With medical marijuana legalized in more than half of the United States, more and more people are taking it to help them manage a variety of symptoms. This patient teaching guide provides important details about using medical marijuana for medical reasons.

**Marijuana: The Basics**

Marijuana is a drug that comes from the Cannabis plant. It has been used since ancient times for medical, spiritual, and recreational purposes. The drug was declared illegal and removed from the United States Pharmacopeia in 1942. The Controlled Substance Act of 1970 made marijuana use illegal as a Schedule I category drug because of its high potential for abuse.

**Active Ingredients**

The two most common pharmacological elements (cannabinoids) of Marijuana are *Tetrahydrocannabinol* (THC) and *Cannabidiol* (CBD). THC is responsible for most of the signs associated with the marijuana “high”.

**Marijuana Plant Types**

There are four main marijuana plant types that each have different properties:

<table>
<thead>
<tr>
<th>Plant Type</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannabis indica</td>
<td>A strain of marijuana that is smaller and stouter. The effects make you feel sleepy and sluggish.</td>
</tr>
<tr>
<td>Cannabis sativa</td>
<td>A strain of marijuana that gives a feeling of being “high.” You may feel energetic and excited.</td>
</tr>
</tbody>
</table>
### Plant Type

<table>
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<tr>
<td>Cannabis ruderalis</td>
<td>A strain of marijuana that is very short and produces only trace amounts of THC. It is not commonly used for medical or recreational use.</td>
</tr>
<tr>
<td>Hybrid</td>
<td>Most marijuana produced and grown is a combination of the above strains, especially indica and sativa.</td>
</tr>
</tbody>
</table>

### Common Effects of Cannabis Indica and Sativa

**Cannabis Indica:**

- Provides relaxation
- Reduces stress
- Relaxes muscles and spasms
- Reduces pain, inflammation, headaches and migraines
- Helps sleep
- Reduces anxiety
- Reduces nausea
- Stimulates appetite
- Reduces pressure in the eye
- Anti-convulsant (seizure)
- Tiredness and “fuzzy” thinking

**Cannabis sativa**

- Stimulating and energizing
- Increases a sense of well-being, focus, and creativity
● Reduces depression
● Elevates mood
● Relieves headaches, migraines, and nausea
● Increases appetite
● Increases feelings of anxiety and paranoia

Other names for marijuana:
Bud, blunt, chronic, dab, dope, ganja, grass, green, hash, herb, joint, loud, mary jane, mj, pot, reefer, sinsemilla, skunk, smoke, trees, wax, weed

Conditions Most Commonly Treated with Marijuana

Because Federal law makes marijuana illegal, there has not been a great deal of research done to test how effective it is in treating specific symptoms. The plant is commonly prescribed to manage the following conditions:

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<th>Condition/Symptom Treated</th>
<th>Actions of Marijuana</th>
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<tr>
<td>Chronic back pain, rheumatoid arthritis joint pain, injury-related pain, and neuropathic pain</td>
<td>Decreases inflammation and reduces neuropathic pain when used in combination with other drugs. Strains with more indica are more effective pain management.</td>
</tr>
<tr>
<td>Cancer pain</td>
<td>Marijuana can work with narcotics to help control cancer-related pain.</td>
</tr>
<tr>
<td>Migraines</td>
<td>Strains with more indica (CBD) help with migraines.</td>
</tr>
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</tr>
<tr>
<td>----------------------------------------</td>
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</tr>
<tr>
<td>Sleep disorders</td>
<td>Limits light sleep and the vivid dreams that occur during this stage. It may improve the quality and duration of sleep.</td>
</tr>
<tr>
<td>Depression</td>
<td>Has an anti-depressant effect and can blunt memories.</td>
</tr>
<tr>
<td>Epilepsy/Seizures</td>
<td>May interfere with brain processes thought to cause seizures.</td>
</tr>
<tr>
<td>Multiple sclerosis</td>
<td>Reduces spasticity and pain in patients that fail to respond to other therapies.</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>Reduces pressure in the eye.</td>
</tr>
<tr>
<td>HIV and AIDS-related weight loss</td>
<td>Increases appetite to help with weakness and wasting of the body. Strains with more <em>indica</em> help with poor appetite.</td>
</tr>
<tr>
<td>Cancer-related nausea and vomiting</td>
<td>Reduces feelings of nausea and increases appetite. Strains with more <em>indica</em> help more with nausea and vomiting.</td>
</tr>
<tr>
<td>Post-traumatic stress disorder</td>
<td>Helps prevent the memory of the underlying trauma. It also helps the person attain emotional wellbeing. It has an anti-depressant effect and can minimize or prevent nightmares.</td>
</tr>
</tbody>
</table>
It’s important to know that while marijuana can positively impact many uncomfortable symptoms, there may be other drugs that produce better results. An example is marijuana’s ability to lower pressure in the eye in people with glaucoma. Other drugs typically produce better results.

**How Marijuana Is Taken**

There are four main ways that marijuana can be taken. These include:

**Inhalation (Smoking)**

Inhalation produces the quickest effects. When a person inhales marijuana, most of the drug enters the body through the lungs and then moves into the bloodstream. The effect occurs within minutes and peaks at around the one-hour mark. The total duration of the effects is around two hours. This allows for a more controlled dose.

- **Onset**: minutes
- **Peak**: 15-30 minutes
- **Duration**: 2-3 hours

Marijuana can be inhaled in different ways: in hand-rolled cigarettes (joints), vaporized (vapes), in pipes, or water pipes (bongs). In these cases, the flowers of the plant are burned, and the active components are released into the inhaled smoke. Vaporizing is becoming more popular. It allows the person to avoid inhaling smoke. The cannabis is heated to a temperature which allows the active ingredients to be released as vapor that is then inhaled. A single intake of smoke is called a “hit.”
By Mouth

Marijuana can be taken by mouth in many forms, including: edibles, tinctures, capsules, oils and liquids like tea. These are a popular option for those who cannot or do not want to smoke cannabis. Cannabis taken by mouth enters the bloodstream after it is digested and absorbed by the intestines. Edibles, such as brownies, cookies, candy, chocolate, pizza, gummy bears, and drinks, can also be a source of nutrients for patients with nausea or digestive disorders. Marijuana taken by mouth takes longer to activate within the body—one half hour to an hour—but produces a longer, lasting effect.

Sublingual (under the tongue)

The area under the tongue has a large number of blood vessels that can absorb the cannabis. The drug is usually placed under the tongue and held in the mouth. Edibles such as lollipops or lozenges and products that include dissolvable strips, sublingual sprays, or tinctures are considered sublingual. Because it is quickly absorbed into bloodstream, the onset of sublingual marijuana is often quicker than when taken by mouth, which must go through the digestive system.
Topical

Topical products include lotions, salves, bath salts, and oils that are applied to the skin. These products are often used for arthritis and joint pain. The drug penetrates the skin and reduces pain and inflammation. These products work well in small areas and do not produce the signs of the marijuana “high”. The actions begin within minutes, with a duration lasting one to two hours. Very little product reaches the brain.

Other Forms

In addition, there are marijuana concentrates such as hash, wax, tinctures and oils.
Dosage

Your physician will authorize you to obtain marijuana but will not prescribe a specific dose. Marijuana can be effective medically at a wide range of doses. Your metabolism, preferred route of administration, and level of prior experience with the drug affect the dosage needed. The exact potency of marijuana is difficult to determine because it depends on the potency of the cannabis used to produce the product. The golden rule is to “start low and go slow.” Unlike most other drugs, you and not your doctor will determine the dosage that you take and how frequently you consume the product.

For most marijuana users, gradually increasing the dose will at first result in stronger effects; but after a certain point (unique to each person), additional dosage increases can result in weaker effects, accompanied by an increase in side effects. Identifying the optimal dose of marijuana may involve trial and error. Sudden discontinuation of marijuana use does not typically produce significant withdrawal-like signs or symptoms, although temporary changes in sleeping pattern, mood, or appetite after stopping the drug have been reported.

Generally, when smoking marijuana, you should take no more than 2-3 inhalations per day, waiting 2 minutes between puffs to see if more is needed. If the drug is taken by mouth, you should wait 2-4 hours between each dose to see how the drug affects you before taking more.
Effects of Marijuana

Use of marijuana may produce the following effects:

Side Effects

While additional research needs to be done to determine short and long-term side effects of marijuana use, the following side effects have been identified:

- Problems with memory and learning
- Addiction to other substances (e.g., opiates)
- Breathing problems when smoked (like cigarette use), including asthma, bronchitis and emphysema
- Increased risk of motor vehicle accidents
- Poor life achievement
- Abnormal brain development in the younger people
- Psychiatric disturbances
- Depression
- Anxiety
- Thoughts of suicide
- Impaired judgment, especially when used with alcohol
- Poor ability to cope with stressful situations
- Severe vomiting (with frequent or excessive use)
- Infertility
- Impotence
- Chronic bronchitis
- Chronic obstructive pulmonary disease* with prolonged use, like the actions of tobacco
- Asthma attacks
- Increased risk of stroke
- Depressed immune system
- Periodontal disease and thrush
- Problems with child development during and after pregnancy

*Inhaled marijuana is believed to contain as much as three times the amount of carcinogens as cigarettes.
Overdose

There are no reports of teens or adults fatally overdosing (dying) on marijuana alone. However, overdosage may occur and is known as “greening out.” Symptoms include:

- Nausea
- Vomiting
- Diarrhea
- Pupil dilation
- Elevated heart rate
- Shortness of breath
- Sweating
- Spasms
- Tremors
- Anxiety
- Panic attacks
- Paranoia
- Poor balance
- Disturbed sleep
- Excessive vomiting
- Hallucinations
- Extreme psychotic reaction

These symptoms are usually self-limiting and resolve within 12 to 24 hours. If symptoms are severe or last longer than 24 hours, emergency treatment may be needed.
Abruptly Stopping Marijuana

Withdrawal symptoms may occur if people who have taken marijuana in excessive amounts or for a long period of time abruptly stops the drug. These symptoms include difficulty sleeping, loss of appetite, and restlessness initially, then irritability/anger, and vivid and unpleasant dreams after a week of non-use.

Authorization for Medical Marijuana Use

If you live in a State that has legalized the use of medical marijuana and you have a disorder that qualifies you to use the drug, your doctor can issue an authorization for use rather than a prescription.

An authorization for use does not give details about the cannabis strain, dose, frequency, or how the drug is taken (e.g., smoking, edibles, etc). Depending on State law, you take the authorization form to a state-authorized cannabis dispensary. These dispensaries have employees who’ve been trained in the dispensing of medicinal marijuana and can guide you in safely taking the drug. Before you can receive marijuana for medicinal use, you must apply for a state-issued identification card.

Medical marijuana isn’t available in traditional pharmacies where no trained personnel are available for providing guidance and recommendations to patients.
Obtaining and administering marijuana for medical purposes is limited to the patient and/or the patient’s designated caregiver. Designated caregivers must be registered with the State’s Medical Marijuana Program (MMP).

**Storage and Disposal Considerations**

- Keep marijuana out of the reach of children, minors, and nonregistered individuals.
- Store all cannabis products in a locked area.
- Keep the product in the original child-resistant packaging.
- Store the product in a dry, cool place.
- Check for expiration dates.
- Dispose of unused cannabis products according to the DEA’s Disposal Act. Contact the DEA Registration Call Center (800-882-9539) to locate a collection receptacle near you.

**Safely Taking Medical Marijuana**

- Be aware that thinking, problem-solving skills, and memory may be impacted by the drug.
- Do not drive or operate heavy machinery while using marijuana.
- Use caution when standing up and walking as your balance may be affected.
- Report any heart palpitations or severe headaches to your healthcare provider.
Be aware that your immune system may be depressed, making infections more common.

Ask your healthcare provider about any possible interactions between your current medications and marijuana.

Be aware of signs of addiction, including:

- Needing more of the drug to get the same effect
- Continuing to use the drug despite family or work relationships being negatively affected
- Neglecting personal appearance and responsibilities
- Spending an increasing amount of time using the drug

Test Your Knowledge

1. The active ingredient in marijuana that causes the feeling of being “high” is:
   - A. Tetrahydrocannabinol (THC)
   - B. Cannabidiol (CBD)
   - C. Flavonoids
   - D. Terpenoids

2. Most marijuana produced and grown is:
   - A. Cannabis indica
   - B. Cannabis sativa
   - C. Cannabis ruderalis
   - D. Hybrid
3. Which condition has shown benefits when marijuana is taken?

- A. Cancer pain
- B. Multiple sclerosis
- C. Glaucoma
- D. All of the above

4. This way of consuming marijuana takes the longest for the effects to be felt:

- A. Inhalation (smoking)
- B. By mouth (like brownies or dummies)
- C. Sublingual (under the tongue)
- D. Topical (lotions and oils)

5. Most people who take marijuana have a(n):

- A. Increased appetite
- B. Decreased appetite

6. What is the golden rule for taking marijuana?

- A. Puff twice to feel nice
- B. Start low and go slow
- C. One puff is enough
- D. Proceed carefully

7. What is a sign that you may have taken too much marijuana?

- A. You feel sleepy
- B. Your mouth feels dry
- C. You begin vomiting
- D. You are unsteady when you walk
8. A caregiver who helps you take marijuana must be registered with the State’s Medical Marijuana Program (MMP)

☐ A. True
☐ B. False

9. You should store marijuana:

☐ A. In the refrigerator
☐ B. Away from sunlight
☐ C. In a locked area
☐ D. In an unlabeled container

10. If you are taking marijuana, what should you report to your healthcare provider (select all that apply)?

☐ A. Heart palpitations
☐ B. Severe headache
☐ C. Upper respiratory tract infection
☐ D. Needing more of the drug to get the same effect
☐ E. Thoughts of suicide
☐ F. That you’ve been prescribed a new medication

Answers: 1=A, 2=D, 3=A, 4=B, 5=C, 6=A, 7=C, 8=A, 9=C, 10=A, 11=All