

CBD Oil for Diabetes: All You Need to Know

Exploring the facts



Diabetes is a disease wherein the body has trouble regulating the level of sugar (glucose) in the bloodstream. In healthy individuals, the pancreas produces a hormone called insulin, which works to transport glucose molecules across cell membranes and into cells for energy production.

In diabetics, depending on whether they suffer from the Type 1 or Type 2 form of the disease, the body is either unable to produce insulin, or it's unable to use it in a way that's sufficient enough to maintain glucose at a healthy level in the bloodstream.

1. In turn, irregular or unstable glucose levels can cause a huge array of serious, life threatening conditions, which we'll talk about in detail shortly.
2. In regard to CBD oil for diabetes, then, there are two main things we need to consider in order to determine the degree of viability that the drug has on the increasingly-prevalent disease:

In what ways (if any) does CBD work to improve either the function and/or production of insulin, and

How does CBD work to alleviate the spectrum of side effects caused by irregular blood sugar levels.

In this article, we'll talk about recent research publications which directly address both of these questions, in the hopes of shedding some light on why CBD oil for diabetes is gaining such popularity among both patients and physicians alike.

Diabetes: What is it, What Causes it, and Who is at Risk

To elaborate on the rudimentary processes explained in the introduction, diabetes is a disease wherein the body is unable to properly transfer the glucose from food into energy sources for cells.

And of course, without energy sources, the body's cells (which are responsible for every functional mechanism of life) will be unable to carry out the requisite pathways needed to survive.

In the case of Type 1 diabetics (who only make up about 5% of the diabetic population), the body is no longer able to produce insulin, which is the keystone hormone needed to transfer glucose molecules from the bloodstream into cells. This is generally due to an autoimmune attack on the pancreas – the organ responsible for the production of insulin. Type 1 diabetes usually arises in children or young adults who contract a pancreas-attacking virus, and other than perhaps a genetic predisposition, there are not many specific risk factors.

Type 2 diabetes is a rather more complex form of the disease wherein the body still produces insulin, but it either doesn't produce enough of it, or the cells become resistant to its physiological pathways. Either way, the resulting effect is similar to that of Type 1 diabetes, wherein the underlying issue is a general inability to control blood glucose levels.

Also, Type 2 diabetes is a far more prevalent form of the disease; it is estimated to affect over 400 million people worldwide, or between 90 and 95% of the total diabetic population.

Additionally, far more risk factors are associated with Type 2 diabetes than there are with Type 1. Several of the most prominent of these factors include: weight (obesity); a high sugar diet combined with inactivity; family history/genetics; ethnicity (African-Americans, Hispanics, and American Indians are especially susceptible, though the reason is unknown); and age (people over 45 are far more likely to develop the disease).

Conventional Non CBD Treatment Methods

In both Type 1 and Type 2 diabetes, an inability for glucose to be absorbed into the body's cells results in it building up to dangerously high levels in the bloodstream. This results in the severe, potentially life-threatening symptoms that are most often associated with the disease. Some of these symptoms include:

- Heart and blood vessel disease
- Nerve damage
- Kidney disease
- Stroke
- Vision problems

In short, there aren't many areas of the body that go unaffected by the physiological detriments of diabetes, and unless the disease is monitored closely on a daily basis, the average diabetic will have a lifespan between 10 and 15 years shorter than the average person's.

Fortunately, conventional medications have gotten to the point where diabetics – if they keep track of their glucose levels rigorously and maintain an appropriate diet – can lead a rather normal lifestyle.

Since they can't produce it on their own, most Type 1 diabetics will be prescribed insulin either in the form of shots that they have to self-administer, or in the form of a pump which automatically monitors blood glucose levels and injects the hormone as needed.

While these forms of treatment are state of the art, they're by no means 100% effective; even the most responsible of diabetics can find it difficult to avoid the dangerous consequences of irregular glucose levels.

And not to mention, without top of the line health insurance, treatments like insulin pumps are far too expensive for the average individual to consider; most, in fact, are resorted to pricking blood from their finger to monitor sugar levels, and self-administering insulin shots through hypodermic needles.

In the case of Type 2 diabetes, individuals who are able to get by without having to take insulin shots will most likely be prescribed a pharmaceutical drug like Metformin or Avandia, which aid in the ability to properly regulate glucose.

However, as is far too common with these kinds of prescription meds, a range of severe side effects is often produced, as is a monthly medical bill that can seemingly be as cumbersome as the side effects themselves.

This is why thousands of diabetics in recent years have been more than willing to try alternative treatment options like CBD oil. Even if it can replace one of their prescription medications, it's generally more than worth it.

Not to mention, the general improvement in quality of life for diabetics that added CBD to their treatment regimen has been consistent nearly across the board.

CBD Oil for Diabetes: What the Research has Shown



Like we mentioned earlier, in the world of medicine, anecdotal evidence can only go so far.

So regardless of the fact that many diabetics use CBD oil every day of their lives to help manage their condition, a lot of physicians will be wary to recommend it as a treatment unless they can point to the exact physiological reasons as to why it's beneficial.

Fortunately, along with its treatment potential for cancer and nervous disorders, CBD oil for diabetes has been one of the most thoroughly researched areas of medicinal cannabis.

Dr. Raphael Mechoulam, a research scientist out of the Hebrew University of Jerusalem, points to the fact that naturally-occurring CBD receptors occur throughout the human body – from the brain and nervous tissues, to organs and immune cells. And one of the organs where he's found the receptors to be highly prevalent?

The pancreas.

In fact, endocannabinoid receptors (namely CB-1 receptors) have been found specifically in the organ's islet cells – the exact location where insulin is produced. And what's more, the stimulus of these receptors in the islet cells has already shown to have direct links to insulin production.

Now, regardless of how intriguing the research is, we simply cannot sit here and say that endocannabinoid receptors are directly responsible for the production of insulin, or that CBD is a cure for diabetes in any way shape or form. While it's possible that the receptors may play a crucial role in insulin's production, much more research will have to be done in order to pinpoint the physiological mechanisms and exact chemical pathways that are responsible for doing so.

We will say, though, that preliminary studies of CBD for diabetes have been so promising, it's led to American Journal of Medicine's Dr. Joseph Alpert to call on the DEA and the National Institute of Health (NIH) for increased funding and collaboration on its continued research.

And moreover, the National Organization for the Reform of Marijuana Laws (NORML) has gone so far as to suggest that endocannabinoids may be "the most important physiologic system involved in establishing and maintaining human health," based on their central role in regulating homeostasis, which is the body's ability to maintain normative operating conditions in spite of harmful stimuli.

CBD for Diabetes: How it Can Help Treat Underlying Medical Conditions

What's been even more concrete than research on CBD's role in insulin production, though, has been research on its ability to help treat and prevent common medical conditions associated with diabetes.

One of the most prominent factors associated with the development of insulin resistance in Type 2 diabetes is chronic inflammation related to obesity. The excessive presence of fatty tissue in obese Type 2 diabetics drastically limits the efficiency of glucose metabolism, which in turn results in high levels of sugar building up in the bloodstream. The specific anti-inflammatory properties of CBD, however, have long been known to directly combat glucose metabolic disorders and improve overall metabolism.

Nerve damage is another condition commonly associated with diabetes. In many instances diabetics will have very limited sensation in their lower extremities, and in severe cases, amputations of the leg(s) are often necessary. This is due to a lack of sufficient blood flow, which eventually results in the breakdown of tissue and the increased risk for infection. CBD, in turn, is a federally patented neuroprotectant, and has been shown to reduce infarcts (areas of dead tissue due to lack of blood flow) by up to 30%.

Likewise, there have been dozens of other publications as well that have showed great promise in the role of CBD as a treatment for diabetes, including studies on retinopathy (a disorder of the eyes) and diabetic cardiovascular dysfunction.

In short, the medical potential and therapeutic benefits of CBD oil for diabetes is nothing short of phenomenal; many thousands of diabetics use it every day to treat the disease and improve their overall quality of life, and many thousands more will continue to do so in the future in light of increased research and improved information.

And lastly, on a side note, it's important to point out that CBD oil will not get you high – unlike whole plant marijuana, it contains hardly any traces of THC, which is the specific cannabinoid responsible for the psychoactive properties of the drug.

CBD Oils for Diabetes: Final Thoughts

CBD oils can range in terms of their overall concentrations of the active cannabinoid; not all tinctures are the same, and different dosages will be required depending on the specific oil that you end up using (although the proper dosage will always be labeled on the bottle).

Likewise, CBD oil is no guaranteed solution for all diabetics; while the majority of patients do find it highly therapeutic, it's certainly more effective for some than it is for others. As is always the case, it's important to do your own research, and if possible, speak with a professional about some possible tinctures that might be appropriate for you and your specific condition.

Source: <https://www.marijuanabreak.com/cbd-for-diabetes>