

# cannabinoids and appetite

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## what are ‘the munchies’?

The feeling of increased appetite after using cannabis has been documented for hundreds of years. This is often called ‘the munchies’. It is only recently however, that any scientific research has been conducted to understand why cannabis use has this effect.

The first human study confirming that increased appetite, particularly the craving for sweet food, actually correlated with cannabis use, was conducted in 1971. Other research has been conducted since that time, once again confirming that sweet snacks such as cookies, chocolate bars and cakes are preferable over savoury snacks to cannabis users. Some research also found that after a period of time, cannabis users showed an increased body weight.

## is there potential for cannabis to be used for weight control?

The therapeutic uses of cannabinoids have been investigated following observed increases in appetite and body weight in a number of human studies. Subsequently, cannabis (both illicit and synthetic preparations) has been successfully used to control wasting in patients with HIV and cancer and conversely to decrease appetite and weight in obese patients. Even though cannabis has been used in this way, little is still known about cannabis and the mechanisms at play, in terms of appetite. It is believed that with further research it is likely that the therapeutic benefits of cannabis for weight control can be even better understood and controlled.

## how does using cannabis increase appetite?

Recently researchers have been able to get a better understanding of how cannabis alters appetite by studying animals and the actual chemical pathways related to hunger, involved within our body.

There are approximately 500 natural components found within the *Cannabis sativa* plant, of which up to 80 have been classified as ‘cannabinoids’ – chemicals unique to the plant. The most well known and researched of these, delta-9-tetrahydrocannabinol, is the substance primarily responsible for the psychoactive effects of cannabis.

Like opiates (substances derived from the opium poppy such as heroin), cannabinoids affect the user by interacting with specific receptors, located within different parts of the central nervous system. Today it is known that we have receptors that respond to cannabis as well as cannabinoid like substances that exist inside us (endogenous cannabinoids). The particular receptor most often associated with cannabis use and appetite regulation is known as CB1. To date, the CB1 receptor has been found to be active in several areas of the body known to stimulate eating behaviour, including the following:

- the sections of the hypothalamus and hind brain that regulate food intake
- the reward centre of the brain – helping food make us feel better
- from within stomach and intestinal tissue – helping us know when we are hungry
- the limbic forebrain – helping food seem more palatable

So put simply, when someone uses cannabis, they are replicating an effect the body produces for itself, only much more intensely – thereby resulting in a change of eating behaviour.