3. Nausea Overview

Nausea is a relatively common ailment that makes people feel like vomiting. While nausea doesn't have to lead to actual vomiting, it often does. Everyone is susceptible to nausea, depending on where they find themselves, but some are much more predisposed than others. In most cases, it can be an acute problem, meaning it will go away once the responsible stimulus is out of the picture.

Outside of direct stimuli based nausea, most cases are a sign of other problems. For instance, the most common cause of nausea and vomiting is viral gastroenteritis, also known as the stomach flu. Another common reason is morning sickness associated with pregnancy. That said, what's behind nausea could also be a more severe problem, although this is relatively rare. The causes of nausea are quite varied. Some people will experience nausea as a result of motion sickness, or even vertigo. For others, it will be a reaction to spoiled food or a new medication your body doesn't tolerate well. Even severe migraines are known to be a direct cause of ongoing nausea.

While not usually severe enough to warrant seeing a doctor, there are some cases when setting up an appointment with your doctor is the best course of action. Be sure to do this if you've experienced vomiting for more than 24 hours, blood in vomit, severe abdominal pain, signs of dehydration, or even any reason to think it's caused by poison.

Everyone can be nauseous. Some people are much more susceptible, while others have a strong constitution, but everyone is familiar with the feeling of nausea. That said, each person's system is going to have the most substantial impact on what causes it, and how bad it is. Other common risk factors for nausea will greatly depend on age. Children are much more likely to have nausea caused by a broader range of things. Adults, however, tend to feel nauseous in fewer situations, but when unexplained nausea persists, it can point to unseen issues. As mentioned, seeing a doctor is really not needed for the vast majority of nausea cases. That said, if this is a consistent issue for you, you'll want to talk to a trusted medical professional to get a full diagnosis and get on the best path forward. There are treatments out there that can help mitigate nausea for those who face a constant struggle.

4. Potential Benefits Of CBD

4a Direct Research Treatment Overviews

Cannabidiol, a non-psychotropic component of cannabis, attenuates vomiting and nausea-like behaviour via indirect agonism of 5-HT(1A) somatodendritic autoreceptors in the dorsal raphe nucleus - https://www.ncbi.nlm.nih.gov/pubmed/21827451 - 2012 - University of Guelph

Researchers evaluate the hypothesis that activation of somatodendritic 5-HT1A autoreceptors in the dorsal raphe nucleus with CBD produces the antinausea effect. In their findings, the authors note that the administration of CBD effectively suppressed nausea. The researchers believe their results suggest CBD produced this effect by indirect activation of specific receptors throughout the body.

Cannabidiolic acid prevents vomiting in Suncus murinus and nausea-induced behaviour in rats by enhancing 5-HT1A receptor activation - https://www.ncbi.nlm.nih.gov/pubmed/23121618 - 2013 - University of Aberdeen

This study evaluates the ability of cannabidiolic acid (CBDA) to reduce nausea and vomiting, as well as enhancing 5HT1A receptor activation using animal models. Their experiment demonstrated both the antiemetic and antinausea properties of CBDA, showing greater potency at inhibiting vomiting and enhancing 5HT1A activation than CBD alone. This study demonstrates the promise CBDA may hold as an effective treatment for nausea and vomiting.

Interaction between non-psychotropic cannabinoids in marijuana: effect of cannabigerol (CBG) on the anti-nausea or anti-emetic effects of cannabidiol (CBD) in rats and shrews - https://link.springer.com/article/10.1007/s00213-010-2157-4 - 2011 - University of Guelph - Nausea suppression

CBD was shown to suppress vomiting in lab rats and shrews significantly. Researchers used another substance, known as cannabigerol (CBG) to reverse this suppression. Moderate doses of CBG and CBD are opposing each other at the 5-HT1A receptor, which is known to play an essential role in regulating nausea.

Regulation of nausea and vomiting by cannabinoids - https://www.ncbi.nlm.nih.gov/pubmed/21175589 - 2011 - University of Guelph

This review highlights evidence demonstrating that manipulation of the endocannabinoid system regulates nausea and vomiting. The author's review currently available research that highlights both the antinausea and antiemetic properties of CBD, effectively suppressing nausea and vomiting. They conclude preclinical research indicates cannabinoids may be clinically effective in treating nausea and vomiting brought on by chemotherapy and other cancer treatments.

Cannabidiol, a non-psychoactive component of cannabis and its synthetic dimethylheptyl homolog suppress nausea in an experimental model with rats - https://www.ncbi.nlm.nih.gov/pubmed/11973447 - 2002 - Wilfrid Laurier University

The authors of this study report both CBD and its synthetic analog dimethylheptyl homolog interfere with nausea as well as conditioned nausea. Using rat models, researchers successfully counteracted nausea induced by lithium chloride using both CBD and dimethylheptyl homolog. In their results, the authors suggest that non-psychoactive cannabinoids may hold therapeutic value in the treatment of chemotherapy-induced nausea.

Preliminary efficacy and safety of an oromucosal standardized cannabis extract in chemotherapy-induced nausea and vomiting - https://www.ncbi.nlm.nih.gov/pubmed/21039759 - 2010 - The Autonomous University of Barcelona

In this clinical trial, researchers aim to evaluate the tolerability, preliminary efficacy, and pharmacokinetics of an acute dose of cannabinoids, such as CBD. The results of their trial demonstrated the antiemetic and antinausea properties of cannabis-based medicine. In their conclusion, the authors note these medicines used in conjunction with standard antiemetic therapy is well tolerated and provided excellent protection against nausea and vomiting.

4b Indirect Research For Treatments_____

Plant-based medicines for anxiety disorders, part 2: a review of clinical studies with supporting preclinical evidence - https://www.ncbi.nlm.nih.gov/pubmed/23653088 - 2013 - University of Melbourne - Anxiety

A comprehensive review of all the plant-based medicine which has had both preclinical and human clinical trials conducted about their anxiolytic-like effect. An analysis of over 1500 papers identified 21 plants which had been adequately tested, with one of the most successful of these plants found to be CBD enriched Cannabis species.

Control of pain initiation by endogenous cannabinoids - https://www.ncbi.nlm.nih.gov/pubmed/9685157 - 1998 - University of Naples Federico II - Pain Relief

Researchers concluded CBD significantly reduces discomfort and pain, in part, due to the interaction between two substances, PEA and anandamide. According to tests, they "act synergistically, reducing pain responses 100-fold more potently than each compound alone".

<u>Cannabis</u>, <u>Cannabinoids</u>, <u>and Sleep: a Review of the Literature - https://www.ncbi.nlm.nih.gov/pubmed/28349316</u> - 2017 - National Center for PTSD - Improved REM Sleep

This report concludes CBD holds promise for significantly increasing the quality of REM sleep. Researchers believe it could one day be a primary force behind improved overall sleep quality. CBD was even shown to reduce daytime sleepiness in many patients.

5. What The Research Says

We've gone from not knowing much about CBD at all to understanding a plethora of different conditions it could potentially improve in just the last 15 years or so. For many, CBD was always just the overshadowed little brother of THC, but new research has flipped this dynamic on its head. These days we have an ever-growing pile of evidence suggesting how much CBD can improve a variety of issues, including nausea.

Many reports have noted the power of CBD to reduce nausea symptoms caused by a broad range of reasons. For instance, <u>Regulation of nausea and vomiting by cannabinoids</u> reviewed all the available evidence before suggesting that CBD could very well be a useful aid in nausea and vomiting suppression, even in cases of cancer treatment. While the preclinical data was encouraging, the team believes much more is needed to say anything for sure.

Another study, called <u>Cannabidiol</u>, a non-psychoactive component of cannabis and its synthetic <u>dimethylheptyl homolog suppress nausea in an experimental model with rats</u> suggested both CBD, and its synthetic analog known as dimethylheptyl homolog, can control nausea symptoms. The researchers also noted that the lack of psychoactive side-effects makes CBD a much more tolerable option.

A clinical trial looking into the impact of CBD on nausea, called <u>Preliminary efficacy and safety of an oromucosal standardized cannabis extract in chemotherapy-induced nausea and vomiting, showed cannabinoids have antinausea and antiemetic properties. They believe that these medications will become more and more prevalent in the treatment of nausea, both as part of existent treatment plans and as a standalone option.</u>

Other teams have set out to determine how CBD and other cannabinoids are providing this powerful nausea fighting benefit. The researchers behind <u>Cannabidiol</u>, a non-psychotropic component of cannabis, attenuates vomiting and nausea-like behaviour via indirect agonism of <u>5-HT(1A)</u> somatodendritic autoreceptors in the dorsal raphe nucleus concluded the 5-HT1A receptor plays an integral role in controlling nausea. The authors noted the activation of these receptors across the body by CBD administration was associated with dramatically reduced nausea.

This interaction with the 5-HT1A receptor has been highlighted by other researchers, including those behind Interaction between non-psychotropic cannabinoids in marijuana: effect of cannabigerol (CBG) on the anti-nausea or anti-emetic effects of cannabidiol (CBD) in rats and shrews. That team showed not only is CBD able to reduce nausea via the 5-HT1A receptors but CBG, another cannabinoid, was able to induce nausea via interaction with the same receptor. Some teams have taken things a step further and identified ways to expand on the nausea fighting power of CBD. Cannabidiolic acid prevents vomiting in Suncus murinus and nausea-induced behaviour in rats by enhancing 5-HT1A receptor activation evaluated the ability of cannabidiolic acid, or CBDA, to control nausea. After analyzing all their data, the team found that while CBD does reduce nausea, CBDA has a stronger impact on the reduction of nausea strength.

CBD has also been proven helpful in the treatment of nausea in several other, more subtle, ways. For instance, anxiety is a common problem for those who deal with chronic or even acute nausea. That said, reports like <u>Plant-based medicines for anxiety disorders, part 2: a review of clinical studies with supporting preclinical evidence</u>, have shown just how much of a difference

CBD can make. After evaluating over 1500 papers on plant-based anxiety medications, the team concluded CBD is the most effective.

Pain before and after nausea symptoms is another issue that is relatively common. Luckily, CBD is known to be a powerful tool in the fight against pain. The team behind <u>Control of pain initiation by endogenous cannabinoids</u> concluded an interaction between PEA and anandamide are responsible for a pain-relieving effect that's 100-fold more potent than either alone. Finally, those living with moderate to severe nausea may have trouble falling and staying asleep. Getting quality rest is one of the most important things we can do for our health, so when it's threatened, it can make a big difference. Researchers behind <u>Cannabis</u>.

<u>Cannabinoids</u>, and <u>Sleep</u>: a <u>Review of the Literature</u>, showed that starting a CBD regimen is associated with much higher quality REM sleep, while also reducing sleepiness during the day.

6. Tracking Effectiveness

It's very common for those who are just starting their journey with CBD to have trouble identifying precisely how well it's working for them. It happens to most people, but that doesn't make it any less frustrating. However, this is mainly because even when working perfectly, CBD has a relatively subtle impact on most conditions. However, for nausea, this tends to be less of an issue.

The best advice we have for people who are facing this problem is quite simple. All it takes is keeping a journal of your daily dosages along with the subsequent daily symptoms. After a couple of weeks, most people will have developed a good feeling for how well CBD is working for them.

While sharing advice with each other has a lot of value, everyone's system will have an impact on what their ideal dosage is. As such, the only way to know for sure you're getting the most out of your CBD is to do the experimentation for yourself and pay close attention to how your body reacts.

We're often asked if keeping this journal is the only way to ensure success with CBD. While plenty of people have gotten what they were looking for without keeping a journal, nothing is as easy to do and can have such an impact. We firmly suggest this to anyone who wants to maximize the effectiveness of their CBD purchase.

We hope you consider leaving your experiences here for the next person to learn from. All it takes from you is a brief overview of how well you think CBD worked for you, and a score for how it improved any nausea, pain, or trouble sleeping. Each one of us has a piece of the puzzle, and by working together, we can provide an accurate picture of how well CBD works to treat nausea.

8. Suggested Dosages

Probably the most common question we're asked is how much CBD is needed to treat a particular condition. If it were that simple, we'd provide this figure and spread it far and wide. That said, each person may require a slightly different routine and dosage to get the most out of their cannabidiol.

Although we can't offer the perfect answer for everyone, we can provide the starting location you need to figure it out for yourself. Reports <u>suggest</u> smaller doses of CBD as needed can be

effective at treating nausea. This means somewhere between 10-20mg could be effective, but researchers say going up from there is the move if you don't find relief.

One thing to keep in mind as CBD become more prevalent is that it's not legal everywhere. It's true that most states treat CBD like a harmless alternative medicine, but other places may see THC and CBD as essentially the same. All you really need to do is double-check before taking CBD on your travels, but it's worth mentioning.

We should also state that while the majority of CBD products out there won't have any THC, that's not always the case. If you're someone who isn't able to get high for any given reason, be sure only to buy THC-free CBD products. That said, some people find a bit of THC included with the CBD can significantly bolster the effects.

CBD can be difficult to fully understand at first, but with a bit of support from the community, most people find their bearings rather quickly. We hope you choose to leave your experiences here for others to learn from, as it could make a world of difference. The more we share with each other, the easier it becomes for the next group to find their way.