

forming—options. And to some, especially those for whom getting access to treatment has meant moving themselves, their families and their entire lives across the country, federal action in favor of medical cannabis can't come soon enough.

What's more, in many states, the only concessions allowed for medical marijuana is the kind of low-content CBD oil used to treat violent seizures in children. Any use of cannabis's other compounds as medicine is rejected out of hand by the governments of these states, and the parameters for obtaining medication are purposefully restrictive. Patients are forced to the black market if they are able to determine that cannabis is the best treatment option for their condition, perpetuating a system of arrest and imprisonment that has left cannabis users victimized for decades.

Among the myriad uses currently being taken advantage of by medical cannabis patients, according to Amanda Reiman, Ph.D., of the University of California, Berkeley, cannabis can also be useful as a "substitute." Though it's not as common to hear about as cannabis for glaucoma or pain, Reiman is convinced that the plant can be one of our biggest tools in the fight against one of the most difficult diseases to treat: addiction itself. "There's kind of a simplistic view that [people who use cannabis to treat addiction] are just trading one high for another, but it really goes much deeper than that on several levels," Reiman explains. "First of all, we look at the common withdrawal symptoms for drugs that are highly physically addictive, like opium and alcohol. We see some similarities—trouble sleeping, nausea, loss of appetite, anxiety, delirium tremens, seizure activity and irritability. When you look at some of the more well-known symptoms that cannabis treats, I mean, that's the list I just gave you."

BODILY BENEFITS

AS SCIENTIFIC STUDIES CONTINUE, SOME EFFECTS OF CANNABIS ON THE BODY ARE PROVING MORE POSITIVE.

LUNGS

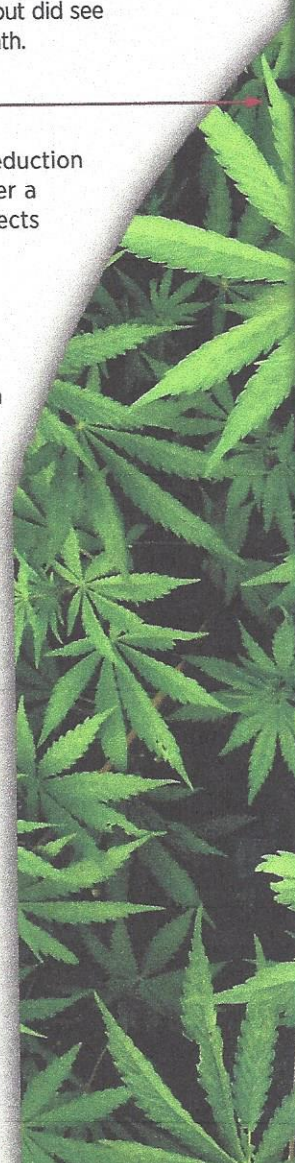
In January 2012, the *Journal of the American Medical Association* published an article asserting that unlike tobacco, cannabis does not inhibit lung function and may actually improve the capacity of users' lungs. The long-term study, which followed risk factors for heart disease, tested 5,115 young adults over the course of two decades and discovered that while tobacco smokers lost lung function over time, pot smokers saw no decrease in function but did see the benefit of a more voluminous breath.

SKELETAL SYSTEM

A cannabis derivative, Sativex, recently brought on a significant reduction in pain among arthritis patients over a two-week period. The potential effects of arthritis, including intense joint pain, stiffness, Plantar fasciitis, trouble healing, Carpal tunnel syndrome and other painful symptoms, can all be addressed with medical marijuana rather than pain-killers, which have proven habit-forming for many patients.

GENETICS

In 2007, researchers at San Francisco's California Pacific Medical Center found that cannabidiol, one of the compounds found in marijuana, can "turn off" a gene that allows cancer cells to grow. As more and more diseases are conquered on the battlefields of science, the concern of cancer continues to grow as people live long enough to be taken by the most fatal and mysterious of all diseases. Continued research will explore the cancer-preventive potential of pot, but the results thus far provide a bright prospect.





→ BRAIN

Acting as a low-dose sedative, cannabis allows those with crippling anxiety to improve their mood, according to studies at Harvard Medical School. Additionally, a study led by Kim Janda of the Scripps Research Center shows THC blocks the formation of the enzymes that make amyloid plaques, the culprit behind decreased brain function. Cannabis, therefore, might hold the key to slowing down the effects of Alzheimer's.

→ EYES

Use of cannabis has been shown to lower the fluid pressure inside the eyeballs, which is why it is regularly prescribed to glaucoma patients. Glaucoma causes inner-eye pressure buildup, which impairs the optic nerve and sometimes causes blindness. The benefit of cannabis for glaucoma patients is particularly of note in states like New York, where restrictions on medical cannabis mean smoking is prohibited—meanwhile, the pressure-relieving benefits of cannabis are only present when it is smoked.

→ NOSE

Cannabinoids act as bronchodilators, meaning they relax the respiratory muscles and make airways larger. In turn, complications stemming from sinusitis congestion such as postnasal drip and mucus buildup can sometimes be addressed with the aid of cannabis. In cases of breathing trouble, physicians are likely to prescribe methods of ingestion as an alternative to inhalation.

→ MUSCLES

Many note a relaxing of their muscles while using cannabis, which can be advantageous for various conditions. Sufferers of multiple sclerosis, a disease that attacks the central nervous system of the body, have been able to decrease the occurrence of muscle spasms with the help of cannabinoid receptors.

→ GASTROINTESTINAL TRACT

Simple stomach ailments such as nausea and emesis can be alleviated by cannabis use. The cannabinoids known as THC and cannabidiol found in the plant have proven to contain anti-inflammatory properties, which can be used to treat more severe gastrointestinal disorders. According to Dr. J. Hampton Atkinson, co-director of the Center for Medicinal Cannabis Research at UCSD, sufferers of Crohn's disease and ulcerative colitis have seen a reduction in symptom severity following the use of medical cannabis.