



STRAIN GENIE

Your Personal Cannabis Health Report

Prepared For: John Doe

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v2.0



STRAIN GENIE

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Introduction to DNA

DNA (deoxyribonucleic acid) is a long molecule that contains the instructions for building every single part of an organism. DNA is made up of four base compounds: (A) Adenine, (T) Thymine, (C) Cytosine, (G) Guanine. These bases pair up as A-T and C-G. DNA is simply a series of those **base pairs** that form a long molecule.

A **gene** is any particular section of your DNA. Genes carry the codes for making and organizing specific molecules that eventually serve as the building blocks for different parts and functions of an organism.

99.5% of the base pair combinations that make up human genes is identical from person to person. The .5% difference is what makes you...you. **Variants** are the genetic variations or differences that make up that .5%.

A **SNP** (single-nucleotide polymorphism) is a specific sequence of DNA base pairs that make up that variant. For example, at a particular section of DNA, 99.5% of individuals may have the base pair A-T. If an individual has C-G at that location, then the location of that variant is indexed and called a SNP.

SNPs are identified by the long and tedious research conducted by geneticists who compare DNA across large populations. Different base pairs at a SNP are known as **alleles**. For example, one allele at a SNP may give you blue eyes whereas another would give you green eyes. Allele variants are also responsible for a great deal of genetic disorders.

Specific SNPs of DNA can be informative as to how you will respond to different foods and drugs, including cannabis. Strain Genie looks at over 120 SNPs to help predict which cannabis products are best for your DNA.

Introduction to Cannabis

Cannabis is a flowering herb plant that contains a variety of diverse chemical compounds known as cannabinoids. You may have heard of THC and CBD – the two most popular of the 113 different cannabinoids. Cannabis also expresses well over 100 terpenes – a class of organic compounds. Different strains of cannabis have different ratios of cannabinoids and terpenes.

Known as the “entourage effect”, these cannabinoids and terpenes have a combinatorial influence on your mind and body by the way they affect your endocannabinoid system– a large group of cells in your body that are specifically responsive cannabinoids. Each strain’s unique ratio of cannabinoids and terpenes can provide a drastically different suite of medical benefits and subjective effects (the “high”). Coupled with the fact that each person’s endocannabinoid system is varying, it’s easy to see how different strains can affect different individuals....differently.

In order to effectively treat medical ailments or achieve your desired “high”, choosing the right strain or cannabis product is critical. Finding the right product for you is always a journey. With over 20,000 products currently available on the market, it’s often a long journey. That’s why Strain Genie exists! The insights you’ll find in this report will make that journey much shorter and kickstart your relationship with this sincerely extraordinary plant.

As a general warning, for any **edible products** you may try:

Start with **5mg THC and wait 2 hours** to see how you feel. If nothing, try again the next day with 10mg. Repeat this process (increase in 5mg THC) until you find the right dosage for you. CBD is non-psychoactive, so it would be very difficult to have an adverse side effect. So, you can be less cautious with CBD-only edibles.

A LOT of edible manufacturers create highly potent edibles that are far too strong for new users. This can result in severely adverse experiences. We urge you to check the labelling and start small. **You can always take more, but you can’t take less once you’ve committed.**



STRAIN GENIE



How To Read This Report

How To Read This Report

This report contains 4 main sections concerning your cannabis-related health.

Warnings

The warning section examines genetic markers related to how your body processes cannabis. Specifically, this section looks at biomarkers related to how your body breaks down cannabis during first pass-metabolism (i.e. through the liver), which can provide key insights as to whether or not you can break down THC and CBD effectively in edible form.

It also examines whether you have genetic predispositions to specific kinds of lung cancer to provide potential suggestions to avoid combustible materials.

Also included in this section is your predisposition to cannabis-induced-psychosis, a rare but real susceptibility where individuals can enter a psychotic state when in the presence of high-THC cannabis strains and products.

Individuals that find themselves at risk should know it is not a guarantee for psychosis following consumption but should proceed with caution when consuming cannabis products where the THC levels are above 5%.

Finally, the warnings section looks at your susceptibility for cannabis dependence. Users with such indicators should be aware of their potential to experience the “habit-forming” nature of cannabis.

If users begin to feel that their cannabis use interferes with their ability to perform daily activities, complete assignments on time, or achieve their goals, they should plan a “tolerance break” for 3-10 days so long as cannabis is not a necessary part of their medical routine.

During this time, it would be advised to use CBD products to help curtail the desire to smoke or consume cannabis.

How To Read This Report

Category-Specific Cannabinoid & Terpene Recommendations

Section 2 cycles through 14 different medical categories, grouped by their symptoms, to provide personalized cannabinoid and terpene recommendations. Each category-level recommendation is the result of recommendations for each composite trait within a category.

In this report, traits are defined as conditions and/or symptoms that underlie a category. Depending on your risk of developing each trait, a dosed blend of cannabinoid and terpenes will be provided where applicable.

Each of these trait-level recommendations are aggregated, weighted by their magnitude, and used to create the category-specific recommendations.

These category-specific recommendations will highlight the personalized assortment of cannabinoids and terpenes you should look out for during your next purchase if you are showing any symptoms related to the traits contained in the category.

Oftentimes, some cannabinoids and terpenes will be downweighed if they are particularly troublesome for some of the conditions (e.g. CBD is bad for eye-pressure, so if you have susceptibility to a condition that increases eye pressure, CBD will not be recommended) and will, thereby, be less likely to show up at the category-level recommendation.

On occasion, a category will have sub-categories as well that will only look at traits contained with the sub-category. Be sure to read the introduction to each category as it will contain important insights on how to translate your results into actionable cannabis use.

How To Read This Report

Report-Wide Cannabinoid & Terpene Recommendations

The end of this report will provide an “all-things-considered” summary that takes into account all of the recommendations provided in each category.

The end result is a generalized THC:CBD ratio and recommended terpenes. Essentially, both the warnings (e.g. less THC in the case of potential for cannabis-induced psychosis) and risk for genetic predispositions (e.g. less CBD for eye pressure) are aggregated to form the ratio and the terpenes with the highest magnitude association (calculated partially as a function of risk and magnitude of the research finding supporting it).

This ratio lets you know how much CBD to include with your THC (or vice versa). For instance, if you get a 1:1 THC:CBD ratio, you should have 1mg of CBD for every 1mg of THC you consume. If 1:10, you should have 10mg of CBD for every 1mg of THC you consume. You can see ratios on top products and/or lab test results for different strains to find the ratio best for you as well as which strains have accentuated expressions of the terpenes and cannabinoids you should prioritize.

Report-Wide Activity Group & Product Recommendations

The final section of your personalized cannabis health report is a translation of your ideal cannabinoid and terpene ratios into cannabis strains and products.

Strain Genie makes product recommendations in a very approachable way.

The first step in the process is that each trait-level recommendation throughout the report also contains an “activity group” recommendation based on your genetic variation at the SNPs that support each trait indicator.

An “activity group” is a collection of cannabis products and strains that our learning algorithms have identified and fit into different aspects of your lifestyle.

Activity Groups



Energize



Create



Elevate



Medicate



Chill



Sleep

An “activity group” association is made based on the trait involved.

For example, traits relating to stress will be assigned a preferential weighting for “Chill” activity group products. A pie chart will show which of the activity groups were found to be most important for you based on the traits you showed risk for, weighted by magnitude.

Within each activity group, Strain Genie will make recommendations for strains and products that have the highest similarity to the ratio, cannabinoids, and terpenes that were found to be optimal based on the genetic indicators we look for throughout the report. For example, if your increased risk for Category 7 is the most significant throughout the report, your final activity group distribution and product recommendations will predominantly emphasize the cannabinoid and terpene recommendations made within Category 7.

Product recommendations will also take into account the warnings that may have arisen during the analysis (e.g. not include edibles if you have an ineffective liver enzyme for breaking down THC).



Energize

Energize strains and products were chosen specifically to help give you a jolt in the morning or afternoon.

Typically sativas, the terpene profile of these strains tends to have more terpinolene and ocimene with less myrcene to give a jolt of energy.

These products may pair nicely with a morning coffee on the weekends, and side effects may include tidying up around the house. Whether it be a light jog or activities in nature, these products should help Energize your day.

Activity Groups



Create

The products and strains can help give you the focus to let you Create your dreams.

These strains are usually sativa-dominant and often contain higher amounts of alpha-pinene and beta-pinene. Pinene has been shown to help with alertness and also have anti-inflammatory properties that work synergistically with cannabinoids.

Ancient philosophers might have preferred these strains, as they provide a creative, introspective, and almost psychedelic mental space.



Elevate

Strains and products in the Elevate category were chosen specifically to have the right terpene profiles to Elevate your mood.

In particular, beta-Caryophyllene, alpha-Humulene, alpha-Pinene, and beta-Pinene tend to be more pronounced. These terpenes interact with THC, creating a synergistic entourage effect. Predominantly hybrids, these products provide a euphoric buzz that is sure to bring good vibes.

If you are looking to get out of a funk or socialize with others, these products can help Elevate your mood. The strains and products in Elevate are often high in THC and have various terpenes that have mood-enhancing effects.

Activity Groups



Medicate

Strains and products in the Medicate category are all verified to be high in CBD.

While most cannabis strains have around 20% THC and less than 1% CBD, Medicate strains have at least 5% CBD and varying levels of THC. Medicate concentrates, edibles, and other products also have significant levels of CBD; some may be pure CBD and some may specify a THC to CBD ratio, e.g. 1:1. CBD helps your body reach homeostasis, which keeps your body temperature uniform and helps your body's endocannabinoid system regulate itself properly.

For cannabis consumers who are used to high THC products or medical patients looking for relief, the products below will help you Medicate with CBD. Compared to the other categories, products from the Medicate category may be the most beneficial. High CBD products are becoming more popular for responsible cannabis consumers.



Chill

These strains and products below help many people Chill and relax.

While some of these products are indicas and others are hybrids, most of them tend to have a calming dose of myrcene and linalool, yet still may have decent pinene levels to keep you from falling asleep completely.

These products are great after a long day of work and can also provide pain-relieving effects to relax the muscles. As such, many people enjoy these strains to watch TV/movies, play video games, or simply Chill with friends.

Activity Groups



Sleep

Below are strains and products that should provide a drowsy effect that will help with Sleep.

These strains are often heavy indicas that are rich in the terpenes myrcene and linalool. Myrcene interacts synergistically with THC by allowing for THC to get absorbed at a faster rate by CB receptors.

Cannabis has also been shown to put the body into a deeper state of Sleep



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Your Health Insights

Warnings

Warnings

Edible Warning

Trait	Genes	Risk	Meaning
CBD Metabolism (Slow)	<i>CYP2C19,CYP2C9</i>	Normal	Normal
THC Metabolism	<i>CYP2C9</i>	Normal	Normal

Smoking Warning

Trait	Genes	Risk	Meaning
Lung Cancer	<i>CHRNA3,HYKK</i>	Increased	Slight increased risk for Lung Cancer

Smoking Warning Found. Smokable products will still be included in the recommended products at the end of this report, but proceed with caution.

Warnings

Warnings

Cannabis-Induced Psychosis Warning

Trait	Genes	Risk	Meaning
Cannabis-Induced Psychosis	<i>DRDR2, AKT1, ZNF804A</i>	Slight	Slight increased risk for cannabis-induced psychosis

Cannabis-Induced Psychosis Warning Found. Proceed with caution when using high-THC products and try to always look for products with higher CBD content than THC as this will help mitigate the intensity of the high. Suggested THC amounts will be reduced in this report, but cannabinoid recommendations containing THC will still be included

Cannabis Dependence Warning

Trait	Genes	Risk	Meaning
Cannabis Dependence	<i>CNR1, DRD2, FAAH</i>	Increased	Increased risk for cannabis dependence

Cannabis Dependence Warning Found. Proceed with caution and take regular tolerance breaks.

Metabolism

THC and CBD are metabolized or eliminated by cytochrome P450 enzymes found in the liver.

A slow CBD or THC metabolism means your liver may break them down more slowly, which can result in overly elevated cannabinoid levels. Edible intake should be limited.

High levels of CBD/THC may delay the breakdown of many common medications. Overly elevated levels of THC could also lead to discomfort and unwanted side effects. Beware of potential drug interactions while consuming cannabis. **It is advisable to limit your dosage and choose to inhale instead of ingesting cannabis, especially while on medication.**

Some individuals may be ultra-fast CBD metabolizers, where your liver may break down CBD very quickly, thus decreasing the bioavailability of CBD in the system and its subsequent effectiveness.

Increasing the dosage of CBD when taken orally may be necessary to produce therapeutic effectiveness.

Folate, also commonly known as folic acid, is a naturally occurring form of vitamin B9. Folic acid, on the other hand, is a synthetic form of vitamin B9. Folate plays an important role in cell growth and DNA synthesis.

Impaired folate metabolism has been implicated in various conditions, including pregnancy complications, birth defects, psychiatric disorders, cardiovascular diseases, Alzheimer's disease, Autism, cancer, etc.

Reduction in the MTHFR enzyme activity may impair the conversion of folate/folic acid to the active form, 5-methyltetrahydrofolate.

For those with the MTHFR mutation, it may be advisable to supplement with "L-methylfolate" instead of "folic acid", as folic acid may be more difficult to break down and could result in high levels of un-metabolized folic acid build-up in the bloodstream that could contribute to additional health issues.

Metabolism

Category Level Severity



Trait	Genes	Risk
CBD Metabolism (Slow)	<i>CYP2C19, CYPC219</i>	Normal
CBD Metabolism (Ultra-fast)	<i>CYP2C19</i>	Slight
THC Metabolism	<i>CYP2C9</i>	Normal
Reduced Folate Metabolism	<i>MTHFR</i>	Slight

Sleep

Sleep is one of the most important elements in any healthy lifestyle. Strain Genie analyzes a number of genes that can affect your sleep quality.

Cannabinoids like THC and CBD have long been shown to induce drowsiness, assisting even with insomnia.

Terpenes such as myrcene and limonene have been associated with increased sleep times, with their influence being driven by their motor relaxant and sedative properties. Myrcene is the most abundant terpene in cannabis, which is why most users report sleepiness after ingesting most preparations of cannabis.

Based on the magnitude of your genetic risk for a number of different sleep and motor conditions that influence your ability to sleep, the Strain Genie algorithm has identified cannabinoids and terpenes associated that best match your risk profile.

These recommendations are the result of a complex aggregation of recommended cannabinoids and terpenes for each of the traits listed below..

Sleep

Your Recommendations For This Category:

Cannabinoids: CBD

Terpenes: Beta-Caryophyllene, Limonene, Myrcene

Category Level Severity



Trait	Genes	Risk
Poor Sleep Quality	<i>CACNA1C</i>	Slight
Delayed Sleep	<i>CLOCK, PER3</i>	Slight
Restless Leg Syndrome	<i>MEIS1</i>	Slight
Narcolepsy	<i>CPT1B-CHKB</i>	Normal
Excessive Sleep Movement	<i>BTBD9</i>	Slight

Gut Health

Inflammatory bowel diseases (Crohn's disease, ulcerative colitis) result from the body's immune system mistakenly attacking the lining of the intestine leading to chronic inflammation and bowel injury.

Celiac disease is a relatively rare but heritable disease affecting only 1% of the population, in which the immune system reacts to gluten intake and attacks the small intestines leading to inflammation and organ damage resulting in malabsorption of nutrients.

While a careful diet can help manage the symptoms of these diseases, certain cannabinoids and terpenes can also help address some of the common symptoms including inflammation, loss of appetite, and associated pain/discomfort.

A great deal of research has linked anandamide, an endogenous cannabinoid very similar to THC, plays a pivotal role in maintaining immunological health in the gut. Because cannabis simulates naturally occurring endocannabinoids like anandamide, researchers are starting to explore whether cannabis can be used to treat the autoimmune disease of the stomach, intestines, pancreas or colon.

Gut Health

Your Recommendations For This Category:

Cannabinoids: THC, CBD, CBC

Terpenes: Beta-Caryophyllene, Alpha-Pinene, Myrcene

Category Level Severity



Trait	Genes	Risk
Inflammatory Bowel Disease	<i>CDKAL1, SLC22A4, SLC22A5</i>	Slight
Celiac Disease	<i>HLA-DQA1, HLA-DQB1</i>	Slight

Substance Abuse

Cannabis dependence as experienced in clinical populations, appears very similar to other substance dependence disorders, although it is likely to be less severe given the lack of deleterious effects associated with long-term chronic cannabis use-- there has never been a single reported death related to cannabis use.

While cannabis is not known to be physically addicting, it can become "habit-forming", which can quickly become expensive and begin to diminish the positive effects of cannabis use.

Additionally, long-term chronic cannabis use has been shown to reliably decrease memory potential but returns quickly with just 3 days of abstinence.

Users with a predisposition to cannabis substance abuse would be prudent to build in tolerance breaks (i.e. 3-10-day periods of no cannabis consumption) to prevent dependence and to keep tolerance at consistently potent and affordable levels.

Substance Abuse

Cannabis Dependence

Your Recommendations For This Category:

Cannabinoids: CBD

Terpenes: Insufficient data for meaningful recommendation

Category Level Severity



Trait	Genes	Risk
Cannabis Dependence	<i>ABCB1, CNR1, Intergenic (RP11-215A21.1)</i>	Slight

Substance Abuse

Other Substance(s) Dependence

Your Recommendations For This Category:

Cannabinoids: THC, CBD, CBC

Terpenes: Limonene, Beta-Caryophyllene, Nerolidol

Category Level Severity



Trait	Genes	Risk
Opioid Dependence	<i>OPRM1</i>	Normal
Nicotine Dependence	<i>CHRNA3, CHRN1</i>	Slight
Alcohol Dependence	<i>CHRNA3</i>	Normal

Skin Health

Psoriasis and atopic dermatitis (eczema) are two itchy, uncomfortable skin conditions believed to be caused, at least in part, by an over-reactive immune system, where it mistakenly attacks the body, leading to chronic inflammation.

Avoiding or limiting environmental triggers is critical for the management of these conditions. Some of the cannabinoids and terpenes may be useful in reducing inflammation, repairing skin, and managing pain.

Cannabis-infused products for skin management are effective for localized treatment. They're fast acting because they can bind to the body's CB2 receptors in the skin for relief. A CBD-infused topical cream, as its name implies, is a topical cream infused with cannabis. Just like topical creams, it is applied directly or topically to the pained joint (or any pained part of the body). As it is topical, it does bypass the digestive system, immediately going to the body part where it is needed.

Skin Health

Other Substance(s) Dependence

Your Recommendations For This Category:

Cannabinoids: CBD, CBC, THCv

Terpenes: Beta-Caryophyllene, Limonene, Alpha-Pinene

Category Level Severity



Trait	Genes	Risk
Psoriasis	<i>HLA-C, POU5F1</i>	Normal
Atopic Dermatitis/Eczema	<i>FCER1A, PLEKHJ1</i>	Slight

Mood / Personality

Mood and personality symptoms such as anxiety and depression reach "disorder" status when they begin to interfere with daily life (e.g. missing meetings and deadlines due to anxiety or depression).

A great deal of research has shown the efficacy of CBD as an anxiolytic (anti-anxiety) and an anti-depressant. Similar mood-altering affects have been seen from terpenes such as alpha-humulene, limonene and beta-caryophyllene.

Products found in the "Elevate" activity group have been shown to have a mood-elevating effect known for inducing pro-social behaviour, which may be particularly beneficial for those with introversion or social anxiety disorder (SAD).

Often times, culture and art / activity can boost mood levels through Brain Derived Neurotrophic Factor (BDNF). As such, products and terpenes/cannabinoids found within the Energize and Create Activity Groups should be prioritized for individuals at increased risk of mood and personality traits to encourage a more active and creative lifestyle.

Mood / Personality

Group I

Your Recommendations For This Category:

Cannabinoids: THC, CBD

Terpenes: Limonene, Beta-Caryophyllene, Nerolidol

Category Level Severity



Mood / Personality

Trait	Genes	Risk
Anger/Aggression	<i>DBH, FYN, HTR2A</i>	Slight
Neuroticism	<i>PDE4D, PTRD</i>	Increased
Stress Susceptibility	<i>COMT</i>	Slight
Anxiety	<i>LOC105376674, SLC6A4</i>	Slight
PTSD	<i>CNR1, FAAH, FKBP5</i>	Increased

Mood | Personality

Group II

Your Recommendations For This Category:

Cannabinoids: CBD, THC, CBC

Terpenes: Limonene, Beta-Caryophyllene, Linalool

Category Level Severity



Trait	Genes	Risk
Lower Empathy	<i>OXTR</i>	Slight
Introversion	<i>HTR2A, RGS2</i>	Slight
Depression	<i>COMT, HTR2A, TPH2</i>	Slight

Neurodegenerative Diseases

Parkinson's Disease and Alzheimer's Disease are two of the most common neurodegenerative diseases related to aging.

Lifestyle changes such as a healthy diet and regular exercise may be important in the prevention or management of these diseases.

Certain cannabis strains, such as those found in the Energize and Create Activity Groups may help you stay active and creative, as Brain Derived Neurotrophic Factor (BDNF) is released during exercise and creativity and has been shown to improve cognition.

Neurodegenerative Diseases

Your Recommendations For This Category:

Cannabinoids: CBD, THC, CBC

Terpenes: Beta-Caryophyllene, Alpha-Pinene, Limonene

Category Level Severity



Trait	Genes	Risk
Parkinson's Disease	<i>USP24</i>	Slight
Alzheimer's Disease	<i>APOE</i>	Slight

Cognitive Health

Genetics may influence how likely you are to experience significant cognitive impairments following cannabis consumption.

Increasing your CBD to THC ratio (i.e. taking more CBD than THC) may decrease the severity of your impairments. Cannabis and certain cognitive impairments like memory loss have a complex relationship, with certain cannabinoids and terpenes assisting with long term memory impairments and others severely impairing short-term memory.

The Strain Genie algorithm tries its best to balance these variables while also considering similar complexities for cannabis-related impacts on intelligence, age-related cognitive decline, and one's ability to learn from mistakes.

Cognitive Health

Cannabis-Induced Impairments

Your Recommendations For This Category:

Cannabinoids: THC, CBD

Terpenes: Limonene, Beta-Caryophyllene, Alpha-Humulene

Category Level Severity



Trait	Genes	Risk
Cannabis-Induced Psychosis	<i>AKT1, DRDR2, ZNF804A</i>	Slight
Cannabis-Induced Impulsivity	<i>DBH</i>	Normal
Cannabis-Induced Psychomotor Impairment	<i>AKT1</i>	Slight
Cannabis-Induced Attention and Working Memory Impairment	<i>COMT</i>	Slight

Cognitive Health

General Cognition

Your Recommendations For This Category:

Cannabinoids: CBD, CBC, THC

Terpenes: Alpha-Pinene, Beta-Pinene, Limonene

Category Level Severity



Trait	Genes	Risk
Lower Memory Performance	<i>DRD2, HTR2A, WWC1</i>	Slight
Attention Deficit	<i>CLOCK, CNR1, DRD2, HTR2A</i>	Slight
Lower IQ	<i>HMGA2, SNAP25</i>	Increased
Age-related Cognitive Decline	<i>ESR1, KL</i>	Slight
Reduced Mistake Learning Ability	<i>DRD2</i>	Normal

Eye Health

Glaucoma and macular degeneration are the leading causes of vision loss in older adults. Glaucoma occurs when the eye's optic nerve is damaged, usually due to a buildup of pressure inside the eye.

Lowering eye pressure is a critical step in managing this condition. Using cannabis, more specifically, THC, to help reduce intraocular pressure associated with Glaucoma, ranks among one of the most cited reasons for medical marijuana.

On the other hand, a recent study suggests that CBD may not lower eye pressure and may actually increase it. Therefore, for those who suffer from elevated intraocular pressure, it is best to choose products with high THC and low or no CBD.

Age-related macular degeneration (AMD) occurs when the macula (a part of the retina) becomes damaged and central vision is compromised. Most AMD begins with the dry type (atrophic) and progresses to the wet type (neovascular), which is more severe. Vascular Endothelial Growth Factor (VEGF) is a molecule involved in the pathogenesis of neovascular AMD (wet AMD) and is associated with abnormal blood vessel growth underneath the retina.

Anti-VEGF agents have been traditionally used to treat wet AMD through direct injections into the eyes. However, cannabinoids have also been shown to inhibit the progression of VEGF with minimal to no harsh side effects.

Moreover, CBD has been shown to help with retinal neuroinflammation, which is a common in AMD.

Eye Health

Your Recommendations For This Category:

Cannabinoids: THC, CBD

Terpenes: Beta-Caryophyllene, Myrcene, Limonene

Category Level Severity



Trait	Genes	Risk
Glaucoma	<i>LOXL1</i>	Increased
Age-related Macular Degeneration	<i>ARMS2, CFH, SCARB1</i>	Slight

Endocrine Health

Diabetes

Diabetes is a condition where the body cannot properly regulate glucose (sugar) levels in the blood. In type 1 diabetes, the pancreas fails to produce enough insulin, a hormone that helps cells take in glucose to be used as energy.

In type 2 diabetes, the body develops resistance to insulin so it cannot use insulin efficiently. More than 90% of people with diabetes have type 2, which is largely caused by unhealthy lifestyle choices combined with some genetic predisposition, whereas type 1 may be largely hereditary.

Your Recommendations For This Category:

Cannabinoids: CBD, THCv, THC

Terpenes: Beta-Caryophyllene, Alpha-Pinene, Myrcene

Category Level Severity



Trait	Genes	Risk
Type 2 Diabetes	<i>KCNJ11, SLC30A8, TCF7L2</i>	Slight
Type 1 Diabetes	<i>HLA-DQA1, HLA-DQB1-AS1, PTPN22, STAT4</i>	Slight

Endocrine Health

Thyroid Diseases

The thyroid gland controls the metabolism of your body. Disruptions in thyroid functioning can be a result of autoimmune thyroid diseases, such as Hashimoto's thyroiditis and Grave's disease. Hashimoto's thyroiditis often leads to an underactive thyroid, or hypothyroidism, whereas Grave's disease can cause an overactive thyroid, or hyperthyroidism.

Inflammation of the thyroid is a hallmark of Hashimoto's, while a portion of people with Grave's disease may also develop Grave's Ophthalmopathy where the immune system attacks tissues and muscles around the eyes leading to chronic inflammation. CBD has been shown to be effective for reducing inflammation. To combat fatigue and sleep troubles associated with thyroid diseases, choose strains in the "Energize" activity group for daytime use and "Sleep" for night time.

Your Recommendations For This Category:

Cannabinoids: CBD

Terpenes: Beta-Caryophyllene, Myrcene, Alpha-Bisabolol

Category Level Severity



Trait	Genes	Risk
Thyroid Diseases	<i>CTLA4, FOXE1, TG</i>	Slight

Cardiovascular Health

Coronary heart disease, also known as coronary artery disease, is the most common type of ischemic heart disease and is caused by the buildup of fatty, cholesterol-rich plaque inside the coronary arteries and subsequent inflammation that can further obstruct blood flow to the heart.

Atrial fibrillation is associated with an irregular, often rapid heartbeat that can increase your risk of blood clots, strokes, heart failure, and other heart-related complications. Hypertension, also known as high blood pressure, can increase the risk of heart disease and stroke.

Cannabis use may lead to a temporary mild to moderate dose-dependent increase in blood pressure and heart rate, followed by a modest decrease in blood pressure. However, with regular use, users can develop a tolerance to these initial effects and show a lowered heart rate and blood pressure immediately after consumption.

To be on the cautionary side, those with established heart disease and are under stress should choose cannabis products with higher CBD and lower THC ratio.

Cardiovascular Health

Your Recommendations For This Category:

Cannabinoids: THC

Terpenes: Insufficient data for meaningful recommendation

Category Level Severity



Trait	Genes	Risk
Coronary Heart Disease	<i>CDKN2B-AS1, CDKN2B-AS1, DMRTA1, LPA</i>	Slight
Atrial Fibrillation	<i>LOC729065, MIR297, PITX2</i>	Normal
Hypertension	<i>ADD1, AGTR1, BCAT1</i>	Slight

Musculoskeletal Health

Arthritis

Arthritis is inflammation of your joints. CBD has been shown to alleviate inflammation and pain associated with Arthritis.

Your Recommendations For This Category:

Cannabinoids: THC, CBD, CBC

Terpenes: Beta-Caryophyllene, Alpha-Pinene, Myrcene

Category Level Severity



Trait	Genes	Risk
Arthritis	<i>HTR2A, IL1B, PTPN22, STAT4</i>	Slight

Musculoskeletal Health

Osteoporosis

Osteoporosis is associated with a reduction in bone density and quality, resulting in weak and brittle bones.

If you are 50 or older, ask your doctor about a bone density test. CB1 receptors may offer a protective benefit by regulating bone tissue absorption and creation.

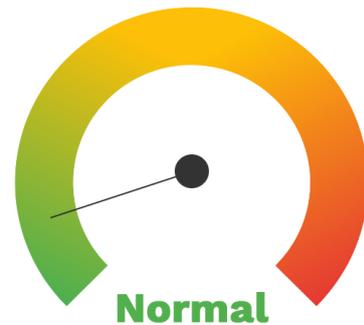
Studies in rodents suggest that CBD may be better than THC in healing bone fractures and promoting stronger bone growths.

Your Recommendations For This Category:

Cannabinoids: CBD, CBG, CBC

Terpenes: Insufficient data for meaningful recommendation

Category Level Severity



Trait	Genes	Risk
Osteoporosis	<i>LRP5</i>	Normal

Cancer

While cannabis is well-known for alleviating cancer-related symptoms, a large body of evidence suggests that cannabinoids can also decrease tumor growth in animal models of cancer by modulating key cell signalling pathways involved in the control of cancer cell proliferation and survival.

Your Recommendations For This Category:

Cannabinoids: THC, CBD, CBG

Terpenes: Limonene, Beta-Caryophyllene, Nerolidol

Category Level Severity



Trait	Genes	Risk
Lung Cancer	<i>CHRNA3, HYKK</i>	Slight
Breast, Ovarian, and Prostate cancers	<i>BRCA1, BRCA2</i>	Slight
Gastric/Stomach Cancer	<i>AGER, PLCE1</i>	Slight
Colorectal Cancer	<i>CASC8, CCAT2, GREM1, SCG5, SMAD7</i>	Normal
Basal Cell Carcinoma	<i>PADI6, RHOA</i>	Normal

Other

Pain Sensitivity

Genetics could play a role in your sensitivity to pain. Increased pain sensitivity or lowered pain threshold may increase the use of opioids for pain management. Cannabis can be an effective substitute for opioid analgesics.

Your Recommendations For This Category:

Cannabinoids: THC, CBD, CBC

Terpenes: Beta-Caryophyllene, Myrcene, Limonene

Category Level Severity



Trait	Genes	Risk
Higher Pain Sensitivity	<i>COMT, OPRM1, SCN9A</i>	Slight

Others

Obesity

Obesity affects nearly 40% of adults, which may increase the risk of many health conditions, including cardiovascular diseases, diabetes, sleep apnea, and certain cancers.

Be sure to curb the munchies with strains high in THCV and keep an active lifestyle with strains in the "Energize" Activity Group.

Your Recommendations For This Category:

Cannabinoids: THCV, CBN, THC

Terpenes: Beta-Caryophyllene, Myrcene, Alpha-Bisabolol

Category Level Severity



Trait	Genes	Risk
Obesity	<i>FTO</i>	Increased

Others

Endometriosis

This trait only applies to females, although males can still pass on their alleles to their offspring.

Endometriosis occurs when lining normally found inside the uterus--endometrium--grows outside of the uterus, causing inflammation, pain, and scar tissue formation. Severe menstrual cramping is a common indicator of endometriosis. Over 10% of women of reproductive age are affected.

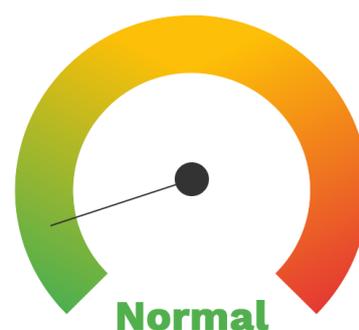
Certain cannabinoids and terpenes are helpful in alleviating some of the symptoms.

Your Recommendations For This Category:

Cannabinoids: THC, CBD, CBN

Terpenes: Linalool, Limonene

Category Level Severity



Trait	Genes	Risk
Endometriosis	<i>ESR1</i>	Normal

Terpene Recommendations

Based on your genotype and early research on terpenes, we have identified the following terpenes that you should prioritize with your cannabis consumption.

Our algorithm tries its best to provide product recommendations that take these terpenes into account, but sometimes sufficient product data is not available, so we provide you with these terpenes so you can find products from your local dispensary or the WoahStork marketplace that are high in the following:

Top Primary Terpenes

Beta-Caryophyllene

Limonene

Top Secondary Terpenes

Alpha-Bisabolol

Alpha-Pinene

Recommended THC:CBD Ratio

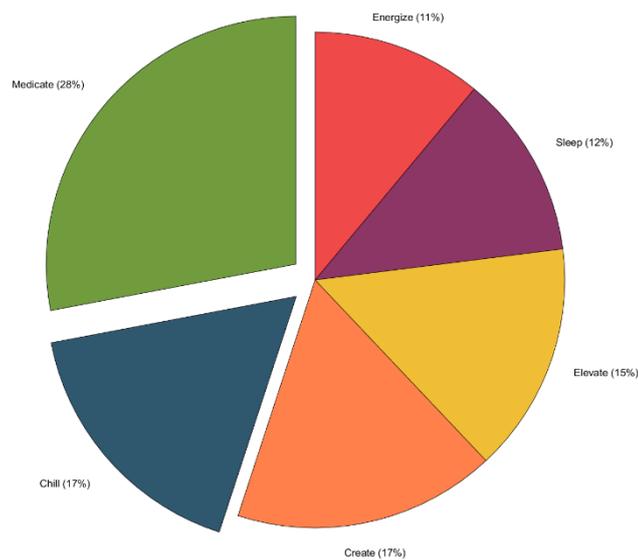
Based on your genotype, the ideal THC:CBD ratio that you should aim for is:

2 : 5

Be sure to use the **dosage calculator at the end of this report** to calculate a THC and CBD dosage appropriate for your body weight and experience.

Many times, this ratio will not be commonly crafted in branded products. Our algorithm does its best to find the closest match out of the available products. You can also experiment with combining multiple products to reach the effective ratio

Based on all of the SNP variants found in the alleles we tested for across all the categories, you could benefit most from products found within the **Medicate** activity group, followed by those found in the **Chill** activity group. The pie chart below shows the ratio of activity groups in order of priority.





STRAIN GENIE



Personalized Recommendations



Energize Strains

Heisenberg Kush



Energize Your Day Sativa

Golden Nugget



Energize Your Day Hybrid

Kali Mist



Energize Your Day Sativa

Silver Surfer



Energize Your Day Hybrid

Durban Poison



Energize Your Day Sativa

Blueberry Dream



Energize Your Day Sativa

Jack Haze



Energize Your Day Hybrid

Super Lemon Haze



Energize Your Day Sativa

NYC Diesel



Energize Your Day Hybrid



Energize Products

Durban Poison
Wittie's Reserve



 Energize Your Day Sativa

Durban Sherbet Cartridge
AbsoluteExtracts



 Energize Your Day Sativa

ASCND - Amnesia Haze
Kurvana



 Energize Your Day Sativa

Sour Diesel Cartridge
Heavy Hitters



 Energize Your Day Sativa

Ancient Lime Cartridge
Hot Nife



 Energize Your Day Sativa

Mango Gummies
Flurish Group



 Energize Your Day Sativa

Sativa Toffee Mini Cookies
Korova Edibles



 Energize Your Day Sativa

Mini Sativa Fuzzies 3pk
Sublime



 Energize Your Day Sativa

Organic Crunch Bar - Sativa
Chief Naturals



 Energize Your Day Sativa



Create Strains

Super Green Crack



Create Your Dreams Sativa

Incredible Hulk



Create Your Dreams Sativa

Ripped Bubba



Create Your Dreams Hybrid

Strawberry Ice



Create Your Dreams Sativa

Snowcap



Create Your Dreams Hybrid

Brainwreck



Create Your Dreams Hybrid

Green Haze



Create Your Dreams Sativa

King's Bread



Create Your Dreams Sativa

Viper



Create Your Dreams Sativa



Create Products

Lemon Cookies x Jack Herer Live Resin Budder
Moxie Seeds & Extracts



 Create Your Dreams Sativa

Jack Herer Select PAX Era
Select



 Create Your Dreams Sativa

Sasquatch Sap
3C Farms



 Create Your Dreams Hybrid

Jack Herer
Humboldt Seed Company



 Create Your Dreams Sativa

Jack Skellington
Prophet Cannabis



 Create Your Dreams Sativa

Island Sweet Skunk Elite
Select



 Create Your Dreams Sativa

Passion
hmbldt



 Create Your Dreams

Terra Herer x Mai Tai Live Resin Cake Badder
Moxie Seeds & Extracts



 Create Your Dreams Sativa

Tangie Disposable Pen
stick.e.vape



 Create Your Dreams Sativa



Elevate Strains

Pineapple Chunk



↑ Elevate Your Mood Hybrid

Purple Haze



↑ Elevate Your Mood Hybrid

White Russian



↑ Elevate Your Mood Hybrid

Blue Dream



↑ Elevate Your Mood Hybrid

Blue Dragon



↑ Elevate Your Mood Hybrid

White Widow



↑ Elevate Your Mood Hybrid

Chocolate Fondue



↑ Elevate Your Mood Sativa

Cataract Kush



↑ Elevate Your Mood Hybrid

Agent Orange



↑ Elevate Your Mood Hybrid



Elevate Products

Best of Both Worlds
Kaneh Company



↑ Elevate Your Mood

Toffee Chocolate Bar
FlavRX



↑ Elevate Your Mood

Cookies N Dream Oil
Jetty Extracts



↑ Elevate Your Mood Hybrid

Cherry Punch Powder
Remedy+



↑ Elevate Your Mood Indica

Strawberry Fruit Sparks 1:1 2pk
The Venice Cookie Company



↑ Elevate Your Mood

Trichome Toffee Crunch - Hybrid
Baked



↑ Elevate Your Mood Hybrid

Chem Dawg Cartridge
AbsoluteExtracts



↑ Elevate Your Mood Sativa

White Fire OG Pure Cartridge
Jetty Extracts



↑ Elevate Your Mood Hybrid

Mood Magic
Yummi Karma



↑ Elevate Your Mood



Medicate Strains

3D CBD



 Medicate with CBD Sativa

TJ's CBD



 Medicate with CBD Hybrid

One to One



 Medicate with CBD Hybrid

White Siberian



 Medicate with CBD Hybrid

Blueberry Essence



 Medicate with CBD Hybrid

Space Needle



 Medicate with CBD Sativa

Valentine X



 Medicate with CBD Hybrid

Warlock



 Medicate with CBD Hybrid

Cannatonic #7



 Medicate with CBD Hybrid



Medicate Products

Calm CBD Cartridge
Hot Nife



 Medicate with CBD

Lozenge
Pure Ratios



 Medicate with CBD

Releaf™ Tincture
Papa & Barkley



 Medicate with CBD

CBD Unflavored Syrup
Cannavis



 Medicate with CBD

CBD Soft Gels - 25 Count
Sensi Chew



 Medicate with CBD

Topical Patch
Pure Ratios



 Medicate with CBD

White Label - CBD OG
Nativ



 Medicate with CBD

Harle-Tsu Elite
Select



 Medicate with CBD Hybrid

Twenty to One
Yummi Karma



 Medicate with CBD



Chill Strains

Skywalker OG



 Chill and Relax Hybrid

OG #18



 Chill and Relax Hybrid

Larry OG



 Chill and Relax Hybrid

Blockhead



 Chill and Relax Hybrid

Pineapple Skunk



 Chill and Relax Hybrid

Cheese



 Chill and Relax Hybrid

Black Jack



 Chill and Relax Hybrid

Ice



 Chill and Relax Hybrid

Donna OG



 Chill and Relax Hybrid



Chill Products

Chocolate Chip Cookie
SkyFire Edibles



Chill and Relax

Purple Punch Elite
Select



Chill and Relax Indica

Original Glue (GG4) Shatter
NUG



Chill and Relax Hybrid

Mini Indica Disposable Vaporizer
Beboe



Chill and Relax Indica

Sour Bubble DMT Oil
Jetty Extracts



Chill and Relax Indica

White Label - Blueberry Cookies
Nativ



Chill and Relax Hybrid

Citrus OG Live Resin
Raw Garden



Chill and Relax

OG Kush Cartridge
Hot Nife



Chill and Relax Hybrid

Super MelonHead Kush
Fire Ant Extracts



Chill and Relax Hybrid



Sleep Strains

Butter OG



Enjoy Deep Sleep Indica

Master Kush



Enjoy Deep Sleep Indica

Northern Lights



Enjoy Deep Sleep Indica

Recon



Enjoy Deep Sleep Indica

Lavender



Enjoy Deep Sleep Indica

Blueberry Kush



Enjoy Deep Sleep Indica

Purple Kush



Enjoy Deep Sleep Indica

Tangerine Kush



Enjoy Deep Sleep Indica

Yoda OG



Enjoy Deep Sleep Indica



Sleep Products

The Cookiebrownie
The Venice Cookie Company



Enjoy Deep Sleep Hybrid

Sleep Balm
Made From Dirt



Enjoy Deep Sleep

Northern Lights CO2
Select



Enjoy Deep Sleep Indica

Afghan Nova
Prophet Cannabis



Enjoy Deep Sleep Indica

Skywalker Cartridge
Heavy Hitters



Enjoy Deep Sleep Indica

LA Confidential Pre-Roll
Loudpack



Enjoy Deep Sleep Indica

Black Domina Pax Era Pod
Bloom Farms



Enjoy Deep Sleep Indica

Northern Lights
Fire Ant Extracts



Enjoy Deep Sleep Indica

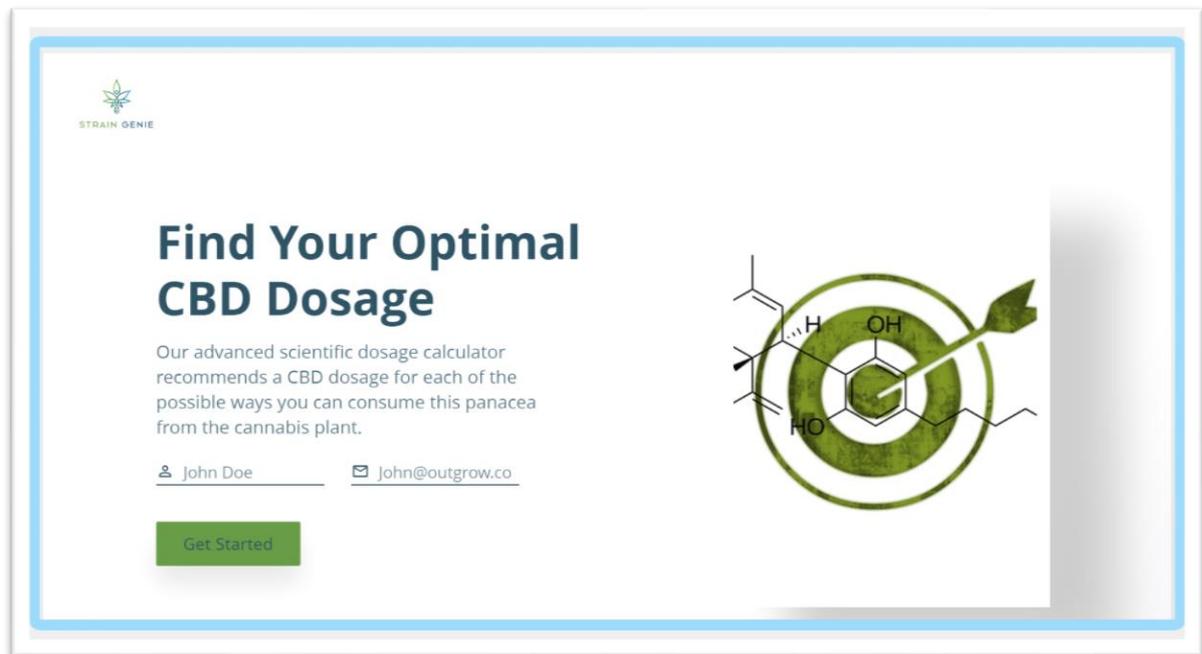
Kosher Kush Vape
Select



Enjoy Deep Sleep Indica

Dosage Calculator

Our Dosage Calculator helps you find the right cannabis dose for your needs.



How To Use Strain Genie's Dosage Calculator

Complete our short questionnaire by entering your gender, body weight frequency of use, and preferred consumption medium.

Based on your data our CBD Dosage Calculator will be able to provide you with an accurate CBD dosage recommendation.

Access the CBD Dosage Calculator here
<https://straingenie.com/cbd-dosage-calculator/>

Access the THC Dosage Calculator here
<https://straingenie.com/thc-dosage-calculator/>

Thank You

Thank you for taking our Customer Satisfaction Survey.
Customer satisfaction is a core value at Strain Genie.

The information we gather measures our high-level relationships with customers and spotlights areas where we need to focus more attention. Your feedback will help us understand what improvements should be made to our platform and which features should be added.

Consumer insights survey:

<https://straingenie.com/customer-satisfaction-survey/>

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Stay connected.

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Exclusive Facebook Group

<https://www.facebook.com/groups/1958151290965337/>

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<https://www.instagram.com/straingenie/>

And Twitter

https://twitter.com/strain_genie