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Nature's (legal) cannabinoids

"Where do you get 'it' from?"

Most patients don't get asked where they get their medicine. That's because everyone knows people get their medicine from a pharmacy. But I have to get my medicine otherwise. I have to safeguard my "source" because my medicine is cannabinoid based – and that makes it almost illegal. – But not today. Today I can answer the source question openly because it is my local pharmacy – with drive-thru service and open to dispense medicine 24-hours a day. I drive up and push a big, yellow smiley-faced button to gain access – a soft automated voice comes over the speaker to verify that I am in the right place in order to pick up my prescription. Next, the typical professional looking person (white-coat with badge) slides open the window asking my name and what I need.

"I'm picking up a prescription for Publius."

They return with a baggie and bottle containing 30 synthetic cannabinoid capsules dosed at 5mg each – that's right, legal cannabinoids!

What are cannabinoids? Well, here is where things get interesting. As one learns in biology, the human body has many systems – the circulatory, respiratory, digestive, and nervous systems to name a few. Each system has parts; for example, the nervous system is made up of the brain, spinal cord and nerves. By the late 1980s, science identified a new human system – *the endocannabinoid system (ECS)* – *also referred to as the cannabinoid system.* There is a cannabinoid system present in all mammals – to include humans and 15,000 other species. A mammal is any vertebrate animal distinguished by self-regulating body temperature, hair, and milk-producing females – as mammal means "breast" or of the breast.

The ECS has two main parts: cannabinoids, which are chemical neurotransmitters, and two receptors called "CB1" and "CB2." Cannabinoids activate receptors found throughout the body – in all organs, for example. In fact, all systems in our bodies are *modulated* by the cannabinoid system. This means that as a body system changes, it uses the ECS to do so.

Science and popular search sites like Wikipedia use three classifications of cannabinoids:

- 1. *Endogenous cannabinoids* (also referred to as endocannabinoids), which are produced by the human body
- 2. Herbal cannabinoids, the kind found in the cannabis sativa plant
- 3. *Synthetic cannabinoids*, produced and distributed by pharmaceutical companies

The third kind is what I am picking up from the pharmacy – 30 Marinol (Dronabinol) capsules. Marinol is a prescribed cannabinoid from my doctor – and I am going to test it against the herbal cannabinoids I have been baking into my brownies for five years now.

The pharmacist hands me a white paper bag containing the Marinol prescribed for my Multiple Sclerosis (MS). Stapled to the top is a typical handout with cautionary medical information. The small amount (150mg) of the synthetic cannabinoid THC costs \$370 – or more than \$69,000 per ounce!

I sign my name on a distribution sheet and pay my \$3 Medicare co-pay. The government, meaning our tax dollars, pays the other \$367 for my medicine. Now I am ready to go – but not before my 'synthetic cannabinoid' dealer informs me of possible side effects. She warns me to be on the lookout for – "dizziness, drowsiness, confusion, feeling 'high,' an exaggerated sense of well-being, lightheadedness, headache, red eyes, dry mouth, nausea, vomiting, stomach pain, clumsiness, or unsteadiness."

Geez – sounds like a lot of potential adversity on my chemically sensitive body. From personal experience, I know that the herbal cannabinoids do not cause these side effects in my body. The pharmacist did mention one noticeable side effect that I have had with eating cannabis brownies: dry mouth – which is hardly a problem when considering the overall benefits of the medicine.

When I get home I open the bag to take a look at the Marinol. The pills are a deep maroon color and perfectly round. They remind me of Boston Baked Beans – as they look exactly like those candies. One thing is for sure; synthetic cannabinoids do not look anything like herbal cannabinoids. The distinct medical difference of popping pills versus the variations and qualities of consuming natural cannabis cannot be understated – and surely won't be by me. After a week of taking one pill a night before bed, as the doctor prescribed, I do not notice any positive effects from the Marinol. It makes me hungry – but that was never a problem in the first place. But it is my first legal cannabinoid and that is what counts, right? – Not whether it works, just whether it is legal, right?

Wrong.

Here is what I know. I have been self-medicating with herbal cannabinoids for five years to provide relief from MS, which I have had for 23 years. During that time I went through the long list of prescribed pharmaceuticals. The relief was minimal. The problem was (and is) the side effects, which became unbearable over time. I felt like a slave, dependent on a cycle of pharmaceutical use which abused my body and left me in the most depressed, hopeless and flattened state.

I finally said enough of the pharma-tinkering with my body and my MS and tried baking herbal cannabinoids into brownies. In doing so, my alternative treatment made me a criminal. I began to eat a small cube of cannabis brownie three times a day. Within the first month my insomnia disappeared, my bladder issues calmed, nerve tingles of the arms, legs, and feet stilled. I was no longer breaking out in upper body tremors after

being out in the world of loud noises, traffic, and the everyday racing of life. The MS was quieter. I found I wasn't contemplating suicide and I felt hopeful about my life again – but realized I had become a chronic criminal.

Cannabinoids are clearly medicinal to our bodies. But there is a strange distinction between which cannabinoids are effective and which ones are legal. In the case of my MS, appetite stimulation has not been a problem – which is what the Marinol is usually prescribed for. Marinol simply did not work for me. There are other pharmaceutical cannabinoids – such as Nabilone and Sativex – available in other countries, but they remain expensive and less effective than herbal cannabinoids. Nature created cannabis and the mammalian ECS, not you or me – and it was through the use of herbal cannabinoids that I was able to wean myself from a life of pharma-cocktails and move toward a healthier life. – Just as nature designed.

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Search terms

Endocannabinoid system; endogenous, herbal, and synthetic cannabinoids; Marinol; Nabilone; Sativex; Multiple Sclerosis and cannabinoids.

Research and selected readings

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