

# Concomitant use of ecstasy and antidepressants

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Theories on how to enhance the potency of illicit substances often prevail among recreational drug users. One such theory is that antidepressants, and monoamine oxidase or MAO inhibitors in particular, boost the effects of ecstasy. However, this combination has been proven to be lethal as it can potentially lead to a deadly condition known as serotonin syndrome.

In Finland, deaths from ecstasy have been associated with the concomitant use of ecstasy and antidepressants. Using these so-called boosters alongside ecstasy and other amphetamine derivatives is extremely dangerous.

Ecstasy works via the body's own neurotransmitters. It stimulates the release of monoamines by the neurons in the brain and inhibits their reuptake. The release of high levels of neurotransmitters, particularly serotonin, acts to produce the desired response in the user's central nervous system. This also has the effect of depleting the body's monoamine stores.

What happens when ecstasy is combined with Aurorix, an antidepressant? The synaptic cleft is a small space between two cells into which neurotransmitters are released. Ecstasy causes the release of serotonin and dopamine through a specific channel into the synaptic cleft, simultaneously blocking the reuptake. At the same time, Aurorix, an MAO inhibitor, inhibits the activity of the enzymes responsible for metabolising both serotonin and amphetamines, thereby eliminating the body's final opportunity for managing the flood of serotonin.

With concomitant use, amphetamine levels in the body rise, whilst the Aurorix acts to inhibit the MAO enzyme responsible for breaking serotonin and amphetamine and prevents their reuptake.

## Risks of ecstasy

- The concomitant use of ecstasy and antidepressants is associated with serious health risks. Combining ecstasy with Aurorix, a moclobemid, is particularly dangerous.
- Frequent ecstasy use should be avoided as the brain's neurotransmitter stores fail to recover, potentially leading to depression. There is no scientific evidence to support the claim that SSRI's protect the brain from the effects of ecstasy.
- Ecstasy is a nerve agent. Studies have shown an adverse impact on recall, learning, logical thinking and reasoning ability after just 20 uses.
- Please bear in mind that even if you follow the recommendations provided here, you cannot protect yourself against the side effects and risks associated with occasional use, including panic, nausea and confusion. The more frequent the use and the higher the doses, the greater the potential for long-term or even irreversible changes to your brain.

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