

of pharmacology and anesthesia at Dalhousie University in Halifax, Nova Scotia. In ongoing animal research, McDougall and his colleagues have found that by blocking certain enzymes or injecting cannabinoids into the joint, sensitivity and pain are reduced, leading McDougall to speculate that both endocannabinoid-targeting and cannabis-based treatments may hold new hope for individuals with OA.

Cannabis also may ease inflammation and affect immunity. In-vitro and animal studies have shown that both herbal and synthetic cannabinoids have the ability to suppress inflammation. Most recently, a *Biological & Pharmaceutical Bulletin* study in 2011 revealed that six different cannabinoids inhibited the activity of COX-2 enzymes, which play a role in arthritis-related inflammation. Other preliminary studies suggest cannabinoids may have immunosuppressive properties – including the ability to inhibit pro-inflammatory molecules called cytokines.

Why Docs Worry

Put simply, when you use herbal cannabis – that is, you inhale or ingest the marijuana plant in some form – you can't be sure of what you're getting. Cannabis contains hundreds of compounds, about 60 of them with cannabinoid properties. "But every plant contains different concentrations, so [using marijuana] is not the same as taking a carefully calibrated medica-

"I GOT MY LIFE BACK."

For one woman with drug allergies, cannabis is the answer for her chronic pain.

Ellen Smith didn't set out to be an advocate for medical marijuana – or even a user, as her one college experience with marijuana "didn't agree with me, to put it mildly," says the 62-year-old Scituate, R.I., resident. That changed after years of daily pain throughout her body and, finally, a diagnosis in 2004 of Ehlers-Danlos syndrome, a connective tissue disorder allowing bones to become displaced. The diagnosis "was a relief – until I learned it was not curable, and that my disease was rapidly progressing," she says. The complications of Ehlers-Danlos were unbearable for Smith, who is intolerant of or allergic to almost all prescription pain medications.

After an operation to reconstruct her broken sternum in 2006, her physician sent her to a pain clinic. "The doctor said, 'I don't usually prescribe marijuana, but I don't have many options for you. Would you be willing to try it?'" recalls Smith. She was – and found relief almost immediately. "When you have severe or chronic pain, you don't get high or stoned like many people assume. Instead, it just turns down the pain dial in your body," she explains.

Most days, Smith eats applesauce mixed with cannabis oil derived from marijuana she grows.

For Smith, medical marijuana has been a revelation. "It hasn't slowed the progression of my disease, but I can get through my day and spend time with the people I love without constantly focusing on my discomfort," she says. That's why she now advocates for medical marijuana at the state and national levels. Says Smith, "Medical marijuana is safe, it's effective and it's given me my life back."



IF YOU CHOOSE TO USE...

Most chronic pain patients report minimal "high" feelings, but if you do have a prescription for medical marijuana, you can play it safe by opting for a variety that is higher in CBD (cannabidiol, a cannabinoid with anti-inflammatory properties) and lower in THC, from a dispensary that tests and labels both compounds, advises Donald Abrams, MD, of the University of California, San Francisco.

Because delayed reaction time is a primary side effect, driving and other tasks that may require a quick response can be dangerous (and may be illegal) if you're taking cannabis.

What's more, your doctor may ask you to do random drug screening to ensure you don't have a substance-abuse problem. It's protocol for many medical practices whose patients use medical marijuana.