

DEPRESSION



“The major depressive disorder is characterized by episodes of depressed mood lasting for more than two (2) weeks often associated with feelings of guilt, low self-esteem and worthlessness and high anxiety. It is also accompanied by additional symptoms including disturbed sleep and appetite, impairment in memory and suicidal thoughts (American Psychiatric Association, 2000).”

Depression also includes less clinically definitive symptoms of low energy and feelings of helplessness and general malaise.

Modern anti-depressant medications rely heavily on serotonin signaling, which can cause unpleasant side effects especially when use is stopped suddenly. Moreover, many users of modern anti-depressant medications complain that they simply don't work very well.

It has been found that clinically depressed patients display reduced CB1 activity. Increased TRPV1 signaling is also associated with depression and anxiety symptoms. This suggests that an imbalance in natural endocannabinoid “tone” plays an active role in depression symptoms (and processing, in general.) Activation of CB1 receptors by THC has the potential of improving human clinical depression by shifting the balance of the cannabinoid “tone.” Cannabis has also been shown to facilitate the release of endogenous serotonin and dopamine, which are the brain's known “happy” chemicals.

Low amounts of THC will primarily activate the CB1 receptor, having anti-depressant effects. At larger doses TRPV1 signaling takes over as the dominant biological effect causing anxiety symptoms. This is the basis for many of cannabis' biphasic effects.

CBD reduces the impact of TRPV1 signaling. CBD also activates the serotonin system, inducing the endogenous release of serotonin, which is similar in action to modern pharmacotherapies.

It is worth noting that depression can also have roots in neuroinflammation caused by chronic stress. Since THC activates CB2, it has been shown to reduce neuroinflammation.

TERPENES

The terpene profile ideal for depression has not been studied in the scientific literature. Limonene is often referred to as having an “uplifting” effect.

Depression has many symptoms, and the terpene profile can be tailored to any of them. Myrcene for sleep issues, linalool for anxiety. Limonene for “energy.”

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