

# ALOHA GREEN APOTH.

PATIENT FOCUSED. NATURALLY GROWN.

# Patient Handbook

A Supplemental Guide to Cannabis Second Edition - October 2017

## Introduction

The Aloha Green Apothecary Patient Handbook is a supplemental guide provided to qualified patients who have read and signed the Patient Intake Form and have already met with an Aloha Green Apothecary patient consultant.

This handbook does not provide medical advice, legal advice, or treatment plans and should not be used by individuals who have not received information from an Aloha Green Apothecary patient consultant or medical professional. Readers are encouraged to seek and obtain proper legal or medical advice from your legal advisor or physician/APRN as required.

The information in this handbook provides only general information, guidelines and estimates - your body may not necessarily react to cannabis as written.

Aloha Green Apothecary does not accept any responsibility or liability arising from this handbook.

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### Please remember:

- If you are having a medical emergency, please call 911 immediately.
- Treat medical cannabis as you would any other medication legally, properly, and responsibly. It cannot be shared with other individuals and should be kept out of the reach of children and pets.
- Cannabis must be consumed within the privacy of your home. It is illegal
  to consume cannabis in any moving vehicle, at any workplace, on any
  school grounds, or in any public place, even if you are a qualified patient
  with a valid 329 Hawaii medical card.
- Do not travel on planes with cannabis. It is illegal to transport cannabis to neighbor islands, the mainland, or other countries.

For any questions or to learn more, please visit the Aloha Green Apothecary dispensary to meet with a patient consultant or call 808-369-2888.



# Caution

Cannabis affects every patient differently. Use caution, start with small doses, go slow, and take the time necessary to develop an optimal therapy approach that fits your specific needs and symptoms.

# Methods of Consumption

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# **Methods of Consumption**

### **Inhalation**

Ingestion

**Sublingual Absorption** 

**Topical** 

LESS COMMON METHODS

Nasal sprays

**Suppositories** 

Each cannabis delivery method affects patients in different ways.

Onset times, duration, and potency can vary widely depending on how cannabis is consumed and metabolized by the body.

## **Inhalation**

The most common method of cannabis consumption is inhalation. When inhaled, cannabinoids enter into the lungs where they are passed directly into your blood stream. This enables instant relief and quick onset, making proper dosing easier than other methods.

### 1. SMOKING

Convenient and fast. While smoking is the most traditional and popular way to consume cannabis, it is not the most effective or healthiest method to experience the benefits. Burning plant material exposes the lungs to carbon monoxide and tar, which can worsen respiratory conditions.

**ONSET** 1-5 MINS. **DURATION** 1-4 HRS.

### What you use:



GRINDER: A small tool used to break cannabis flower into small pieces



ROLLING PAPERS: Cannabis can be wrapped in rolling papers to make a "joint"



PIPES: Handheld pipes enable cannabis to be smoked without being wrapped. Flower is instead loaded into the small bowl at the end of the pipe.



BONGS: A large pipe that forces smoke to first pass through water, resulting in a smoother hit.

### 2. VAPORIZING

Effective and discreet. Considered the healthiest method to inhale cannabis. Vaporization uses lower temperatures, which extracts cannabinoids more effectively without igniting or destroying the material, making it cleaner than smoking. It also significantly diminishes odors caused by burning cannabis.

**ONSET** 1-5 MINS. **DURATION** 1-4 HRS.

### What you use:

VAPORIZING PENS: Subtle and small personal devices, vape pens use cartridges filled with cannabis concentrates. Be sure to use only high quality oils in compatible cartridges.

PORTABLE VAPORIZERS: These handheld devices can be loaded with oil or flower depending on the device's capabilities and are rechargeable.

STATIONARY VAPORIZERS: For larger quantities of vapor, patients can use non-portable, high performance temperature control devices

\*ALOHA GREEN APOTHECARY – Our cured cannabis flower can be used for inhaling medicine either by smoking or vaporizing. Speak with your patient consultant to learn more about which products may best suit your needs. Unfortunately, due to Hawaii Department of Health regulations, dispensaries cannot sell any paraphernalia.

### 3. DABBING

For advanced users. This relatively new process uses high, specific temperatures to quickly inhale small "dabs" of cannabis concentrate. Dabbing provides an immediate and powerful dose of medicine and should be used with caution by high tolerance users only.

**ONSET** 1-5 MINS. **DURATION** 1-4 HRS.

### What you use:

DAB RIG: A water pipe used for smoking oils, extracts or concentrates.

CERAMIC OR GLASS NAIL: Dabbable concentrates are placed on a small surface shaped like the head of a nail, which is first heated up using a blowtorch

E-NAIL: This product includes a digital display which allows for consistent temperatures and consistent vapor.

<sup>\*</sup> Aloha Green apothecary – We are currently developing cannbis concentrates that can be used for dabbing. Sign up for our newsletter and loyalty program to stay updated – ask your patient consultant about how to join our mailing list!

# Ingestion

Another popular way to consume cannabis is through ingesting it in edible form. When cannabis is ingested, cannabinoids are metabolized by the liver, which strengthens both the effects and duration of the medicine. Smaller doses of cannabis-infused products are recommended as over-medication may occur. Wait at least an hour to assess the effects before increasing the amount of medicine consumed, and remember that an empty stomach can significantly affect the time it can take for the medicine to kick in.

**ONSET:** 1-2 HRS. **DURATION:** 6-8 HRS.

### OILS & CAPSULES

Simple and convenient. Cannabis-infused oils are concentrate products that commonly come in capsules or plastic applicators for quick and easy consumption. They can be consumed directly or added to food/drink.

\* ALOHA GREEN APOTHECARY – Many brands and types of CBD oils/capsules are available at Aloha Green Apothecary. Cannabis derivative products containing THC in these forms are being developed at our production facility and will be made available within the next few months.

# **Ingestion**

### **Edibles and Beverages**

Wide-ranging and appetizing. Cannabis is easily infused into foods and drinks to provide patients with long-lasting relief in an appealing way. While baked treats have always been popular (because cannabinoids bind best to oil and butter), all sorts of medicated foods have been developed by culinary cannabis companies – drinks, ice cream, candies, chocolate, etc. Patients can also add cannabis to regular cooking using cannabis-infused butter and oils for a delicious way to find relief.

**ONSET:** 1-2 HRS. **DURATION:** 6-8 HRS.

\* ALOHA GREEN APOTHECARY – Cannabis-infused tea is a great way to consume medicine that is easy to make. Aloha Green Apothecary carries CBD-only teas and CBD-infused honey in a wide range of flavors. Popular cannabis cookbooks are also available for sale – visit Aloha Green Apothecary to check out our library.

If you feel that you have consumed too much of a food-based medicine, do not panic. Symptoms, though they may be overwhelming, subside within a few hours. Stay hydrated and remain calm. Edible cannabis is safe and will not cause any long-term toxicity.

\* ALOHA GREEN APOTHECARY – Patients who are interested in making their own edibles can purchase oil/butter infusers at the dispensary. Be sure to ask your patient consultant about "decarb-ing" your cannabis and why using milk/butter/oil is important when making food-based medicine. Hawaii legislation currently prohibits dispensaries from selling cannabis-infused edibles. We encourage patients to contact their district's representative or senator and urge them to make medicine accessible in forms that can help patients.

# Sublingual

Some cannabis products are designed for sublingual consumption. "Sublingual" refers to the tissue region under the tongue, an area where cannabinoids can enter directly into the bloodstream through vessel-rich tissues. Dosing can be easily managed through this discreet, convenient, and very effective delivery method (which is frequently used for children).

ONSET: 30 MINS.

DURATION: 1-6 HRS.

### **TINCTURES**

Fast-acting without inhalation. Cannabis tinctures are alcohol-based cannabis extracts applied directly under the tongue for 30-60 seconds before being swallowed. These products usually come in a small bottle and can be sprayed or placed into the mouth with a dropper. To find your ideal dosage, start with just a drop and wait ten minutes before using more.

### LOZENGES AND STRIPS

Wide-ranging and appetizing. Cannabis is easily infused into foods and drinks to provide patients with long-lasting relief in an appealing way. While baked treats have always been popular (because cannabinoids bind best to oil and butter), all sorts of medicated foods have been developed by culinary cannabis companies – drinks, ice cream, candies, chocolate, etc. Patients can also add cannabis to regular cooking using cannabis-infused butter and oils for a delicious way to find relief.

\*ALOHA GREEN APOTHECARY – Flavored and unflavored CBD tinctures in varying strengths can be purchased at the dispensary. We work only with trusted, verified CBD companies to provide Hawaii patients with quality CBD products that complement cannabis treatments. THC tinctures and lozenges, which are being developed by the Aloha Green Apothecary team, will also soon be available for patients.

# **Topical**

Topicals consist mostly of non-psychoactive, cannabis-infused salves, lotions, sprays, and transdermal patches. Patients apply these products directly onto their skin to treat localized pain, muscle soreness, and inflammation. Cannabinoids are absorbed through the skin and do not result in psychoactive effects.

### **ONSET & DURATION: VARY**

### SALVES AND SPRAYS

Pain relief minus the psychoactive effects. Cannabis-infused balms, lotions, creams, and oils, are applied directly onto the skin and are ideal for symptoms such as arthritis, minor burns, skin conditions, cramping, and migraines. As topical salves and sprays vary in their potency, onset times and duration vary. If you have allergies or sensitive skin, be sure to check products for ingredients or fragrances that may cause irritation.

**ALOHA GREEN APOTHECARY** – CBD topicals are popular products at Aloha Green Apothecary. We even work with local vendors who create organic CBD products with pure ingredients exclusively for our dispensary. Support local! Live aloha!

### TRANSDERMAL PATCHES

A long-lasting topical option. Transdermal patches are medicated adhesive patches that deliver specific doses of cannabis through the skin into the bloodstream. They should be applied to a clean, dry, hairless skin surface - the inner wrist, top of foot, and ankle areas are recommended.

\* ALOHA GREEN APOTHECARY – THC transdermal patches will be introduced next year to aid patients requiring a more discreet, localized method of experiencing the benefits of cannabis.

## **Less Common Methods**

Innovations are constantly underway in cannabis production and in the therapeutic applications of cannabis. In addition to the four main ways to consume cannabis, nasal sprays and suppositories offer patients effective but lesser known ways to consume cannabis.

### **ONSET & DURATION: VARY**

### NASAL SPRAYS

Cannabis-infused nasal sprays offer patients the ability to safely and instantly administer doses of cannabis through their nasal passages. These sprays are used primarily to treat against epileptic seizures in children.

### **SUPPOSITORIES**

Anal suppositories transmit cannabinoids into the rectal mucosa, from where it enters the bloodstream and spreads quickly throughout the body.

# Cannabis and Human Civilization



Cannabis cultivation and therapeutic use has a documented history spanning 6 millennia, and an archaeological history of 12,000 years. Cannabis is among humanity's oldest crops. The plant is indigenous to Central and South Asia, from where it spread west around 2000 BCE towards the Middle East, North Africa, and Europe. There is evidence of cultivation in great ancient civilizations, such as China and Egypt - even the medieval Vikings grew and used cannabis. It wasn't until the beginning of the 20th century that cannabis was introduced in the US.

Despite prohibition efforts past and ongoing, many people rely on cannabis to treat far-ranging illnesses, both physical and mental.

With more and more states legalizing cannabis for medical use, patients today have an unprecedented opportunity in terms of access and treatment availability. This is an exciting time for medical cannabis, with new innovations constantly underway in research, cultivation, and therapeutic applications.

# The Types and Effects of Cannabis

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# **Types and Effects**

### The Types and Effects of Cannabis

There are many strains, or varieties, of cannabis. Each possesses unique qualities that affect patients differently. These differences are due to the type and strength of certain compounds present in each strain.

### Cannabinoids and the Endocannabinoid System

The medicinal capabilities of cannabis are possible due to cannabinoids produced by the plant. Cannabis contains at least 85 known cannabinoids. These chemical compounds interact directly with the endocannabinoid system, which is found in mammals, birds, reptiles, and fish. This system of cell receptors maintains the internal stability of the body and regulates a wide variety of functions, including sleep, digestion, mood, motor control, immune function, pain, memory, and temperature.

When cannabis is consumed, cannabinoids bind to the receptor sites in the brain and nervous system (CB1) and throughout the body (CB2). Different cannabinoids have different effects depending on which receptors they bind to. In terms of using cannabis as medicine, this gives us the ability to use cannabis products with different cannabinoid profiles for specific symptoms.

THCA and CBDA are the most abundant cannabinoid acids found in cannabis. Other major cannabinoid acids include CBCA and CBGA. When these cannabinoid acids are exposed to heat, they break down into their cannabinoid counterparts, losing the "A" portion of the chemical makeup, in a process called "decarboxylation". THCA turns into THC, etc. The resulting cannabinoids (without the "A") bind to cell receptors to provide the powerful therapeutic effects of cannabis. This is why "raw" cannabis does not trigger psychoactive effects in humans – it must be first decarboxylated with fire or high heat to transform the cannabinoids.

### THC

Delta(9)-tetrahydrocannabinol – is the primary psychoactive compound in cannabis and is what gets people "high". THC cannabinoids tend to bind with the CB1 receptors in the brain and nervous system, altering behavioral and cognitive perceptions.

### **CBD**

Cnnabidiol - the second most common cannabinoid found in cannabis is non-psychoactive and has a list of health benefits that continues to get longer. CBD quickly is gaining importance and acceptance in the medical community for its efficacy and variety of therapeutic applications.

### **Terpenes and the Entourage Effect**

Terpenes are the fragrant oils that give cannabis its distinct and varying scents. They also naturally occur in herbs, fruits, and plants. These oils give the different cannabis strains their distinctive smells and flavors like citrus, berry, mint, and pine – many times, helping to create the strain names. Like cannabinoids, terpenes also bind to receptors. New studies show that all the compounds in cannabis working together create an "entourage effect" that magnifies the therapeutic effects of the individual components – the medicinal impact of the whole plant is greater than the sum of its parts (like using THC or CBD in isolation).

# **Strain Types**

Cannabis strains can be divided into three distinct categories: sativa, indica, and hybrid. Sativa and indica strains originate from different geographic locations and have distinct attributes in appearance and growth cycle. More importantly, the two types of cannabis can have almost opposite effects on the human body. Strains are bred to maximize/minimize specific traits and effects, and hybrid strains are created when genetics from both sativas and indicas are combined.

### SATIVA

Sativa strains tend to provide energizing and uplifting "heady" effects that are well-suited for daytime use. Patients seeking medicine that offers pain relief and encourages physical activity, social interaction, and creative thinking prefer sativa strains. Sativas also help alleviate depression and anxiety, promoting a sense of well-being.

### **INDICA**

Indica strains are known for relaxing the body and mind, helping patients manage pain, insomnia, anxiety, and stress – especially in the evenings. The full-body sedating effects of indicas are sought out by those with chronic pain and sleeping disorders. These strains are also effective in stimulating appetite and giving patients "the munchies".

### strain types continued...

### **HYBRID**

Hybrids are crossbred strains of cannabis that have genetics from both indica and sativa plants. Their traits depend on what is inherited from parent strains, and they produce effects that provide the best of both worlds. Hybrid strains are generally categorized as indica-dominant, sativa-dominant, or 50/50 hybrid. Very few strains available in recent years are 100% pure indicas or sativas, as nearly all popular and effective strains have been developed through scientific and precise breeding.

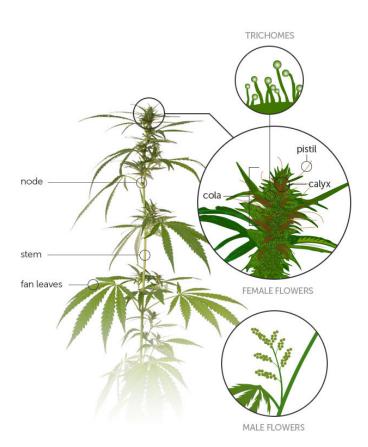
### HIGH-CBD

High-CBD strains can be an indica, sativa, or hybrid. This separate categorization features strains that are specifically bred for high CBD content, therefore maximizing medicinal benefits. Cannabis strains with CBD levels over 4% are considered to be high and may even intentionally have low THC levels to minimize psychoactive effects.

Speak with your Aloha Green Apothecary patient consultant to learn about our strains, understand their different effects, and find the medicine that may be best for your needs.

# The Anatomy of the Cannabis Plant

The cannabis used for consumption comes from the flowers of a female cannabis plant.



CALYX: Tear-shaped nodules nestled in the cola, the calyxes are the actual buds themselves and the main product used for medicine. The highest concentration of trichomes is found on calyxes and the "sugar leaves" that grow among them.

COLA: The main cola grows at the top of the plant and is a large, tight cluster of buds. Smaller colas are also produced at the end of major branches.

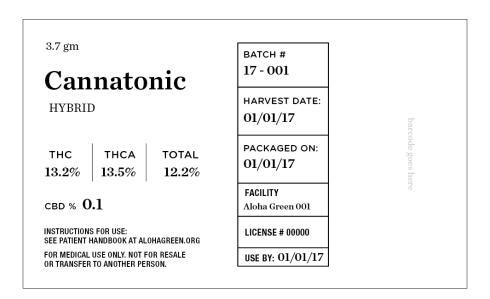
TRICHOMES: Seen as a translucent blanket of tiny crystal hairs and sticky resin that cover parts of the plant, trichomes contain the cannabinoids and terpenes that make cannabis a powerful therapeutic medicine. These nearly microscopic resin glands are the most important part of the cannabis plant for a patient.

PISTIL: The pistils are vibrant, hair-like strands that grow out from each calyx and capture pollen from male plants. They first grow white and transform to orange, red, or brown.

FAN LEAVES: Even though the fan leaves are the most recognized part of the cannabis plant, they lack any significant levels of THC and are generally not consumed.

# Packaging, Testing, and Storing

# Packaging, Testing, and Storing



### Understanding Aloha Green Apothecary's product labeling:

- Total product weight
- Strain name (for cured flower) OR Product type
- Strain type (if applicable)
- THC profile percentages of THC/THCA/Total THC
- CBD profile percentages of CBD/CBDA
- Other cannabinoid profiles (if applicable)
- Use by three months from package date
- Package date after processing/manufacturing
- Harvest date
- Batch number Harvest/phenotype identifier
- Facility Production facility identifier
- License number State registration information
- Biotrack barcode unique seed-to-sale tracking barcode
- Warnings

# Independent Laboratory Testing

Hawaii legislation requires all cannabis products available for sale at dispensaries to pass or undergo independent laboratory testing for the following:

- · Cannabinoid profile
- Pesticides
- Mycotoxins
- Heavy metals
- Moisture content
- Microbial impurities
- Solvents (if applicable)

Laboratory test results for all cannabis products are available at the dispensary. Please speak with your patient consultant if you'd like to see these reports or to learn more about how our cannabis products are tested. Hawaii has one of the most stringent testing standards in the country to ensure the safe, reliable medical cannabis for the state's patients.

# **Storing Medical Cannabis**

Proper storage of medical cannabis is critical in maintaining potency. The freshness and efficacy of your medicine will rely on four important items:

HANDLING: Too much handling of the cannabis flower will cause trichomes to fall off. Minimize handling only to time of consumption.

LIGHT: Store all cannabis products in a cool, dark place. Light degrades therapeutic compounds and cannabinoids.

AIR: Keep cannabis in an airtight container to keep it from drying out and to protect it from airborne contaminants.

HEAT AND MOISTURE: Dried cannabis is sensitive to temperature. Too much heat will dry out the product and too much moisture will promote dangerous bacteria and mold growth. While storing cannabis in the refrigerator is acceptable, keeping it in the freezer is not recommended – freezing makes the trichomes fragile and more likely to fall off when touched.

Aloha Green Apothecary provides each patient with an airtight childproof container to store and keep cannabis products. We recommend keeping purchased medicine in the provided containers as they are specifically designed to preserve freshness and prevent children/pets from coming in contact with cannabis.

# Warnings and Side Effects

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# Warnings and Side Effects

Cannabis is a highly effective medicine with significant therapeutic benefits to countless medical conditions. Like all medicines, consuming cannabis may cause certain side effects. Side effects are common and temporary in relation to the amount and strength of cannabis consumed. If you suffer from a negative reaction, we recommend that you reduce the dosage and/or modify the strain or type cannabis product consumed.

If you believe you are having a health emergency, call 911 or consult your physician immediately.

### Some effects may include:

Feelings of euphoria

Feelings of anxiety and/or paranoia

Hunger and increase in appetite

Dry mouth or thirst

Dry/red eyes

Drowsiness and lethargy

Insomnia

**Dizziness** 

Intensification of sensory experiences

Motor impairment

Short-term memory loss

Regular heavy usage can increase a patient's tolerance and may require larger doses to achieve similar affects and symptom relief.

Women should not consume cannabis products while planning to become pregnant, during pregnancy, or while breastfeeding.

While over-medication is possible, especially with cannabis-infused foods, there are no recorded instances of deaths due to a fatal dose of cannabis. You cannot "overdose" on cannabis. If you feel that you have consumed too much cannabis, do not panic. Symptoms, though they may be overwhelming and extremely uncomfortable, subside within a few hours. Stay hydrated and remain calm.

Like with most medication, there is a risk of addiction associated with cannabis use. Cannabis does not cause physical dependence (as certain prescription drugs, opioids, alcohol, tobacco, etc. may), but can become psychologically addictive for individuals prone to developing an addiction. Withdrawal symptoms can include feelings of depression, sadness, irritability, insomnia, trouble concentrating, and loss of appetite.

# Mahalo

