



MMJPR NEWSLETTER

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A LETTER FROM THE EDITOR

MMJPR offers numerous benefits to both website visitors as well as advertisers, as it brings them together to exchange and connect on a subject that is of growing interest to patients with chronic conditions, growers of medical marijuana, healthcare practitioners, and anyone interested in improving health.

If you're interested in becoming part of the thousands of Canadians who are exploring the benefits of medical marijuana, MMJPR offers you this unique opportunity to do so

WELCOME TO A NEW WORLD IN HEALTH CARE.

Its almost spring. Now is the time to start getting your health and happiness in order so that you can enjoy the good weather and outdoor activities. This March issue of our MMJPR Newsletter will focus on the law and science behind the medical marijuana movement in Canada.

Join us for this fifth issue of our medical marijuana newsletter and explore the unique community that has sprung up around the movement to both study and legalize the use of cannabis in Canada.



Marijuana's Health Update

A recent US report released by the U.S. National Academies of Sciences, Engineering and Medicine on the health benefits of cannabis treating a host of maladies, suggest the most significant findings relate to cannabis use to help manage chronic pain, prevent nausea in cancer patients under chemotherapy, and improve patient-reported outcomes for muscle issues in people with multiple sclerosis.

There's also significant evidence that cannabis help improve sleep for people with a range of disorders including patients with sleep apnea, and chronic pain.

Although many in the medical marijuana clinics tend to stretch the drug's benefits with only profits in mind, many researchers suggest there may be good reasons for more studies to be done to reach definitive conclusions on how cannabis works to help a variety of illnesses.

There are however great disparities of truth, this same report states that there's insufficient evidence that cannabis-derived products can help with epilepsy, however companies like GW Pharma is currently on track to get the first FDA approval for a marijuana-based drug. They have unveiled data findings that its cannabinoid-derived therapy; Epidiolex effectively treats a number of conditions that cause debilitating epileptic episodes including Dravet syndrome, Lennox-Gastaut syndrome (LGS), Tuberous Sclerosis Complex (TSC) and Infantile Spasms (IS).

Caution for Pregnant Women

A recent US study suggests there is strong evidence of reduced birthweight for pregnant women. It concluded there is not enough evidence that women who smoke pot are more susceptible to pregnancy complications, or an infant's need for admission to intensive care. It also suggests there's not enough evidence to show whether it affects the child later, like sudden infant death syndrome or substance use.

In search of the science behind medical marijuana

DNA geneticist; Nolan Kane studies cannabis from a unique perspective—in the past he has studied chocolate and for many years, the sunflower, eventually mapping its genome, a sequence of more than three and a half billion nucleotides, and now he's moved on to marijuana. Though its sequence is much shorter, roughly 800 million nucleotides, he considers it a far more intriguing plant.

It's such an interesting plant, such a valuable plant,"

says Nolan Kane, who specializes in evolutionary biology. "It's been around for millions of years, and it's one of man's oldest crops. And yet there are so many basic problems that need to be answered. Where did it come from? How and why did it evolve? Why does it make all these suites of compounds? We don't even know how many species there are."

Standing in his laboratory greenhouse on the campus of the University of Colorado Boulder looking at ten hemp plants that Kane recently procured for research purposes. These plants, like nearly all hemp varieties, carry extremely low levels of THC.

They may not look threatening, but their very presence here, in the confines of a major university lab, represents years of wrangling to win federal and university approval. Right now, Kane's allowed to grow only hemp strains. The rest of his research material is cannabis DNA, which is supplied by Colorado growers who extract it using methods he's taught them.

Kane fingers one of his innocuous-looking plants, expressing mild bemusement at the U.S. ban on commercial hemp cultivation. "Hemp produces fibers of unparalleled quality," he notes. "It's a tremendously high biomass crop that replenishes the soil and doesn't require much in terms of inputs. We import tons and tons of hemp each year from China and even Canada, yet as a matter of federal policy, we can't legally grow it. There are places where farmers in the U.S. can literally look across the Canadian border and see fields that are yielding huge profits."

A sketchy outline of the cannabis genome already exists, but it's highly fragmented, scattered into about 60,000 pieces. Kane's ambitious goal, which will take many years to achieve, is to assemble those fragments in the right order. "The analogy I use is, we have 60,000 pages of what promises to be an excellent book, but they're strewn all over the floor," he says. "We have no idea yet how those pages fit together to make a good story."



Many people are more than a little eager to learn how Kane's story will play out. "There's a certain pressure," he says, "because this work will have huge implications, and anything we do in this lab will be under a lot of scrutiny. You can feel it. People are just wanting this to happen."

Once the genome map is complete, enterprising geneticists will be able to use it in myriad ways, such as breeding strains that contain much higher levels of one of the plant's rare compounds with medically important properties. "It's like discovering some hidden motif deep in a piece of music," Kane says. "Through remixing, you can

accentuate it and turn it up so that it becomes a prominent feature of the song."

"So much of science is incremental," says Kane, "but with this cannabis work, the science will not be incremental. It will be transformative. Transformative not just in our understanding of the plant but also of ourselves—our brains, our neurology, our psychology. Transformative in terms of the biochemistry of its compounds. Transformative in terms of its impact across several different industries, including medicine, agriculture, and biofuels. It may even transform part of our diet—hemp seed is known to be a ready source of a very healthy, protein-rich oil."

"Cannabis," Kane says, "is an embarrassment of riches."

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Human rights complaint filed for not covering medical marijuana

A Saskatchewan human rights complaint has been filed over the lack of coverage for medical cannabis by Social Services.

A very violent attack several years ago left Terance Grady with diagnosed post-traumatic stress disorder (PTSD), anxiety and depression. Flashbacks of the attack made it very difficult to sleep and he now finds the only relief comes from smoking marijuana.



He reported ‘It helps with my anxiety and it helps with my nightmares so I’m not waking up screaming in my sleep,’ Grady said from his Saskatoon home.

Grady is unable to work because of his mental health, which means he doesn’t have insurance. His provincial social services supplementary health program doesn’t cover medicinal cannabis and that’s why he’s filed a discrimination complaint with the Saskatchewan Human Rights Commission.

According to University of Saskatchewan law professor Ken Norman, Grady’s complaint is valid.

“Yes, it sure is...The simple point is that a prescription is a prescription is a prescription,” Norman explained from his campus office.

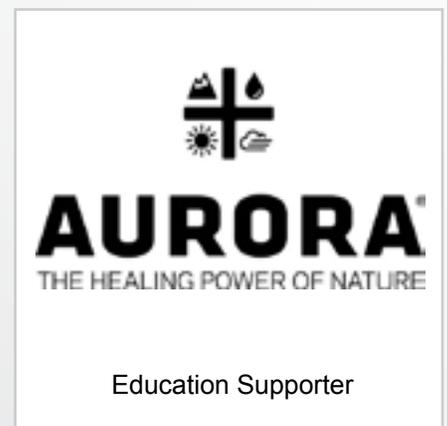
The law professor referred to a recent case that was just settled in Nova Scotia where courts found it discriminatory for an insurer to not cover medicinal marijuana on the basis Health Canada hasn’t assigned a Drug Identification Number (DIN).

“Soon enough everyone involved, employers, insurers and social services will come to realize a prescription for medicine is a prescription for medicine. The kind of medicine isn’t a matter they can draw the line on,” he added.

A statement from the Saskatchewan Ministry of Health said they are not responsible for making the decision because Health Canada creates the national framework.

Unlike the drug products listed in the Saskatchewan formulary, marijuana for medical use is not an approved therapeutic product, and therefore not covered, it has not yet been assessed by Health Canada for safety, efficacy and quality as required under the Food and Drugs Act and regulations.

The Saskatchewan Human Rights Commission said it can’t confirm if Grady filed a complaint or if it will proceed with action.



Rectal Marijuana More Effective Than Smoking Joints

Recent news reported in The Canadian Press suggests not all medicinal marijuana is created equal.

As medical marijuana becomes increasingly mainstream and Canada moves toward legalizing the substance, health experts are emphasizing the need for doctors and patients to consider the often serious side effects linked to the various ways of consuming the drug.

An addictions specialist; Paul Farnan says “We know there’s something in opium that helps pain, and we’re able to pharmaceutically develop morphine and other analgesics, but we wouldn’t say to people, ‘You have pain? Why don’t you smoke opium?’ ... We think there’s some stuff that cannabinoids will be helpful for. Why don’t you just smoke cannabis? First of all, cannabis is actually a really dangerous thing for your lungs.”

Mikhail Kogan, medical director of the Center for Integrative Medicine at George Washington University in Washington, D.C., said he sees no reason for people to smoke marijuana medically anymore.

It’s difficult to absorb enough of the drug through the lungs, and gastric acids interfere when someone eats it, he said, adding that it’s more effective to take the drug by other means, such as under the tongue.

“Rectally is actually a lot more preferred because of the volume of absorption... but not everybody is open to this way of administration,... the majority of people still smoke because it’s the most available method.” Kogan said.

Health Canada’s website reads “Many of the chemicals found in tobacco smoke are also found in cannabis smoke.”

The Canadian Medical Association has no formal position on the consumption of medicinal pot, but it officially opposes the inhalation of any burned plant material.

Association spokesman Jeff Blackmer added that many physicians are reluctant to prescribe medical marijuana because of the absence of peer-reviewed research into whether the drug is medically effective, its possible side effects, appropriate dosage and more.

A “strong majority” of doctors would prefer not to be involved as so-called gatekeepers to medical marijuana and Blackmer continued to add that the Canadian Lung Association, urged patients and doctors to take lung health into consideration when discussing medicinal marijuana.

Colette Rivet, head of the association that represents licensed cannabis producers in Canada, said that while the industry is against smoking medical marijuana, ultimately it can’t restrict what patients do.

“We know that there’s an issue with smoking. However, we can’t control it at the patient level,” Rivet said.

“We’re trying to develop new product forms so they would be more inclined to go away from that.”

Each licensed producer has its own unique document that physicians fill out when prescribing medical marijuana, which includes a minimum amount of information required by Health Canada, Rivet said.

Beyond that, some companies ask whether a patient would prefer dried marijuana or oil, while others don’t, she added.



A Health Canada spokesman confirmed that patients oversee requesting the form of medical marijuana they prefer, whether dry leaf or oil, and they are not restricted in how they wish to consume it.

The sale of edibles is banned, but a June 2015 decision from the Supreme Court of Canada ruled medicinal marijuana patients have the right to prepare their medication however they want, including cooking it.



Marijuana & Chicken Soup to Soothe Your Inflammation

The Number #1 go-to comfort food for many of us, whether you've got a cold or recuperating from an injury or chronic inflammation, this medicated soup recipe offers up a comforting healing soup.

Ingredients (serves 4)

- 1 tablespoon marijuana butter
- 3/4 cup chopped celery
- 3/4 cup chopped carrots
- 1 small sweet onion minced
- 2 quarts chicken broth
- 1 quart mushroom broth
- 1/2 pound chopped cooked chicken breast
- 2 cups egg noodles (options may include orzo or plain rice)
- 1 teaspoon dried basil
- 1/2 teaspoon dried oregano
- Salt and pepper to taste
- 5 grams of ground marijuana buds



Directions

1. In a large stock pot, melt marijuana butter over medium heat. Cook onion, carrots and celery in butter until tender, or about 4-6 minutes. (adding in only a touch of water if needed)
2. Add both liquid broths and stir in chicken, noodles, basil, oregano, salt, pepper and ground marijuana buds.
3. Bring to a boil, then reduce heat and simmer for 15 - 30 minutes before serving.

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