



EPISODE #184  
 BENEFITS OF MEDICAL MARIJUANA  
 WITH DR. RACHNA PATEL

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Wendy Myers:

Hello. I'm Wendy Myers. I'm your host of the Live to 110 Podcast. Thank you so much for joining us today. We're going to be talking about medical marijuana with Dr. Rachna Patel.

This is a very, very important podcast. There's a lot of controversy surrounding medical marijuana, a lot of stigma. And we're going to be talking about the science behind using medical marijuana, and how it's really, really effective with very few toxic side effects for insomnia, for chronic pain and for anxiety.

We'll be talking about some of the ways that you can use medical marijuana besides smoking it, and how you're not always going to be getting high from using medical marijuana.

CBD oil does not produce a high—the CBD component of medical marijuana.

We'll also be talking about why you may want to avoid vape pens. These are the oils that you put into a pen, and then you can inhale them.

So we're going to be talking about how some of those have toxic ingredients in them, and why you probably much probably want to avoid that form of medical marijuana.

But before we jump into the podcast, we have to do the disclaimer.

Please keep in mind that this podcast is not intended to diagnose, treat any disease or health condition, and is not a substitute for professional medical advice.

Please keep in mind that that this podcast is for entertainment purposes only. Please consult your healthcare practitioner before engaging in anything that we suggest today on the show.

## 01:56 ABOUT DR. RACHNA PATEL

Wendy Myers:

Our guest today is Dr. Rachna Patel. She's known as the medical marijuana expert, and she's been practicing in the area of medical marijuana since 2012 right outside of San Francisco, California.

She step-by-step walks patients through how to safely use medical marijuana for their specific health conditions.

Her background is in emergency medicine, and she completed her medical studies at Touro University College of Osteopathic Medicine, and her undergraduate studies at Northwestern University.

You can learn more about the work that she does at [DrRachnaPatel.com](http://DrRachnaPatel.com). That's D-R-R-A-C-H-N-A-P-A-T-E-L dot com.

Dr. Patel, thank you so much for coming on the podcast.

Dr. Rachna Patel:

Thank you for having me.

Wendy Myers:

Why don't you tell the listeners a little about you, and how you got into medical marijuana?

Dr. Rachna Patel:

Sure. I've been practicing in the field of medical marijuana since about 2012 now, so a good four years. And it all started off with, I was surfing Craigslist one night, and I came upon an ad on Craigslist for—there's a medical marijuana doctor that's needed at a clinic in California.

So it definitely peaked my curiosity, and started to look into the field because I didn't know it existed, and then what I started to do was I started to do some research on studies that had been out there on medical marijuana.

And what really took me aback was its potential as a pain management medication.

My background is in emergency medicine, so a lot of what I saw were overdoses on opioids. And so I knew that that was not a good option.

There were definitely cases that sat heavy with me. I saw children that had overdosed that we had to resuscitate them. I saw patients that repeatedly came in, basically, to get a high off of these opioids.

And then I also had the experience of doing what's called a toxicology rotation. And essentially, what this rotation is, is that you see overdoses on prescription medications, and that's all it is. We spend an entire month doing this.

And so it was a little bit disillusioning. You go into medicine to help people, and here, the very medications that you're prescribing are hurting patients.

What I ended up doing was I—you need clinical experience as a physician in any field that you're going to go into.

Now, there wasn't any formal training in medical marijuana. And actually, there still isn't. So I set out to work at a medical marijuana clinic in California. That's essentially how I got started.

## 04:46 MEDICAL MARIJUANA AND CHRONIC PAIN MANAGEMENT

Wendy Myers:

Yes, and it's amazing because 60% of people that seek out medical marijuana do it for chronic pain management. And that's what I did. I used medical marijuana—I haven't recently, but I have in the past. I used CBD oil and inhaler to manage chronic lower back pain because I didn't want to constantly take opioid medications, which I had to do when I had a really intense flare-up.

It also helps with sleep. I was also using CBD oil to aid sleep, which it worked very, very well.

So that's something I do recommend to a handful of my clients as well.

But super happy that California just legalized marijuana for recreational use because my opinion is it's kind of like alcohol. It's not a big deal. I don't know why it's illegal for so long.

## 05:34 USING MEDICAL MARIJUANA

Wendy Myers:

But getting back to medical marijuana, what are the ways that we can use medical marijuana without smoking it?

Dr. Rachna Patel:

Several different options are available. There is a method of inhalation known as vaporization. And what that essentially does is that you have to have a device called a vaporizer, and that heats what's in it rather than burning it.

When you avoid burning something, what you're also avoiding is the toxic hydrocarbon that it creates that's doing damage to the lungs.

The second way of using marijuana is in the form of edibles. You've heard of your typical brownie—the special brownies that people talk about.

Although nowadays, the edibles are getting healthier and healthier, you have sugar-free options, gluten-free options. So the industry is evolving in that sense.

The third option is what's known as tinctures. Tinctures are basically drops that you put under your tongue.

You do have other options available as well. This is more for patients with very targeted conditions. You have rectal formulations of medical marijuana, and vaginal formulations of medical marijuana as well.

And I also forgot—topicals. So you apply this to the affected area on the skin. That's another option as well.

Wendy Myers:

Yes, a friend of mine, she's our nanny. She watches my daughter after school. Her mother has chronic back pain, and she has a topical that she puts on her mother's back, and it works really, really well for her pain.

There's a lot of people in my life that are using medical marijuana and recreational marijuana, but a lot of people that are using it because it's a really effective medication.

## 07:26 CBD OIL

Wendy Myers:

So let's talk about the different forms like CBD oil. A lot of people might not know what that is, and what that is, how that helps you versus smoking it because we know when we smoke it, you'll lose about 50% of those cannabinoid medicines that are in it. So that's why people will use other forms of it.

Let's talk about the CBD oil, and what exactly that is.

Dr. Rachna Patel:

First of all, I want to define what CBD oils are because I think there are a lot of misconceptions about CBD oils.

The term "oil" isn't always an oil. So the chemicals in marijuana can be extracted in oils. There's coconut oil and olive oil. But the thing to watch out for is that they can also be extracted in chemicals that are not good for you, such as butane, hexane, propane.

So that's important to know because a lot of times, marijuana extracted in those chemicals will

also be referred to as oils. So be careful about that.

Now, there is another solvent that it can be extracted in, and that's carbon dioxide—CO<sub>2</sub>. And that's typically referred to as CO<sub>2</sub> oil.

Marijuana has a bunch of different chemicals in it. And a lot of what had gotten a bad rep was THC in the past. That is a psychoactive compound that does cause a high, although it does have medical benefits.

The other chemical that marijuana makes in high concentration is CBD. That has medical value as well.

Now, at the end of the day, what matters are the proportions of these chemicals that you're using, and a lot of what you're going to end up using will depend on the medical condition that you're using it for.

Wendy Myers:

I think a lot of misconception that people have is that in using any kind of medical marijuana, they'll automatically get a high. I think a lot of people have reservations about it or concerns.

With the CBD, you don't get a high. Does it have any THC? Is there a little, tiny bit of THC in it, or is totally just CBD extraction?

Dr. Rachna Patel:

It depends. Mainly, what you want to do is whatever you purchase, you want to make sure it's laboratory-tested, and then that will then give you a breakdown of the amounts of the CBD, the THC, plus the other chemicals that occur in marijuana.

So that's the thing to look for.

Typically, you have both because the plant makes both. So when people use the term CBD oil, typically, what it means is that it's a much higher concentration of CBD and a lower concentration of the THC.

And because CBD is not psychoactive, and you have such little amounts of the THC, you're likely not going to get any psychoactive effects from CBD oil. Does that make sense?

Wendy Myers:

Like the munchies?

Dr. Rachna Patel:

Right, the munchies. That's very common. Although, that can be helpful in patients who have cancer, for instance. Their appetite gets suppressed from either the chemo or the cancer itself, and that can be very helpful for them.

Wendy Myers:

Absolutely. My father was—he's passed now—undergoing chemo and radiation, and he lost 120 pounds in five months. And I told him, smoke some marijuana to try to stimulate your appetite.

He wasn't nauseated, but he just couldn't eat. And he tried it and was like, "I don't like it. I don't

like the way it makes me feel."

But it's not for everyone, but I think that would have been really helpful.

Dr. Rachna Patel:

A lot of patients that are undergoing chemotherapy will complain that things are tasting metallic or cardboard-like. What marijuana does is that it makes things more appetizing, so it helps in that sense.

Wendy Myers:

And it reduces nausea. I've had times when I felt really, really nauseated and I will seek out medical marijuana to reduce that nausea, or a coffee enema. But they both work really, really well. But it's extremely effective for nausea.

Dr. Rachna Patel:

Yes. Agreed. A lot of times better than even prescription medications because you don't end up getting side effects that a lot of prescription medications tend to give.

## 11:53 ADDICTION POTENTIAL

Wendy Myers:

Absolutely. So how addictive is medical marijuana?

Dr. Rachna Patel:

I'd like to equate it to alcohol use. A lot of it depends on how much you're using, and how often you're using it.

So if you're drinking a glass of wine a day, likely you're not going to get addicted to the alcohol, but if you're having a case of beer a night, yes, it's like you are going to get addicted to the alcohol.

So it's the same case with marijuana. You want to keep the use to the lowest-effective dose, lowest-effective frequency.

Now, big picture compared to other substances like opioids, like alcohol, it has much less potential for addiction. So the number that gets thrown out there is 9% whereas the other medications, or even alcohol, they fall into the 20% to the 30% range—a much less likelihood to get addicted.

Wendy Myers:

So is it really physically addictive? Any substance you take over a long period time, it changes your body chemistry, your brain chemistry where we're all going to be reliant upon that.

As you know, medical marijuana increases the production of Gaba, which is that feel-good neurotransmitter in the brain that's calming and reduces anxiety. And that if you stop the marijuana, that production of Gaba will stop, and you'll have anxiety, and you want to smoke again.

So I just explained it, it's physically-addictive, but it's also mentally-addictive as well?

Dr. Rachna Patel:

Again, those that are heavy users are more likely to go through withdrawal. Most of my patients, actually all of my patients, are using it in moderation. And so if you're a heavy user, yes, you are

likely to go to withdrawal. And that withdrawal typically lasts about four to six weeks, consists of symptoms like changes in appetite, changes in sleep pattern, irritability.

But again, you have to be a heavy user.

Now, the other interesting thing about marijuana is that it's a fat-soluble substance. So it's not like you stop taking it, and all of a sudden, your system goes into shock because it doesn't have that substance available.

It, in fact, does have stores of it in your fat cells, in your body. So it's almost like you're naturally weaning off of it. So it tempers that withdrawal even in heavy users.

And in my patients, at most, they're using it maybe three times a week, not more than that. And typically, once in a day.

And in those users, they can come on and off of it as they please without any withdrawal symptoms whatsoever.

## 14:30 COMMON CONDITIONS APPROPRIATE FOR MEDICAL MARIJUANA TREATMENT

Wendy Myers:

So let's talk about some of the conditions. What are the most common things that you treat in your practice where you use medical marijuana?

Dr. Rachna Patel:

So the three most common conditions that I treat are chronic pain, anxiety and insomnia. Beyond that, like I mentioned, a lot of cancer patients come to me because they're having side effects from the chemo medications that they're taking.

Within the category of pain, the most common conditions are typically back pain from patients who have bulging discs. If they have degenerative disc disease or arthritis patients is another group of patients that come, patients with fibromyalgia as well.

So chronic pain is huge, and then so is insomnia and anxiety as well.

Actually, I want to touch upon that anxiety bit that you had brought up.

A lot of times, patients come to me saying that, "When I use marijuana back in high school or college, I felt really anxious. I felt really paranoid."

So that has to do with a combination of chemicals that you're using. THC, which is the psychoactive substance, is what's causing that paranoia, that anxiety, but again, that's because these people probably used it expressively back in college or in high school.

So dosing has a lot to do with it as well.

## 15:49 DOPAMINE AND SEROTONIN

**Wendy Myers:** Doesn't marijuana increase your dopamine levels as well? There are some people, if they already have high dopamine, they could be more prone to the paranoia. "People are out to get me or talking about me," thinking.

**Dr. Rachna Patel:** Again, we don't have tons of research on this, and the research that's been done is in mice and in petri dishes. But it is serotonergic, and dopaminergic as well.

Yes, so it does work through those pathways to increase levels of those chemicals, which is why it helps with things like migraines, for instance. What's commonly prescribed for migraines are triptans, and they work through the serotonin pathway.

And it's believed that because marijuana impacts serotonin levels that that's why it helps relieve migraines as well.

So we don't have tons of research, not in humans, but based on what we know, from studies done in mice, yes, it does increase levels of these chemicals in the body.

**Wendy Myers:** And then we have millions of cannabinoid receptors in the body, and that's why it's positively impacting our body when we smoke it, or use medical marijuana in all the different ways that it can be used.

**Dr. Rachna Patel:** We actually have chemicals in our bodies that are very similar in structure to the chemicals in the marijuana plant, which is why we react to the chemicals in the marijuana plant.

The key to our bodies reacting to both the chemicals in our body and in the plant are these receptors, and they're overall called cannabinoid receptors. And as far as we know, there are two specific kinds—there's CB1 and CB2.

CB1 is mainly in the central nervous system, and CB2 is mainly in the immune system. But they're located throughout the body, which is why our bodies react to these chemicals.

## 17:45 MEDICAL MARIJUANA AS AN ANTI-INFLAMMATORY

**Wendy Myers:** And so medical marijuana, it works as an anti-inflammatory, which is why it reduces pain. Inflammation causes pain. Can you talk a little about that because we know that 60% of people that seek out medical marijuana use it for pain, like I did?

I had a bulging disc. I think it's healed now, but I don't need anything anymore for it. But when I



was in acute pain, inflammation, yes, I was using medical marijuana because it worked really, really well to reduce that inflammation. I just used a vapor pen—a vaper pen or what have you.

I was blown away by how much better my back felt after using it.

Dr. Rachna Patel:

Again, based on research done in mice and in rats, we know that the cellular level at how marijuana acts as an anti-inflammatory, so what it does is that we have these chemicals called cytokines. And they communicate from cell to cell, to increase inflammation in a certain area as a protective mechanism.

And so marijuana influences that signaling, one, and then it also impacts what are called T regulatory cells. And these are cells that, basically, they're there to help prevent the body from attacking itself. So the marijuana communicates with those cells as well.

And these are sort of the mechanisms by which it works to reduce inflammation in the body.

So for a more clinical perspective, I've had patients that have had psoriasis. And so one of the main presentations of psoriasis is that you get inflammation on the skin, and my patients that have applied marijuana topically, they found that it significantly reduces the inflammation on the skin.

Wendy Myers:

That's great because there's not a lot of treatment for psoriasis that are successful.

## 19:30 EFFECTIVITY

Wendy Myers:

So let's talk about results do you see, and the patients that you're working with where you prescribed medical marijuana.

Dr. Rachna Patel:

So I went into this field after having read the research, expecting that, "Okay, medical marijuana will be one piece in the arsenal that patients have to help manage pain."

But what I ended up finding was that by using medical marijuana, a lot of my patients were able to slowly stop using prescription medications. And this is very significant in my patients who have fibromyalgia. They're usually on a cocktail of medications.

A year later, when they come back to me for a follow-up, they're telling me that, "Marijuana is all I use, and I don't have to use it every day. And I only use it on an as-needed basis. And that does the job in managing my pain."

So I was definitely taken aback by that as a doctor because most of what you do is prescribe medications, and then one medication will cause a side effect, so you prescribe another medication.

And so you just get into this rut.

But to be able to recommend the medication, and then patients are able to come off of these other medications that are causing side effects, I think that's great. You see a significant improvement in the quality of their lives as well because they're no longer experiencing the side effects of the prescription medications.

## 21:01 MEDICAL MARIJUANA VERSUS BIG PHARMA

Wendy Myers:

And do you think that big pharma maybe have a problem with medical marijuana, spending a lot of money trying to quash the legalization of medical marijuana?

Dr. Rachna Patel:

Great question. So yes, I do. I think it's a threat to a lot of medications that are commonly prescribed for pain, for anxiety, for insomnia. And quite frankly, who in America doesn't have one of those three conditions?

So yes, it is a huge threat. I can see why they would push to not want it legalized or regulated.

And the other thing that's great about marijuana is that in a lot of states where marijuana has been legalized, you can grow the plant in your backyard. And what's great about that is that you can grow it organically—you know the quality of the plant, you know what's going into your body as well.

And it's super cost-effective. You can buy a seedling—it costs anywhere from \$25 up to \$45. But that one plant can give you enough medication for an entire year.

And you can put it into different forms that's appropriate for you, so you don't have to worry about any added ingredients or preservatives or anything like that.

Wendy Myers:

Yes, I heard people will take the leaves and make tea out of them, and do all kinds of stuff.

Dr. Rachna Patel:

I want to touch on that, the tea bit of it. There's a misconception around that too. So again, realize that the chemicals in marijuana are fat-soluble. So you can't just take any part of the plant and dump it in water and expect that water to have those chemicals.

Typically, when there's a tea, what's done is that those chemicals are extracted in some sort of oil, alcohol, or some other base. And then you're mixing that into a tea.

But the main part of the plant that makes all the chemicals are the flowers, or what's typically known as bud.

The other parts of the plants, they don't make as much of those chemicals because, again, they don't have these little structures called trichomes on them.

**Wendy Myers:** Luckily, in three states, just with the presidential election, three states legalized marijuana for recreational use. How many states currently are legalized for medical marijuana? Do you know offhand?

**Dr. Rachna Patel:** Over 23. So with this recent election, it added another, I think, we're probably in the mid-20s right now, so a little over a half of the states at this point in time.

So it's great. Now, the regulations vary from state to state. Some are more restrictive than others. Some limit the use of medical marijuana to only certain conditions. A lot of times anxiety and insomnia are not listed in those conditions. It just depends on who can get access to it, depending on the state that you live in.

## 24:03 MAINSTREAM CBD OIL SUPPLEMENTS

**Wendy Myers:** So I see online a lot of CBD oil being sold as supplements, and the FDA just, I don't know exactly the details of it, they passed something where you can't use CBD oil in a supplement because they've launched a study for it. So now, they're claiming it as—I think they have some proprietary claim on it where now, because it's used in a study. Now, it can't be used in supplements—some bullshit.

Personally, what I think, to be frankly honest, they're trying to, in that way, regulate CBD oil. But I still see it online. It's still being sold.

So if you're in a state that does not allow medical marijuana, can you still purchase it online and have it mailed to you?

**Dr. Rachna Patel:** I want to give some clarity on these things that are labeled as supplements that are being sold online. There are different types of marijuana plants—so there's cannabis sativa and there's cannabis ruderalis.

Cannabis sativa is what makes the CBD. It makes a bunch of cannabinoids—so CBD, THC.

Then there's cannabis ruderalis, what's more commonly known as hemp. So hemp is high in fiber, doesn't make as many cannabinoids. It does make CBD, but in much smaller amounts than cannabis sativa.

And also, cannabis ruderalis doesn't make THC.

So what's going on is that these supplements that are being sold online, that's where the CBD is being derived from. So what you're missing out on is what's called an [entourage] effect.

So all those other cannabinoids that may be impacting the CBD, you're not necessarily getting that effect.

Now, clinically, what have I seen as a physician? So I do get patients that come in and that tell me, "Hey, I purchased this online. It's a CBD capsule or CBD oil. But I'm finding that it's not working."

So what I find is that when they go to the dispensaries here, and most of those products are derived from that cannabis sativa, it works a lot better for them because you're getting the effect of the other chemicals as well in there.

## 26:14 DIFFERENT FORMS OF CBD OIL

Wendy Myers:

And going back to the different forms of medical marijuana, I experimented myself, and I took a capsule of CBD oil, and found it worked well. I was using it for sleep, like, "How am I going to get myself to sleep tonight?"

And so I took a pill, and found that it wasn't as effective as taking a tincture underneath my tongue.

Can you talk about the differences why?

Dr. Rachna Patel:

So I have a question for you. That capsule that you took that had the CBD oil in it, first of all, do you know what the oil was? What it was extracted in?

Wendy Myers:

I don't know offhand. It was in a gel capsule, and it was from a medical marijuana store, so it wasn't the ruderalis.

Dr. Rachna Patel:

The main thing you want look into is that it's lab-tested—whatever it is that you buy. And you want to, again, that breakdown that I was telling you about because this lab-testing will tell you the amounts of the THC, the CBD.

That's very important to look into because that's ultimately what is going to have the effect on your body.

So whether you're buying it online—I don't even know if it's legal to buy it online, but if you're buying it online, or if you're getting it from a dispensary, just make sure whatever you're buying has been laboratory-tested.

And the other thing is absolutely make sure what ingredients are being used because you certainly don't want to be consuming something like propane or hexane or butane.

So the question I would ask is, do you know the amounts of the different chemicals in the capsule you were using versus the tincture? Do you have the labeling with you?

Wendy Myers:

You know what? I do. It's in the other room. I know that the pill I was taking was a 10-mg.

Dr. Rachna Patel:

10-mg CBD?

**Wendy Myers:** And the tincture, I probably just dose myself to death. I'm like, "You're sleeping tonight?" So I don't remember offhand. It was a little while ago.

**Dr. Rachna Patel:** So that brings up another important point. You don't want to overdo the marijuana. Specifically, what I found with pain is that you need to hit a sweet spot. If you underdo it, obviously, it's not going to help. But if you overdo it, it can make your pain worse.

So that's important to keep in mind because I've had patients that they've been struggling with pain for years, then all of a sudden, the marijuana is working for them, and they start to overdo it. And then I'll get phone calls telling me, "Dr. Patel, this is making my pain worse."

And that's because they're overdoing it. And that's why the focus should always be minimal dose, minimal frequency.

So using more isn't necessarily better.

## 28:46 MEDICAL MARIJUANA TOLERANCE

**Wendy Myers:** And do people, as they progress in using medical marijuana, begin to build up a tolerance, and then have to slowly increase the dose, little by little?

**Dr. Rachna Patel:** So nobody should have a tolerance to marijuana. If you have a tolerance, that's a sign that you're using too much, and you need to cut back.

So that's what I'm teaching patients. With the methodologies that I'm teaching, usually, when patients come back to me, one of the questions I always ask is, "Are you finding that you're having to use a higher and higher dose, and having use it more and more frequently?"

And usually, the answer is no, because we've worked from the beginning on keeping the dose and the frequency minimal.

And you can keep it minimal. You don't have to keep on increasing the dose because you have stores of it in the fat cells in your body. So even on the days you're not using it, it's still in your system. As you're burning off those fat cells, it's still helping you.

## 29:40 MEDICAL MARIJUANA AND BODY WEIGHT

**Wendy Myers:** And there's a medical marijuana summit that I listen to that's really, really interesting. I'll put the link in the show notes, if you guys are interested. They gave a couple of talks for free.

I listen to that, and they're talking about how someone who's overweight, who has more fat, that they're going to maybe need a little bit more of the medical marijuana than someone who was

thinner.

Dr. Rachna Patel:

Actually, I haven't found that to be the case because there's actually an advantage to having more fat cells on your body with marijuana, again, because it gets stored in the fat cells in your body.

I found that the patients that actually need to use it more frequently are my athletes, and these are athletes that are biking like 30 miles in a day, for instance. So they're pretty up there in terms of how athletic they are.

Typically, I found a lot of your fat metabolism is associated with higher metabolizing the cannabinoids. So it's an advantage to actually have more fat on your body.

Wendy Myers:

I'm sorry. Allow me to correct myself. I think the distinction was if someone is overweight, the tinctures might work better for them than CBD oil pill. I forget the reason exactly why, and I was wondering maybe you knew the difference. But I think it has to do with if they take the CBD oil—I forgot the exact reasoning why.

Dr. Rachna Patel:

I haven't found the dosing of marijuana is dependent on body weight. A lot of medications are. You have to calculate the dosage based on body weight. But I haven't found that to be the case with marijuana.

A lot of it has to do with the severity of the condition.

That's mainly what I found—the fat composition in your body as well is another thing that I found.

So yes, those are two influencing factors. It's a lot different than prescription medications as well.

So a lot of what we think, it's almost counterintuitive. You have to think the opposite of marijuana.

## 31:54 CONTRAINDICATIONS

Wendy Myers:

What circumstances would you not recommend the use of medical marijuana?

Dr. Rachna Patel:

Patients who have heart conditions where an increase in heart rate is likely to exacerbate that heart condition. So if you have some sort of dysrhythmia.

And the reason for this is that chemicals in marijuana can increase your heart rate, if you use too much of it.

So you don't want to run that risk.

That's one group of patients.

The second group of patients is my patients who have been diagnosed with schizophrenia or bipolar disorder. Usually, I'm very cautious in recommending marijuana to them because those psychoactive properties, again, if you take too much of it, it can cause hallucinations.

So in these patients, it can exacerbate, it can cause psychotic episodes. So we don't want that.

Third group of patients—anybody who has any sort of lung conditions, and emphysema, asthma. Obviously, you don't want to be smoking marijuana. And you may actually even not want to be vaporizing marijuana either.

Another group of patients—women that are pregnant or breastfeeding. The jury is out when it comes to the research, but I tend to err on the side of caution because some research has pointed in the direction that using marijuana while you're pregnant can lead to low birth rate, and pre-term labor and delivery.

So that's another group of patients that I'm very cautious with as well.

I feel like it is being touted as a wonder drug, and it has a lot of medical applications, but again, you do want to be cautious with it. You don't want to overdo it, and then in patients that have these conditions, you want to use it with a lot of caution.

## 33:48 MEDICAL MARIJUANA AND CANCER

Wendy Myers:

What are your thoughts on claims that medical marijuana can cure cancer? I recently had a very dear friend of mine that I've known since I was very young pass away from colon cancer, and he was using medical marijuana to manage his pain.

But I think a lot of people, or some information out there that it actually cures it.

What are your thoughts?

Dr. Rachna Patel:

So we have a lot of compelling research in mice and in petri dishes. We don't have enough information in humans. And what I found is that, just in general, research done in mice and in petri dishes doesn't necessarily translate over to humans.

So what we know, in terms of research done in mice and petri dishes, is that marijuana affects the process—so cancer cells, they escape this process of apoptosis where a cell is supposed to die. There's programmed cell death. And it escapes that process.

Marijuana reprograms the cell, so that it does die when it should die.

So that's one process.

The second process is that it prevents these cancerous cells from traveling to other organs, and

then sticking to those organs, and invading those other organs. That's how you get metastasis—the spread of cancer to other organs.

And then the other way that it's shown to influence cancer is that the cancers that are sensitive to hormones, it pretty much makes them less sensitive to those hormones. So it prevents their growth.

But again, this is in mice and in petri dishes. We don't have enough information to go off of for humans. There have been very few studies done. One study was done on patients with glioblastoma, multiform. And it was only 10 patients.

And these were patients that were terminal that had tried chemotherapy, and then they started using the marijuana.

So it's not much information that we have to go off of.

So would I make the claim that it cures cancer? Absolutely not.

## 35:56 WHERE TO BUY MEDICAL MARIJUANA

Wendy Myers:

After listening to this, I know a lot of people are going to be wondering, "Where can I get some medical marijuana?"

What are your thoughts on, say, if they're in a state that where marijuana is not legal for medical consumption, would you recommend buying it off the street?

Dr. Rachna Patel:

Absolutely not, and there are several reasons for this. The first is that it could very well be laced with something else. I have found reports of where marijuana has been tested, and it's been laced with ketamine, or PCP even.

So that's a big concern.

Other concerns are that, how was it handled? Does it have fungus or bacteria in it? Especially if you're someone who is on a medication that is compromising your immune system, then you definitely don't want to be exposing yourself to this fungus or this bacteria because it can make you really, really sick.

Third thing is pesticides and fungicides. You don't know how it was grown, and what amounts of these pesticides and fungicides were used. And if there's a lot of this stuff in there, it can be toxic to you.

So you may think that, "Oh, I'm going to use marijuana because it's benefiting my health." But really, what you may be doing is harming your health by getting it off the streets.



And unfortunately, we're in a transition period in this country, where some states have legalized it medically and recreationally, and other states haven't. Those that live in states where it's legalized recreationally and medically, they obviously have access to better products because a lot of the states are mandating laboratory-testing, which is important for obvious reasons.

## 37:40 ORGANIC MEDICAL MARIJUANA

Wendy Myers:

It's conceivable that there's a lot of money to be made in growing marijuana at this time, and there's going to be even more money to be made by spraying it with pesticides and fungicides because that's going to make the plants last longer, and keep off the bugs, and whatnot, and keep it looking pretty.

So you have to be very, very careful. You want organic medical marijuana like everything else.

Dr. Rachna Patel:

So with the organic thing, it's not going to be certified organic. When someone says that it's organic, you're trusting their word to tell you that it's organic. So if that's the case, I would inquire further about, "What do you mean by organic? How exactly are you growing it? Are you completely avoiding pesticides and fungicides? Are you using minimal amounts of it?"

So inquire further. Ask a lot of questions. You always want to know what you're putting in your body when it comes to marijuana, especially because the regulations aren't completely there yet.

## 38:42 VAPE PENS

Wendy Myers:

And also with these vape pens, there's a big problem like you mentioned with the butane and the propane. There are a lot of these vape pens that come, they'll have a little strawberry or watermelon scent.

So what are your thoughts on those? I'm sure teenagers, they get their hands on these, and they like the taste of the watermelon or the strawberry flavor.

So what does someone need to look for when they're purchasing a vape pen to avoid toxic chemical solvents?

Dr. Rachna Patel:

So the main thing is what did they use to extract the chemicals in? What solvent did they use?

Most solvents that are used are typically pretty bad for you, like a lot of those ones that I mentioned—propane, hexane and butane. Those are common ones.

The safer one that I found is carbon dioxide, or it's also known as CO<sub>2</sub>.

Wendy Myers:

And that's all essentially oils—that's how that oil is extracted as well—with a carbon dioxide. It's

safe.

Dr. Rachna Patel:

Yes. But most of them, they're using hydrocarbons as solvents. So that's a big question to ask, that, "Hey, I'm using this vape pen, and I want to know what you've used to extract the chemicals in."

Now, the other thing is that if you do buy a vape pen, and you don't know what's in it, the ones that use these solvents, you'll find that they have a chemical aftertaste to them.

So that's important.

The other thing is that, again, because it's not a regulated industry, they may be using industrial-grade solvents, which may have other chemicals mixed in that may be toxic to your health.

So if you're going to use a vape, I usually generally advise my patients against using vape pens unless they absolutely know what's in it, and it's safe for them. but if you do decide to use a vape pen, ask a lot of questions as to what exactly you're putting in your body.

## 40:47 SAFE EXTRACTION METHODS

Wendy Myers:

And what are all the safe extraction methods? So people are knowing, "Carbon dioxide, this one. These are okay," and really, to avoid all the other ones.

Dr. Rachna Patel:

So oils, natural oils like coconut oil, olive oil are safe, ethanol, that's another safe option, and then carbon dioxide. As far as I know, those are the three main solvents that you can use that are safe.

Wendy Myers:

So pretty much avoid all the other ones.

Dr. Rachna Patel:

There's naphtha that's used. I'm trying to think off the top of my head. All sorts of crazy chemicals that are being used. So just be careful is what I would tell them.

Wendy Myers:

And it seems to me that the vape pens that are pre-loaded, they just come, you just buy it, it's already in the pen, those are probably more likely to have solvents in them than the cartridges that you purchase—not always, but it seems like perhaps the cartridges that you buy. It's more expensive if you have to buy the pen separately, and the cartridge itself. But those are probably going to be more on the safe side.

Dr. Rachna Patel:

I wouldn't make that assumption. Even carbon dioxide-extracted oils come in those cartridges as well. So don't go around on assumption. Always ask a lot of questions whenever you go to buy anything.

Wendy Myers:

I was just thinking more if it's pre-loaded, you buy it and it's already complete, those usually have flavors in them, it seems suspect to me.

- Dr. Rachna Patel: I'm suspect of vape pens in general. So just be careful is all I would tell you.
- Wendy Myers: Because I know they have to add flavors and make them more palatable and stuff.
- Dr. Rachna Patel: Or to even hide that chemical flavor that you get from whatever solvent that they're using.

## 42:46 FIND OUT MORE ABOUT MEDICAL MARIJUANA

- Wendy Myers: And so if the listeners are looking to get more information on medical marijuana, what resources can they turn to?
- Dr. Rachna Patel: So a couple of websites that I found very informative, there is a website called NORML, which is spelled N-O-R-M-L. That's a good website to go to. That's the National Organization on Medical Marijuana Reform of Laws, or something like that.
- Safe Access Now is another good website to go to. And then I have information on my website, [www.DrRachnaPatel.com](http://www.DrRachnaPatel.com).
- Be careful where you get your information from when it comes to marijuana. There are a lot of claims being made that aren't necessarily justified. So get your information from good, credible sources.

## 43:39 SOME FINAL TIPS

- Wendy Myers: Is there anything else you want to add to our discussion about medical marijuana, maybe some interesting tip that we left out?
- Dr. Rachna Patel: I think we about covered it all.
- Wendy Myers: We covered everything.
- And thankfully, we live in the United States. I know there are some countries, there's a death penalty for smuggling marijuana or something like that. Luckily, here, we recognizing that it's safe, it's medicinal. I think it's a lot less harmful than alcohol. So much death and destruction and addiction and harm from the alcohol [...] medical marijuana, or marijuana in general.
- Dr. Rachna Patel: Even prescription medications. Prescription medications can be pretty harmful. Even something what we think is benign like Tylenol. That can turn out to be pretty harmful if you take too much of it in the long run.
- So I definitely agree on that one.

**Wendy Myers:** Opioid medication definitely uses up all the glutathione in your liver, and then when that's all used up, you start to get liver damage. The same thing can happen with Tylenol or over-the-counter pain medications.

With the medical marijuana, you don't have that problem.

**Dr. Rachna Patel:** Yes. Typically, not. I haven't found that it produces any toxic byproducts in the liver. About 70% of it is processed in the liver, about 30% in—I don't remember, but part of it is in the liver, and part of it is in the kidneys.

And I haven't found that it makes any sort of toxic byproducts.

## 45:15 MOST PRESSING HEALTH ISSUE IN THE WORLD TODAY

**Wendy Myers:** That's how we like it. And so I have a question I like to ask all of my guests on the show. What do you think is the most pressing health issue in the world today?

**Dr. Rachna Patel:** Tough question. There's a lot of them. Being a doctor, you're so exposed especially as an ER doctor, you're exposed to so many pressing health concerns.

I would say a lot of what I saw in the ER were overdoses on medications. I think that's a very huge concern that I think is being downplayed. It needs to be brought into people's awareness that these medications can be a lot more dangerous than we think they are.

**Wendy Myers:** Why aren't more doctors aware of medical marijuana and recommending it to their patients?

**Dr. Rachna Patel:** When we're taught about it in medical school, we're taught about it as a drug of abuse. We're not taught about its medical properties. I think a lot of it stems from that. That's number one.

The other thing is that a lot of doctors are cautious because there's not enough research in humans at this point. So they don't have much to go off of.

**Wendy Myers:** One thing, [...] studies, they're amazing. But as a physician and as a health practitioner myself, you hear a lot of anecdotal evidence of medical marijuana working. And it worked on myself, and it worked on a friend. There's so much anecdotal evidence.

And that needs to be given a tremendous amount of weight because that's how we learn about whether treatments are working or not.

**Dr. Rachna Patel:** I think, taking what I see clinically, and then also, what I'm seeing in preliminary pre-clinical studies, helps me to recommend this medication in a very safe way.

So yes, I do agree that what we're seeing, what doctors that are recommending medical marijuana, what they're seeing clinically is a significance.

Now, the anecdotes, again, you need to get all the important information because, for instance, say someone has cancer. Usually, in that state, people are throwing everything that they can at the cancer. They're going from all directions.

And say, they do end up going into remission. They can say that the marijuana cured the cancer, but could it have been something else that they were using as well? Could it have been chemo? Could it have been some other alternative at route that they took that could have helped?

So the anecdotes, you need to sift out the important information from those anecdotes.

## 48:15 THE STIGMA

Wendy Myers:

Yes, absolutely. I think also, the listeners out there and their friends, there's a stigma about marijuana because it's typically been seen as an abuse drug, illegal drug, and definitely, Ronald Reagan's campaign in the 80s did not help that, and criminalizing marijuana.

I recommended it to a client before, and she was very turned off by it, and probably with me because of it. And I think there's probably a big stigma out there because people just aren't educated enough about its benefits. And then the physicians don't want to recommend it because they don't want to look like a quack.

Dr. Rachna Patel:

I think in the past 10 years, we've made a lot of progress in terms of—I've definitely found that there are more and more physicians that are open to it. I think it started all with California back in 1996, and look how far we've come. It's now 2016. So that is a tremendous amount of progress to make in a matter of 10 years.

And I think in the next 10 years, we'll make even more progress.

Wendy Myers:

Yes, it's got all those states. So in your state, vote to legalize marijuana, or at least medical marijuana because I think it's such an amazing medication, like you said, with very little toxic, or no toxic effect on the body, and so many benefits. I think it's a wonderful medication.

So everyone, if you want to go learn more about Dr. Patel, go to [DrRachnaPatel.com](http://DrRachnaPatel.com), D-R-R-A-C-H-N-A-P-A-T-E-L dot com.

Thank you so much for listening. And if you want to learn more about detoxification, you can go to my website, [MineralPower.com](http://MineralPower.com). You can also check out my main website, [Liveto110.com](http://Liveto110.com) where you can learn all about nutrition and lifestyle improvements and detoxification, which is my favorite subject.

Thank you so much for listening. Have a fantastic day.