

## **Abstract**

Amphetamines are psychostimulants acting on the central nervous system, which produce a feeling of increased energy, euphoria and blissful feeling. The use of these drugs has many physiological effects such as nausea, increased blood pressure and heart rate, vomiting, abdominal cramps, arousal and alertness, hyperactivity and many others. Amphetamines produce their effects by acting on the monoamine transmission system in certain areas of the brain, especially in the ventral tegmental area and the nucleus accumbens. Amphetamines may affect monoamine transporters localized in the plasma membrane, vesicular monoamine transporters and various receptors. Effects of amphetamines also have practical use in the treatment of certain disorders such as attention deficit hyperactivity disorder, but chronic overactivation of the system and triggering signaling cascades in neurons may induce a number of changes at the cellular and molecular levels, that underlie the development of a state of addiction on these drugs. This has a lot of other health and social negative impacts on the drug users.

## **Keywords:**

amphetamine, physiological effects, monoaminergic system, addiction