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LEARN ABOUT CANNABIS

Cannabis 101

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The Program

On August 1, 2013, Illinois Governor, Pat Quinn, signed into law the Compassionate Use of Medical Cannabis Act (the "Act"). The Act made medical cannabis legal in Illinois for residents that suffer from a specific set of approved conditions. As stated in the Act, "the recorded use of cannabis as a medicine goes back nearly 5,000 years."

The Plant

Cannabis is a flowering plant with many utilitarian purposes: cannabis seeds can be used for food; its stalks can be used for paper, clothing, rope and building materials; and its leaves, flowers and roots can be used for medicinal purposes.

The female plants can grow the flowers, or buds, that are utilized most often for human consumption. The cola refers to the plant's "bud site" where tight female flowers bloom. Colas form at all budding sites throughout the plant, but the larger, firmer colas tend to form toward the top of the plant with the main cola, sometimes called the apical bud, forming at the very top of the plant.

Cannabis as Medicine

Documents dating as far back as 2900 B.C. tell us cannabis has lived alongside humans for thousands of years and has been cultivated for medicinal purposes for just as long. Cannabis' impact on the human body can be credited, in large part, to what are called [Cannabinoids](#). Cannabinoids are chemical compounds secreted by the plant's trichomes that offer a wide array of therapeutic benefits. The two most well known cannabinoids are THC and CBD. Cannabinoids bind to receptor sites in the brain and body – this system of receptors is referred to as the [Endocannabinoid System](#).

The science behind cannabinoids as medicine is strong; so much so that certain cannabinoids have actually been synthesized (artificially made) and received FDA approval for treatment of illnesses like MS (Sativex, Marinol and others). The two cannabinoids mentioned, THC and CBD, have been shown to help patients suffering from pain, nausea, sleep and stress disorders, as well as stress relief, anxiety, inflammation and epilepsy. Cannabis contains at least 85 different cannabinoids and more research becomes available every day detailing how cannabinoids can be used to treat a wide range of ailments. However, recent studies have also shown a possible connection between early cannabis use and a negative impact on brain development. Without question, additional research into cannabis' impact on the human body is needed and appropriate.

One of the best things to understand about cannabis as a modern medicine is that you no longer have to smoke cannabis



What Is A Cannabis Strain?

A strain is a genetic variant of cannabis. Most cannabis strains can be classified as either Cannabis Sativa or Cannabis Indica – two variations of the same basic species of cannabis. These two classes of strains tend to have very different effects on the consumer as further detailed below. Today we regularly see the influence of hybrid genetics that combine both indica and sativa varieties.

Over the years, countless numbers of hybrid strains have been created through genetic cross-breeding programs to develop plant profiles that are meant to take the best attributes of both parent strains – you'll only need to go to your registered dispensary to see the assortment of strains that have been created over the past decades with a variety of cannabinoid profiles.

Indica vs. Sativa

Form and structure: Indica plants tend to be short and stocky, while sativa varieties are tall and lanky. The leaves of indica plants are broad and chunky, whereas sativa strains exhibit thin and pointy leaves. It should be noted, it's not always easy to quickly identify the different species solely by their appearance. The variation in form is primarily due to the different geographical regions in which each originate — indicas from the mountainous regions of Asia and the Middle East and sativas from more equatorial regions around the world.

Efficacy: The efficacy, or effect, of indica and sativa strains can be very different. A pure sativa will likely have a powerful uplifting/energizing effect. Sativas can promote focus and productivity – making them preferable for day-time use. However, strong sativas can cause a person’s mind to race and cause users to feel anxious or paranoid.

Indicas traditionally promote relaxation and general calming. Often, indicas are thought to be very beneficial for pain relief, anxiety and sleep disorders. Strong indicas might not be the best option for morning-use and wanting to stay productive. Likewise, consuming a sativa in the evening isn’t necessarily recommended.

That said, these expectations are sometimes over-generalized. Two types of cannabis compounds – cannabinoids and terpenes – hold most of the influence when it comes to the affects of the cannabis. In this way, cannabis strains are the sum of smaller parts that are passed on genetically from plant to plant.

As mentioned above, hybrids are simply a mix of sativa and indica, providing the pros and cons of each species. Hybrid strains that are more indica than sativa are called indica-dominant. Likewise, sativa-dominant strains have mostly sativa traits, but are buffered by some indica influence.

[More about Indica vs. Sativa](#)

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The Effects of Cannabis

Cannabis affects everyone differently. Different strains and methods of consumption give users different effects. And new users generally feel different effects than more experienced users.

Effects can vary — some people don't feel anything at all the first time they try cannabis. For the most part, the experience tends to be kind of relaxing and a little euphoric. Some people can become more outgoing and social. However, others find cannabis makes them tired, anxious or even paranoid.

It is very important to proceed with consuming medical cannabis cautiously and with respect for its efficacy – start slow with a low dosage and see how it affects you. Keep track of your dosing, type of product and the feelings that it provided – this will help you better understand how cannabis can best work for you.

Types of Consumption

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Recently, with advancements in extraction technologies, a new form of concentrated resin has been developed as well as concentrated forms of cannabis oils that can be ingested orally, mixed with topical lotions and applied to the skin, or vaporized and inhaled – smoking the flower is no longer the only method; you can truly take a pill that contains a very precise and consistent dose of medication, i.e. a pill with 5mg of THC and 5mg of CBD.

Here is a quick rundown of the most common forms of consumption and the cannabis forms for each:

- **Inhalation** – smoking or vaporizing and inhaling through the lungs (joints, pipes, and vaporizers).
- **Ingestion** – the cannabinoids and terpenes are extracted from the flower as oil and then either ingested as-is, combined with another medium like food, or processed into pills, gel caps and other traditionally-seen medicinal forms that can enable very precise and controlled dosing experiences (edible baked goods, pills, capsules and tinctures)

- **Oral absorption** – the extracted oil is combined with another medium. The finished product is kept in the mouth while it dissolves under the tongue, on the tongue or through the inner cheek (mints, lozenges and breath strips).
- **Topical** – the extracted oil is combined with a product that is applied to the skin (lotion, ointments and transdermal patches).

How Long Does It Take For an Edible to Take Effect?

The most important thing to remember is that each person can be different – start low and go slow. The metabolism of the person plays a large role in the amount of time it takes for an edible to take effect. Traditionally, it can take anywhere from 20 minutes to two hours or longer.

The effects generally peak up to four hours after eating or drinking cannabis, so it's best to wait at least that long before consuming more. In most places, 5-10mg is considered to be a dose – which may be just right for some, too much or not enough for others. Take your time and learn what's right for you, and always pay attention to the label for dosing and recommended serving size.

Can I Consume Too Much Cannabis?

Just like any product that has a physiological effect on the human body, you can over-indulge. Similar in the way you can have too much caffeine or you can have too much alcohol, you can have too much cannabis.

Consuming too much cannabis may lead to a few unpleasant hours. However, unlike other commonly prescribed medicines for treating pain and other conditions approved for this program, it is highly unlikely that an otherwise healthy individual would experience a lethal reaction from over-consuming cannabis. This is principally because the [cannabinoid receptors](#), unlike opioid receptors, are not located in the brain stem areas that control respiration and cardiovascular function. In the nearly 5,000 years that cannabis has been used by tens of millions of people for both medicinal and recreational purposes, there has not been one credible documented case of someone fatally overdosing on cannabis.

There is a test known as the LD-50 used to determine the toxicity of a product. This rating indicates at what dosage fifty percent of test animals receiving a drug will die as a result of drug induced toxicity. The LD-50 rating for aspirin is 1:20. in layman's terms this means that if the recommended dosage of aspirin is two pills, in order to induce death, a person would need to consume 40 pills (20x's the recommended dosage). For Valium it's 1:10 and for some cancer medications it can be as low as 1:1.5.

It was estimated that the LD-50 for cannabis would be between 1:20,000 and 1:40,000; meaning that a person would need to ingest 20,000 to 40,000 times the single serving size to induce a lethal reaction. For this study, a single serving of cannabis was measure at .9 grams of cannabis (the amount in one cannabis cigarette or joint) – a person would need to ingest 20,000 to 40,000 joints, or roughly 1,500 pounds of cannabis in 15 minutes to induce a lethal reaction. Simply put, it would take an unrealistic amount of cannabis consumption for an otherwise healthy person to experience a cannabis-induced lethal event.