

## From Abracadabra to Zombies

### Rick Simpson (b. 1950?) : Cannabis Cures Cancer

*If children were given tiny doses of [hemp] oil each day like a supplement, diseases like cancer, diabetes, MS, and many other conditions could be eliminated entirely. --Rick Simpson\**

Hundreds of scientists around the world are investigating cannabinoids under the blanket organization **The International Cannabinoid Research Society**.

Rick Simpson is best known for his advocacy of the claim that marijuana cures cancer. More precisely, he

claims that **hemp oil** cures cancer. All cancer. Not just one of the dozens of kinds of cancers. Hemp oil, he says, cures them all and many other diseases as well.

(A point of clarification: what Simpson means by *hemp oil* may not be what others mean by it. For example, **he uses buds not seeds to make his oil**. In any case, whatever terms we use--hemp oil, cannabis, cannabinoids, marijuana, etc.--we use them as shorthand for the active chemicals in marijuana plants, buds, and seeds.)

*Cannabinoids are a group of 21 carbon-containing terpenophenolic compounds produced uniquely by Cannabis species (e.g., Cannabis sativa L.) . These plant-derived compounds may be referred to as phytocannabinoids. Although delta-9-tetrahydrocannabinol (THC) is the primary psychoactive ingredient, other known compounds with biologic activity are cannabidiol, cannabidiol (CBD), cannabichromene, cannabigerol, tetrahydrocannabivarin, and delta-8-THC.\**

What evidence does Simpson provide to support his claim that hemp oil cures cancer and dozens of other diseases? Is he a trained medical expert who has conducted many

controlled double-blind studies? Is he a trained statistical analyst who has reviewed all the studies done on marijuana and cancer to prove that the data support with statistical significance the claim that hemp oil cures cancer? No. He is a zealous advocate who bases his passionate beliefs in the miraculous power of marijuana on personal experience and many testimonials. He has numerous supporters. I last wrote about Simpson in my **December 2012 Newsletter**: "I'm jealous. **Rick's Facebook page** has more than 16,000 likes. **The Skeptic's Dictionary Facebook page** has fewer than 10,000 likes." His page now has almost 140,000 likes; the SD page now has almost 20,000. His likes on Facebook have increased about 10-fold in two years, while the SD's likes have merely doubled. Simpson has also been given an award considered prestigious in some circles, an

award that The Skeptic's Dictionary will never even get nominated for: **Freedom Fighter of the Year at the Cannabis Cup in Amsterdam.**

Below I will recount Rick's story of his personal experiences with using and watching others use hemp oil. I'll follow that up with a look at the scientific evidence that others have presented in support of the miraculous medicinal power of marijuana. I wish I could report that everything Rick claims is true. I have cancer and a cure would be nice. I am sorry to report that hemp is not all it is hyped up to be. In their zealous campaign to get marijuana legalized, Rick Simpson and his supporters may be doing great harm. They not only promote false hope and spread misinformation about the medicinal powers of cannabis, they spread lies and misinformation about chemotherapy, radiation, and other forms of science-based treatments for cancer. It would be foolish to assume that there are no people with cancer who have given up on science-based medicine and are using marijuana to save them. I don't begrudge anyone in his last days using anything that puts a smile, legal or illegal, on his face. But I am not amused by the cannabis advocates who put their own pleasure above the health and well-being of people suffering from diseases that are treatable, if not curable, by good medicine. To do so in the name of helping people only makes the advocacy more pathetic and contemptible.

### **Rick Simpson's Story**

In 1974 Simpson was driving his car in his native Nova Scotia when a radio report came on about a study that found marijuana reduced cancerous tumors in mice. Specifically, researchers at the University of Virginia had found that several chemicals in marijuana acted against both cancerous tissue taken from mice and on cancerous tissue in the mice.\* Simpson never read the study: "**Antineoplastic activity of cannabinoids.**" It was published in the *Journal of the National Cancer Institute* (Vol. 55, No. 3, September 1975). The authors of the study wrote, among other things:

Lewis lung adenocarcinoma growth was retarded by the oral administration of delta-9-tetrahydrocannabinol [THC], delta-8-tetrahydrocannabinol [THC], and cannabinol (CBN), but not cannabidiol (CBD)....

The cannabinoids (delta-9-THC, delta-8-THC, and CBN) active in vivo against the Lewis lung tumor cells are also active in the in vitro systems.

[note: **Delta-9-THC and Delta-8-THC are the only compounds in the marijuana plant that produce all the psychoactive effects of marijuana.**]

I will not speculate as to why, 40 years later, there has not been any study or set of studies that has proved beyond a reasonable doubt that any of the active ingredients in marijuana stop tumor growth in humans, much less that any of them "cure" cancer in humans. The CCC--Cannabis Cures Cancer--advocates believe otherwise and later in this article I will get to the evidence they provide to support their position. Some, including Simpson, think there has been a Big Government/Big Medicine/Big Pharma conspiracy to suppress research and stifle medical progress. Let's get that nonsensical notion out of the way up front. Big Pharma would not let an opportunity to make billions of dollars producing and selling pharmaceutical grade cannabis

products. Big Pharma lobbyists would be all over the politicians they have in their pocket to make it happen *if* it were likely to be profitable. What would make it profitable would be the ability to show in clinical trials that it works, i.e., stops cancerous tumor growth in humans. The evidence so far indicates that it is very unlikely that cannabis is the panacea the CCC advocates believe it is. Furthermore, there isn't a medical doctor alive who wouldn't want a cure for cancer. If cannabis showed as much promise as the CCC advocates claim, there would be labs around the world doing clinical trials on humans. Doing clinical trials on cannabis for cancer is very low on the list of potential drugs to investigate further because it shows little promise compared to other chemicals. Of course, I could be wrong. Maybe there is a conspiracy or maybe fear of potential abuse is driving the meddlers of the world to prevent research on marijuana. I'll leave this topic to others to investigate further. Let's return to Rick Simpson, the man who believes hemp oil is a cure for cancer and many other diseases.

Some twenty years after Simpson heard the radio report about cannabinoids slowing the growth of tumors in mice, he was working in the boiler room at a hospital when he had a head injury. He suffered a concussion and for years afterward had headaches, ringing in the ears, and trouble sleeping. In 1998, **he saw the movie *Reefer Madness II*** (or was it **an episode of Dr. David Suzuki's *The Nature of Things***?) about the promise of marijuana as a medicine. He decided to try marijuana for his medical problems. After all, he reasoned, the prescribed medicine he was taking wasn't working. His doctor wouldn't prescribe marijuana, so he grew his own. He eventually started experimenting with hemp oil that he made from the buds of his plants. After using hemp oil, he says, his headaches went away, the ringing in his ears got tolerable, he slept better, and his arthritis disappeared. "Within a few months," he says, "people saw the difference. The oil controlled the pain, my blood pressure, and it allowed me to sleep. I lost weight and looked 20 years younger."\* Some readers may find it interesting that the man who claims hemp oil cures cancer developed skin cancer after using hemp oil for several years. Anyway, in 2003 Simpson had one facial spot removed and biopsied. Before he got the results of the biopsy, he self-diagnosed himself as having an infection where the spot had been removed. He applied cannabis oil to two other spots that hadn't been surgically removed and a few days later, he says, they were gone. He put the oil on his self-diagnosed infection and it too disappeared. He self-diagnosed that the cancer came back and again he applied cannabis and again he concluded that cannabis had cured his cancer. The biopsy had confirmed, he says, that the removed spot was basal cell skin cancer. The other two spots weren't tested before they disappeared. Simpson seems to have concluded that since the spot removed was skin cancer, the other two spots were also cancerous.

His doctor, of course, rejected Simpson's belief that he had cured his own cancer with hemp oil. Simpson couldn't understand why the doctor didn't believe him. He had this personal experience that proved what he claimed, didn't he? Why wouldn't the doctor admit that removing the skin cancer wasn't what cured him, that it was the rubbing on of hemp oil that cured him? Furthermore, after he used his hemp oil to cure many people of many different ailments, including his mother's psoriasis, he could not understand why neither the medical experts nor those in law enforcement didn't get it. He had his own personal experience with the cure and he now had the testimonials from many others to back him up. He had cured cancers, diabetes, arthritis, glaucoma, and other diseases. What more did these people want by way of proof?

No one should doubt Simpson's sincerity. He passionately believes in the medicinal virtues of hemp oil. He grew his own plants and made his own oil. He gave away his oil to those in need until the police took out his marijuana plants and he had to buy his pot to make his oil. Even now (2014), when he is somewhat of a minor celebrity giving **seminars in Europe** and author of a book, he does not come across as being in it for the money or the fame. Rick's son, Mike, however, is taking donations by PayPal, credit card, check, or cash. (Scroll to the bottom of any page on <http://phoenixtears.ca> to donate.)

Rick Simpson may be a brilliant man and I don't think we should hold it against him that he has no medical background or that his education stopped in the 9th grade. But, like many brilliant men, Simpson did not try to back up his personal experience with scientific evidence. He did what most of do most of the time: he set out to **confirm what he believed**. His reasoning followed his natural instincts. It is unnatural to do what scientists do: try to disprove or falsify beliefs. To him, his belief that cannabis cures cancer was a matter of common sense. It would have seemed weird to him to act as if his belief that *cannabis cures cancer* were a hypothesis to be tested. What would we expect him to do, give fake hemp oil to some of his friends to see if there was some sort of **placebo effect** going on? Scientists and experts in cognitive biases know that *confirmation bias added to wishful thinking is a recipe for self-deception*. Rick Simpson is not a scientist. He's a non-scientist who followed his instincts and drew conclusions that seemed obviously true to him and his fellow believers.

Before concluding this article with a review of what the scientific evidence shows regarding cannabis and cancer, I recommend the reader take a look at **several essays and a book** I've written about the problems that can occur when we blindly follow our natural instincts. Our natural way of thinking works well enough for many matters in daily life, but it is not very reliable when it comes to evaluating complex causal events such as what causes or cures cancer. For that we need **well-designed tests** that will minimize our natural biases and lessen our chances of **self-deception**. **Collecting anecdotes, which is what Simpson has done**, is important but it is not a substitute for controlled studies on humans. One simple and obvious problem with Simpson's method of establishing his claims about hemp oil is that he seems oblivious to the need to isolate the chemical compounds that might be having a medicinal effect. He also seems oblivious to the need for quality control to establish dosage. He mixes what he grows or buys without scientific analysis of how much THC or any other chemical, for example, he is dealing with. He's eyeballing everything and has no idea what dose he is giving to anybody. The dosage of any medicine is absolutely essential to determining its effectiveness and safety. Nor does he keep records. A scientist would note when, where on the body, and how much hemp oil was ingested or applied. Meticulous records would be kept as to how long the treatment went on, what other treatments were given in conjunction to the hemp oil, etc. Otherwise, in the end all you have is a bunch of stories that are of little value to the issue of whether there is a causal connection between hemp oil and any kind of palliative effect.

Also, Simpson knows that not everyone using hemp oil is cured. He and his advocates, like the folks at **High Times**, explain the failures, but their explanations sound like rationalizations:

Unfortunately, not everyone is saved by the oil. While the HT photographer was taking pictures for this story, Simpson received word that one of his patients had died

after only two days of treatment. Simpson estimates that his success rate with terminal-cancer patients is about 70%. “The ones that can’t be saved are usually the ones who’ve had the most chemotherapy and radiation, or wait too long to start the treatment,” he says. “They have to be able to stay alive long enough for the oil to start to work.” In fact, most patients who undergo chemotherapy die from the treatment, not the disease. But because chemotherapy is a multibillion dollar industry that supports some of the biggest pharmaceutical companies in the world, it’s unlikely these corporations will give up this profit stream without a struggle, no matter how many dead bodies pile up.

Simpson provides no evidence for his claimed success rate. Nor does HT provide any evidence for its claims that cancer patients die more frequently from chemotherapy than from cancer and that Big Pharma is preventing the world from enjoying a cheap cure for just about anything that ails anyone. In their fantasy world, Simpson and his advocates seem to think they can just make stuff up as it suits them.

### **Cannabis: the evidence so far**

There are several people who have investigated the scientific evidence for the claim that cannabis cures cancer. In **Cannabis Does Not Cure Cancer**, Dr. David Gorski, a breast cancer specialist, examines Arjun Walia's web page: **20 Medical Studies That Prove Cannabis Can Cure Cancer**. What Dr. Gorski found is identical to what others have found, such as Skeptical Raptor (**Marijuana and cancer—what are facts and what’s just smoke**), who have looked at the studies put forth by CCC advocates as proof that cannabis cures cancer.

1. Many of the studies put forth aren't even about cancer.
2. Most of the studies were preclinical studies looking at cell culture models and mouse models.
3. Some of the studies found evidence that cannabinoids, under some circumstances, can **actually stimulate cancer cell growth** and possibly contribute to tumor progression.
4. Many of the studies involve trials of cannabinoids to treat cancer-related symptoms and side effects, not cancer itself.
5. Finally, the studies taken as a whole suggest that some purified cannabinoid agonists might be worth investigating further, but they do not provide a strong case for cannabis curing any kind of cancer.

Dr. Gorski concludes:

There’s a lot of interesting research about the role of cannabinoid receptors in cancer and whether targeting them with cannabinoid agonists from marijuana or other natural sources, synthetic agonists, or endocannabinoids will be a useful tool to add to the armamentarium of anticancer therapies. *From what we know now, it is quite clear that cannabis does not cure cancer, at least not by itself and certainly not ingested or smoked as marijuana or ingested or applied topically as hemp oil.* Even in purified form, naturally-derived or synthetic cannabinoid agonists show relatively modest antitumor activity in preclinical models, which means that they will have to



be combined with existing chemotherapeutic regimens. If they do find their way into the routine clinical treatment of cancer, it will be through rigorous pharmacological studies and rigorous clinical trials, the latter of which, in particular, are painfully lacking. (emphasis added)

**Skeptical Raptor** writes:

- let's remember that there are **100** to over **200** different types of cancer (the actual number depends on how some researchers subdivide some types) in humans. And each of these different cancers have different **pathophysiologies**, different genetics, different prognoses, different causes, and different treatments. In other words, it is not one singular disease with one unified course of treatment. Always be skeptical when someone makes some claim that "XYZ cures or prevents cancer", because that's going to be nearly impossible. Every cancer is so different with such different physiology, there is just never going to be a magic pill.
- The first step I take before I investigate any internet claim is check with the **Cochrane Reviews**, which is my **primary research tool** to find **systematic reviews** of primary research in human health care, and to find the best information for **evidence based medicine**. A search of the Cochrane Reviews shows not one systematic review of THC or cannabis in cancer therapies ...[probably because]...there aren't enough studies of high enough quality to roll up into a systematic review. That's a clue, but it's more a lack of evidence rather than solid evidence. [**Michael Kruse of Skeptic North** also consulted the Cochrane Reviews and found: "Cochrane has 3 reviews concerning cannabis, three of which are complete and show no evidence to support or refute cannabis in the treatment of Schizophrenia, Tourette's syndrome or Dementia. Cochrane is still studying cannabis for the treatment of nausea in cancer and in symptom relief in HIV/AIDS patients, so conclusions have not been drawn." For more on what the Cochrane Reviews are click **here**.]
- [SR reviews what evidence there is and concludes:] *There is little evidence that it prevents cancer and a little evidence that it can cure cancer.* But these are very limited in vivo and animal studies, very preliminary and not in controlled clinical trials. (emphasis added)

**CancerResearchUK** has also investigated the studies cited to support the notion that cannabis cures cancer.

There is no doubt that cannabinoids – both natural and synthetic – are interesting biological molecules. Hundreds of scientists around the world are investigating their potential in cancer and other diseases – as well as the harms they can cause – brought together under the blanket organisation **The International Cannabinoid Research Society**.

Researchers first looked at the anticancer properties of cannabinoids back in the 1970s, and **many hundreds of scientific papers** looking at cannabinoids and cancer have been published since then. This **Wellcome Witness seminar** is also fascinating reading for aficionados of the history of medical cannabis, including the scientific, political and legal twists.

But claims that this body of preclinical research is solid “proof” that cannabis or cannabinoids can cure cancer is highly misleading to patients and their families, and builds a false picture of the state of progress in this area. For example, **we’ve taken a look at more than 30 scientific papers that are often claimed to “prove” that cannabis cures various types of cancer.** (emphasis added)

Guess what CancerResearchUK found when they investigated these scientific papers? *There isn't enough evidence to show that cannabinoids can effectively treat cancer in people.*

Does the lack of strong clinical evidence that cannabis cures cancer mean that there is no possible benefit from cannabis for those of us with cancer? Of course not. Many people use marijuana to prevent nausea, anorexia, and vomiting. There are, however, some safer, cheaper drugs that work quite well for these problems. I've found **Zofran** (ondansetron) has helped me enormously. That said, I have applied for a marijuana card and will use cannabis if the Zofran quits working. I may even try cannabis to help me sleep. I don't have any significant pain right now, so I won't be trying cannabis for pain relief. (I tried cannabis oil and some tablets for a couple of months but quit. It was expensive, did help me sleep better but my ocean wave sound machine seems more effective. I also didn't like the fact that I had no idea how pure the stuff was or whether the doses I was taking would do more good than harm. [new] **In one test** of 75 cannabis edibles, only 17% were found to be accurately labeled. 60% of the products were overlabeled, claiming to have more THC than they actually did. ) Studies are ongoing and someday there may be strong clinical evidence cannabis is not only beneficial for alleviating some of the more irritating side effects of cancer and cancer-treatments, but for treatment of some cancers themselves. But **for now, the claims for the miraculous healing powers of cannabis are highly exaggerated and based more on wishful thinking and self-deception than on solid evidence.** [/new] You might want to put your miraculous marijuana on the shelf next to your **dichloroacetate (DCA).**

See also **natural cancer cures.**

**further reading**

**reader comments**

**Study: Here’s How Cannabis Could Help Your Body Fight Off Cancer by Justin Kander**

"Researchers tested the effects of CBD, THC, and an endocannabinoid analogue called methanandamide on two lung cancer cell lines, A549 and H460, along with cells from a lung cancer patient. It found these compounds **increased expression** of intercellular adhesion molecule 1 (ICAM-1) on the cancer cells, which made them more susceptible to white blood cells called lymphokine-activated killer cells (LAK). However, normal cells were not affected this way, showing yet again that cannabinoids can selectively target abnormal cells while leaving healthy tissue alone."

Did you know **the government has a patent dated 2003 entitled “Cannabinoids as antioxidants and neuroprotectants.”** Yes. This patent is assigned to The United States of America, as represented by the Department of Health and Human Services. The patent claims:

Cannabinoids have been found to have antioxidant properties, unrelated to NMDA receptor antagonism. This new found property makes cannabinoids useful in the treatment and prophylaxis of wide variety of oxidation associated diseases, such as ischemic, age-related, inflammatory and autoimmune diseases. The cannabinoids are found to have particular application as neuroprotectants, for example in limiting neurological damage following ischemic insults, such as stroke and trauma, or in the treatment of neurodegenerative diseases, such as Alzheimer's disease, Parkinson's disease and HIV dementia.

You learn something new every day!

**Critical appraisal of the potential use of cannabinoids in cancer management** by Belinda J Cridge and Rhonda J Rosengren in *Cancer Management and Research*. 2013; 5: 301–313.

"Cannabinoids affect a range of pathways that regulate cell division and viability; however, the knowledge in this area remains incomplete....Overall, the cannabinoids affect multiple cellular signaling pathways, which means they have the potential to decrease cancer development, growth, and metastasis. However, there are likely to be both cancer- and cannabinoid-specific elements to these effects....Cannabinoids show significant potential as antiangiogenic agents, and this may prove key to their success as a clinical therapy, but the role of the cannabinoid receptors in this response is still to be fully elucidated." Due to prejudice and our long history of opposition to the freedom of adults to use drugs like marijuana, it is unlikely that in the near future the United States will be sponsoring any research on cannabinoids that might lead to beneficial cancer treatments.

## CON

**Cannabis Does Not Cure Cancer** by Dr. David Gorski

**Science versus the Politics of Weed** by Dr. David Gorski

**Hemp Oil Scammers** - A Facebook Page devoted to exposing scammers

**The American Cancer Society page on Marijuana**

**Cannabis, cannabinoids and cancer – the evidence so far** - Cancer Research UK

**Marijuana and cancer—what are facts and what's just smoke** posted on Skeptical Raptor's blog

**Pot. Marijuana. Cannabis. Misunderstood Motives.** by Eric Hall

**Cannabinoids and cancer: causation, remediation, and palliation** from *The Lancet* - "As yet there is no evidence that THC or other cannabinoids have anticancer effects in humans."

## PRO

**Rick Simpson Oil** (registered to Mr Rick L. Simpson, General Delivery, 344 Little Forks Rd.,



Springhill NS, B0M1X0, Canada)

**Rick Simpson's Story: The man who rediscovered the cure for cancer** by Lincoln Horsley

**High Times on Rick Simpson's Hemp-Oil "medicine"**

**Rick Simpson in his own words - Healing Cancer with Cannabis - A YouTube Video**

**"Miracle" Cannabis Oil: May Treat Cancer, But Money and the Law Stand in the Way of Finding Out** By Chris Roberts in SF Weekly

**National Cancer Institute** at the National Institutes of Health (obviously from the **National Center for Complementary and Alternative Medicine**) I advise CCC advocates to read more than the first page of the NCI's report. Please read the sections on **Cancer Risk and Cancer Treatment**. Several studies have found *an increased risk of certain types of cancer from cannabis use*. Furthermore, *"No clinical trials of Cannabis as a treatment for cancer in humans were identified in a PubMed search*; however, a single, small study of intratumoral injection of delta-9-THC in patients with recurrent glioblastoma multiforme reported *potential* antitumoral activity [emphasis added]."

**The Rick Simpson Process of Producing Hemp Oil**

**clinical trials**

**Cannabis, pain, and sleep: lessons from therapeutic clinical trials of Sativex, a cannabis-based medicine.**

**Cannabinoid action induces autophagy-mediated cell death through stimulation of ER stress in human glioma cells**

In response to Dr. Gorski's post on Science-Based Medicine that Marijuana Does Not Cure Cancer, JD wrote:

Cannabis DOES cure cancer. I dunno how much more evidence you want/need. We know how & why it works, we have lab study's [sic], chemical study's [sic], animals study's [sic], human study's [sic] & pseudo human trials [?].

<http://www.ncbi.nlm.nih.gov/pubmed/12648025>

<http://www.ncbi.nlm.nih.gov/pubmed/19914218>

<http://www.ncbi.nlm.nih.gov/pubmed/15026328>

<http://www.ncbi.nlm.nih.gov/pubmed/16893424>

<http://www.ncbi.nlm.nih.gov/pubmed/15361550>

<http://www.ncbi.nlm.nih.gov/pubmed/19889794>

<http://www.ncbi.nlm.nih.gov/pubmed/19015962>

<http://www.ncbi.nlm.nih.gov/pubmed/19608284>

<http://www.ncbi.nlm.nih.gov/pubmed/17237277>

<http://www.ncbi.nlm.nih.gov/pubmed/11586361>

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<http://www.ncbi.nlm.nih.gov/pubmed/20859676>  
<http://www.ncbi.nlm.nih.gov/pubmed/22776349>  
<http://www.ncbi.nlm.nih.gov/pubmed/11479216>  
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To which, Dr. Gorski replied:

I bet you haven't read even half (or a quarter) of those articles and studies. More importantly, I challenge you to show me a study from that list that isn't just like the twenty or so I discussed; i.e., preclinical cell culture and animal studies that show a fairly high IC50 even using purified cannabinoid extracts. That will require actually reading at least the abstracts (possibly more) of all of those studies.

IC50 is how much drug you need to inhibit the thing you are trying to inhibit by 50%.

Last updated 24-Jun-2015