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## Marijuana and the munchies

## A new 'cannabinoid blocker' could help rehabilitate the weed

BY DAWN RAE DOWNTON • History hasn't been kind to cannabis, a researcher at Dalhousie University lamented last year. The drug is one of the most used worldwide, but misconceptions about its therapeutic potential and safety continue to malign it, even by doctors. More research is on the way, but marijuana's true rehabilitation could come from, of all things, a new diet drug that works by deactivating the same therapeutic neural network in our bodies that marijuana activates.

Whether or not you've ever tried marijuana, whether or not you've inhaled, you have your own cannabis infrastructure, a grid of nerve receptors that changes your experience of pain, sleep and appetite. We all make our own natural cannabinoids, marijuana-like chemical compounds. "If you're hungry," says Mark Ware, M.D., a professor at McGill University's pain centre, "they're probably active in you right now."

But what if you're hungry too often, as are 95 per cent of Canada's 2.25 million Type 2 diabetics whose excess weight aggravates their disease and costs the economy one of every seven health care dollars it spends? Looking for an anti-munchies drug, researchers found the synthetic compound rimonabant, a cannabinoid blocker. (It switches off the same neural network that our own cannabinoids and marijuana turn on.) So long as you stay on it, the drug reduces appetite, blood sugar, waist size and weight (by about five per cent), while it raises HDL ("good") cholesterol. Rimonabant was approved in Europe last year. Negotiations with the Food and Drug Administration in the U.S. are underway. It could be available in Canada next year.

In a dearth of effective weight-loss drugs, will there be a run on it? "It's not a bikini drug," says Dr. Josée Dubuc-Lissoir of Sanofi-Aventis, the French manufacturer. She says an education campaign will limit prescribing it to fighting diabetes and cardiovascular disease. Rimonabant will likely be as popular here as it's been in Europe, and it may well help policy-makers understand that the body's cannabinoid network holds marvellous therapeutic secrets that could still be better understood—including the way marijuana helps the sick and dying.

For critically ill Americans, that can't happen soon enough. In March, a U.S. court ruled that even the dying—for whom cannabis restores sleep and appetite and reduces pain—can be prosecuted under American laws. Is the situation any better in Canada? To some extent, says Dr. Ware and Halifax's Dr. Mary Lynch, the pair of Canadian researchers known worldwide for studying cannabis and its manufactured versions—Sativex, Marinol (dronabinol), and Cesamet (nabilone)—used in the treatment of chronic pain, cancer, AIDS and multiple sclerosis. With researchers across the country, Ware and Lynch are running a trial to test its safety and efficacy against standard chronic pain medications.

It's the last Canadian study for now. Months after gaining office, the Harper government declined to renew funding for the Medical Marijuana Research Program the Liberals began seven years ago. Lynch isn't surprised. "We live in a pain-denying world," she says.

Canada allows regulated access to the herb itself, but obtaining it is an uphill climb, especially when you're sick or when you can't find the required pain specialists to wade through the government's mountain of paperwork on your behalf. In eastern Canada especially, legal access has become merely theoretical: the one Halifax pain clinic that serves all of Atlantic Canada closed its doors to most new referrals years ago.

Until recently, though, Canada led the world in research, and still has the most prescribable cannabinoids. The U.S. has two drugs only, as does most of Europe including the Netherlands, which also has an access program. Only Canada has approved Sativex, an oral spray, for chronic pain relief.

Ware's cannabis patients don't get the munchies if they're appropriately dosed, nor do they get "stoned." The sick respond differently to drugs than do the healthy, he explains. "These are extremely ill people who have failed conventional treatments. These aren't the ones standing on Parliament Hill waving hemp flags." They're rarely overweight, either—though now they may be glad of those who are.