

Weed and weight: Why are cannabis consumers slimmer?

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Diet. Detox. Paleo. Parisian. Whatever you want to call it, nearly half of Canadians are following some sort of food plan to lose weight, according to a recent [national poll](#).

Whether for health or aesthetic reasons (or a bit of both), the desire to slim down feeds billions of dollars into the weight loss industry every year. And yet, as studies keep telling us, results are [almost never permanent](#). It's enough to make the diet-weary roll a fat one and forget it—which, coincidentally, may be an effective slimming strategy in itself.

Dr. Stephen Glazer, chief medical officer at [CannaWay Clinic](#) and bariatric expert, says while research is still in its infancy, studies suggest the [endocannabinoid system](#) “contributes significantly to both obesity and metabolic disorders.”

The fatty acid connection

Simply put, the endocannabinoid system is a network of cellular receptors in the body that help keep our system in balance. It is the CB1 receptors within the endocannabinoid system that interact with THC, leaving us feeling euphoric (or “high”).

Glazer says these same CB1 receptors play a large role in energy uptake, storage, and conservation. When this receptor is activated by THC, either through ingestion or inhalation, it heightens our taste and smell pathways and activates our brain's appetite centre, colloquially known as the “munchies”. This is why he says his patients at CannaWay receiving chemotherapy can benefit from medical cannabis to help them rebuild a healthy appetite.

But aren't we talking about losing weight? Yes.

As it turns out, Glazer says new research looking at the average Western diet, which tends to be high in omega-6-fatty-acids and low in omega-3-fatty-acids, points to chronic and excessive stimulation of the CB1 receptors.

To put it in perspective, the ideal omega-6 to omega-3 ratio for the human body is 3:1. But in the average Western diet, this can be as high as 20:1. Overactive CB1 receptors could be throwing the entire endocannabinoid system off balance.

Says Glazer: "Excessive stimulation of our cannabinoid receptors (CB1) can result in an increased rate of obesity along with unhealthy lipid profiles, insulin resistance, inflammation, and an increased risk of cardiovascular disease."

In other words, the system that keeps our bodies in balance is itself out of balance, thanks to the foods we're eating.

Cannabis to the rescue?

While it seems counterintuitive that something responsible for a food frenzy can also help you shed pounds, research suggests regularly activating CB1 with cannabis can help calm this overstimulated receptor over the long term, a phenomenon called down-regulation.

Glazer says one study in particular showed long term, regular cannabis is linked to lower body mass index (BMI) and obesity rates. "This is an exciting development, in specific relation to the long-lasting down-regulation of CB1, which may suppress appetite while increasing calories burnt."

But it's not just THC at play when it comes to hunger, or lack thereof. Glazer says another cannabinoid, called THCV, may actually block the effect of THC on CB1 receptors, potentially suppressing appetite. He cites more recent evidence that suggests THCV may increase connectivity in areas of the brain associated with appetite—areas that have been shown to be affected in obesity patients. “Thus, THCV may play a role in reducing the incidence of obesity.”

Blocking CB1 receptors to suppress appetite is something the pharmaceutical industry has already looked into. A drug called Rimonabant showed promise in the lab, although clinical trials resulted in negative psychiatric side effects, and research was abandoned.

Work that brown fat

CBD, the darling cannabinoid of late, could also be responsible for trimming weed-loving waistlines over time. Over time CBD has been shown to increase our body's brown fat, or brown adipose tissue, a special kind of fat that burns through regular body fat for fuel.

“This may have a variety of positive effects related to fat cell metabolism and energy expenditure, resulting in a potentially promising therapeutic agent for obesity prevention,” says Glazer.

While he has not personally seen lowered BMIs in his own medical cannabis patients, Glazer says he doesn't discount the growing evidence connecting cannabis with healthy body sizes. However, he's cautious to give full credit to the handful of cannabinoids mentioned above:

“We must keep in mind that the cannabis plant is composed of over 250 unique chemical compounds and the research is just getting started, focusing primarily on THC and CBD. More research is required for definitive answers, but we are moving in the right direction and the future for cannabis use and research is quite promising.”