

This article was written by a chemist, in a simple layman language, driven by care for a friend who is misinformed – and as it's usually the case, he finds ways to justify and be comfortable with the use of recreational marijuana.

A TV documentary the other day about the use of medicinal marijuana contained several misunderstood and misleading statements. Not everything on google or on TV is true and correct. It was designed for attention, hype and controversy; and actually, if you listen carefully, what was said is correct, yet it is misunderstood.

I won't promise I'll try to be brief, but I'll will keep it in a point format:

- 1- Medicinal marijuana does not mean marijuana used for medicinal purpose. There is a big difference between the street drug used by recreational users, and the version bred by scientists and meant for rare substitute medicinal use. I'll explain.
Please read the chemists' associations' responses I'll cut & paste the link at the bottom.
- 2- Now, THC drug is the main problem. THC also exists in a few other plants, that also have "green" leaves, and grow "naturally" in forests, "out of God's soil" – and just because it grows out of soil naturally... well... so does poison ivory. These THC plants, beyond THC, they are extremely toxic, even fatal – despite having green leaves and growing naturally! Several family members of safe plants we eat aren't safe – e.g. in the mushroom family – with several toxic plants. "Natural" does not necessarily mean good, and "chemical" does not necessarily mean bad. While not every chemical is natural, every natural substance is a chemical. Everything is a chemical compound; the water, the air, food, our blood, skin, bones and our enzymes and hormones ... they are all chemical compounds, it's just whether you would call it water, or dihydrogen monoxide. Food digestion and all our actions, even our emotions are chemical reactions between such chemical compounds as enzymes and hormones. Drug dealers are still using the green leaf sales pitch and natural plant song and dance and it is working on simple people. Many natural plants with green leaves will kill you.
- 3- **THC is a psychoactive brain-altering drug** proven to stop "natural" brain compounds needed for the brain receptor cells, including memory receptors, causing panic attacks, disorientation, damage to the prefrontal cortex of the brain, even dementia cases. THC causes permanent loss in what we call it IQ especially if the user is under 25 years old. When the user stops, the negative effect is irreversible. THC causes permanent damage to brain development. These are not opinions. They are facts. This is why ALL Chemists' associations in the entire world agree on it.

Now remember, the "doctors," the family physicians you would visit, don't know much about medicine. They only go by what the chemists' association tells them. These doctors are just "physicians." They studied physiology. They are not chemists. The "doctor" who made that show, when he talked about research, he wasn't talking about a research he did. He is in no position, academically to know anything about it. He is talking about research he read, a research done by the chemists. Just giving a fair credit here. Doctors "physicians" write prescriptions and look like they know what they are talking about when in fact they never moved a finger to know anything about the compound they just prescribed. It was sent to them with a specs and info sheet from the research chemist. Again, having said that, the show was correct, it just was presented in a clever fashion meant to attract viewers and at the same time make it seem controversial for their viewing audience and commercial per-second rate to succeed.

- 4- On the other hand, there is another chemical compound in several plants, including in marijuana, CBD, that is iso-THC, similar in the chemical structure, a non-psychoactive compound, and though is it is an iso, the difference in the arrangement of its atoms, makes it totally different in behaviour and properties. CBD is a different compound with several positive health values, and that is not a secret or a new discovery. The programme didn't tell you that there are several medications on the market that are basically the CBD extract from marijuana or from other plants. Some of these plants "with green leaves, and they grow naturally in the wild" would kill you if you would ingest them as is, whole, or smoke them, but extracting only the CBD is a different issue. If you use marijuana as it grows in nature, you

don't only intake the very small "good" CBD but also you would intake several "bad" compounds including the much higher level of the bad THC which, in nature, is about 20 times the level of CBD.

- 5- Alcohol is a good example. Red wine for example, has an incredible compound commonly known as the fountain of youth, resveratrol. But, it is a small amount and one would need to drink a lot of wine, a lot of alcohol (negative) to get the benefit, i.e. causing more harm than good. The chemical fermentation of a small substance under the skin of grapes introduces two groups of polyphenols called anthocyanins and proanthocyanidins that are capable of detoxifying the activities of various cancer spearheading substances.

Moreover, grapes also contain high levels of caffeic acid, which is an effective cancer countering substance. The chemical process of fermentation optimizes and produces a very positive result. It optimizes the rule of the bioflavonoids to strengthen the body's immune system to destroy cancer cells. Resveratrol prevents liver, breast, lung and prostate cancer.

The polyphenol, resveratrol is also known to reduce the levels of amyloid-beta peptides in people suffering from Alzheimer's disease, and to stall the onset of various neurodegenerative diseases and also promotes brain health. Studies have shown that consumption of red wine on a moderate basis has resulted in lower incidence of Alzheimer's disease.

Does that mean we should go and tell people to drink lots of wine? "Alcohol here is the concern and the negative element that would do a lot more harm than good. Alcohol "the bad part" would about 10% of the wine, when the good part is under .001%. The same concept applies to the bad THC problem in marijuana vs the small amount of good CBD." The attached medical journal report addresses the myth of those who justify the use of this drug as "moderate" – smoking a "joint" every now and then, not daily, and how drug's dangers have not been eliminated.

Using the wine analogy, yes, resveratrol is a naturally occurring, powerful polyphenol (plant-derived) compound that has significant antioxidant properties, which allows it to neutralize the gaggle of free radicals that intend to wreak havoc on critical cellular functions; but, that's why chemists have extracted it and produced it as a drug and not advised that you to drink the whole product (wine, bottles of it) to get the good dose you need of resveratrol (and a lot more of the bad alcohol!)

Another approach would be, drinking non-alcoholic, or dealcoholized wine. The same goes for several positive values of beer. Again, alcohol is the problem that needed to be avoided, so either an extract of the beer or the wine's good properties only, or use non-alcoholic beer and wine, but again, you would still need lots of it. So, you still have a problem. This is exactly the case with marijuana. Either remove the THC "the part that gives the user the high, and causes health problems" or just extract the good CBD. Medicinal marijuana is a drug carefully, professionally and genetically bred to contain very little bad "THC – which gives that high" and more CBD. That's the opposite of recreational drug where THC in marijuana is high. The drug users of course want the THC.

Medicinal marijuana is high on CBD, low on THC, opposite that in nature. Medicinal marijuana would not get you high. (Well, just like decaffeinated coffee or dealcoholized beer, there is still a trace of caffeine or alcohol.) The fact is, those who smoke marijuana, do it for the "high" not as pain killer. A Tylenol tablet is 20 times more effective pain killer than a joint.

- 6- Here is an extract from one of the official responses from one of the chemists' associations:

"We are troubled that some of CNN's coverage of Dr. Gupta's views muddies the water on this issue. For example, a headline stemming from Dr. Gupta's upcoming documentary on CNN.com is 'Marijuana stops child's severe seizures'.

However, this story is about a child who is benefiting from a non-smoked marijuana extract that does not get her high because it contains trace amounts of marijuana's active ingredient, THC, and high amounts of the non-intoxicating CBD.

Because most Americans think of marijuana as the THC-filled, smoked substance, this headline is misleading. It would be like broadcasting, 'Opium cures pain for millions of people,' instead of acknowledging that Morphine, an extract of opium, is the substance at play."

7- There is almost 100 different cannabinoids in cannabis. THC is the major one with almost 50% and it is the "bad" one; and yes, it is addictive. On the other hand, CBD is the "good" but smaller one, with opposite properties. But, if you use marijuana as it grows in nature, you would get very little, insignificant amount of CBD "iso-THC" benefit and much more of the harmful THC.

8- Here is another response by USPRS, pharmacological research scientists' society:

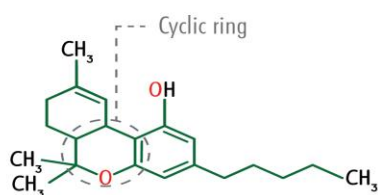
"Sabet's own Project SAM website is specifically touting the medical benefit of synthetic iso-THC contained in Marinol pills. CBD is beneficial when it is a non-smoked extract, but THC naturally occurring in a marijuana plant is a dangerous, addictive drug with no medicinal benefit.

Dr. Gupta is a person America looks up to for advice. That is why we are troubled by how people might interpret his comments as a license to support legalization, when in fact, he is simply arguing for the use of an extract and a specially developed plant that in fact does not resemble the common plant sought by common people. Project SAM agrees with those ends too, and urges the media to correctly cover this story."

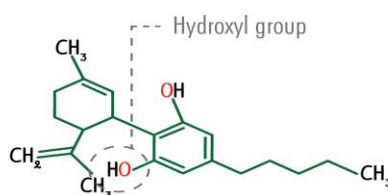
9- Another Organic chemists' press-release stated:

"Opium has medical values, and it's extract is called morphine. Marijuana has medical value, too — but just as we don't smoke opium to receive beneficial effects, we must not smoke marijuana to get its medical value. It won't work. It is important to distinguish between the whole marijuana plant material and individual components within the marijuana plant. Some constituents of marijuana, including iso-THC such as CBD, are available today in pill form (dronabinol, or Marinol); some synthetic mimics of those constituents are also available (nabilone, or Cesamet)."

In other words we need to extract the tiny amount of useful component out of the harmful plants. Recreational users of this drug, marijuana, need be educated.



Tetrahydrocannabinol (THC)



Cannabidiol (CBD)

Tetrahydrocannabinol (THC) is one of at least 113 cannabinoids identified in cannabis. THC is the principal psychoactive constituent of cannabis.

Finally, again: medicinal marijuana is not the natural or common marijuana recreational drug users smoke. Marijuana is not just called medicinal because it is used for medicinal purposes. No. It is a specially bred strain with no or very little THC (which gives the high in recreational marijuana) and high CBD, the opposite of commercial marijuana and opposite of what typical users of this drug would want.

The limited benefits are only in one compound, which is extracted and separated from the bad plant as whole. When you read about some benefits of marijuana, keep in mind all these facts... the material is not, or should not be talking about smoking the plant. Remember, your daily vitamins and mineral supplements contain arsenic. It does not mean that you can go and ingest arsenic. Chemists extract the good part, in a good form, in a good dose. The whole plant as whole is bad. The typical, natural marijuana plant is by far a lot more harmful than beneficial. Simply, and rather facetiously albeit truthfully put, it will make you stupid, age faster, lazy, and crazy.

Marijuana's side effects include:

depression,
lack of motivation,
Lower IQ especially in young people under age 20.
hallucination,
brain cells damage,
birth defects including brain disorders and cases of slow mental development when smoked by pregnant women... and more. These are not isolated opinions. They are medical facts supported by ALL science authorities.

...It gets worse, **as you'll see in the attached recent medical journal report, THC is linked to the development of dementia cases, not just a lower IQ and memory loss.**

Say no to all brain-altering drugs. Marijuana is a brain-altering drug.

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Two final notes for pre and post drug victims:

- The drug temptation is real. It's dangerous. And it's a lot harder to get out of it than to stay out of it. I have a policy: if you don't want to do something, don't try it. Trying it will end in one of two ways: you either didn't like it and you stopped. In this case you lost the bragging right of having the determination to have refused drugs. You didn't gain anything by trying it. Besides, some drugs, even the so-called lighter drugs e.g. marijuana, for some people, one single dose can leave its mark on their health. The second possibility is, you liked it. Now you have a problem. Now you are tempted to try it again. Now the process of self-deception and justification starts: I can stop any time. Just a few times and I'll stop. It is not so bad, some people on the internet said so, people used drugs throughout history.... All these attempts to convince yourself it's Ok and addiction is not a threat. You're lying to yourself. These symptoms are indicative of addiction. Wouldn't it be easier to have not tried it at all? We'll, actually, it's harder, considering peer pressure. I understand. The point is obvious.

- The second point is, those who fell for the temptation, had the strength to get out, really get out, not just say it and still have a dose now and then (a typical addition route)... those who turned their backs to drugs, walked out with such strength and determination, are true heroes who deserve our respect, love, and support.