BASICS program (Morningside) [10]
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