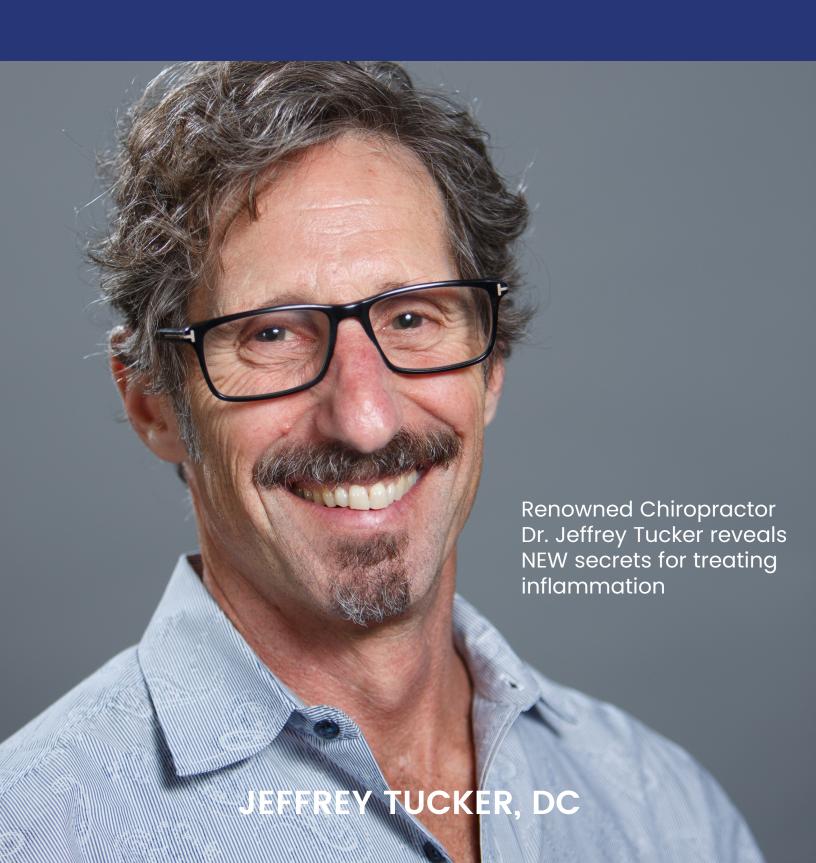
HEALTH CARE PROVIDERS: UNLOCK THE SECRETS TO TOPICALS IN YOUR PRACTICE



WHAT YOU WILL DISCOVER

This guide will discuss important considerations to make when selecting a topical for your practice and patients. It will help you unlock the power of using and recommending topicals in your practice.

There is an ever-increasing number of topical products used for a variety of painful conditions. Some are acute conditions, such as strains or sprains, tendinopathy, or muscle aches. Others are chronic, such as neuropathic pain or osteoarthritis of the hand, shoulders, or knee. Your patients are relying on you, as the doctor, to treat them with and recommend products that are beyond what they can buy "off the shelf" at Amazon.com, Inc. or local retailers. Doctors who recommend professional-grade topical products need to be confident in the product's safety, efficacy and value when making their purchasing decisions^[1].

What you'll discover:

- Recommending topicals what's the objective?
- Longstanding and current topical treatment options
- Hemp-derived CBD a NEW Topical anti-Inflammatory
- PHYTO-ZOL® a new approach to hemp-derived CBD topicals
- Best practices using topicals in your treatments
- Establishing a system for recommending topicals

Not ALL Topicals have the same active ingredients.

The difference is significant enough to influence how you want to incorporate topicals into your practice

Most chiropractors are familiar with longstanding compounds containing Menthol, Camphor, Tumeric, Arnica, Pycnogenol, Glucosamine, MSM, Boswellia, Ilex, or Essential Oils. Now, a new ingredient has taken center stage with the explosion of hemp-derived CBD based products. Choosing the right hemp-derived CBD based product can be confusing. This guide is designed to help you sort through the confusion and look for specific attributes in topical hemp-derived CBD formulations. Having a reliable and consistent hemp-derived CBD brand to help patients during and between office visits should be a priority to doctors, as patients are seeking your expertise and advice.

I have designed and written this guide as a consolidation of my knowledge and experience. From it, you can quickly adopt some of the best practices and begin to unlock some of the secrets to using topicals in your practice to improve patient outcomes.

I hope you enjoy reading this eBook as much as I have enjoyed putting it together. In good health.

Dr. Jeffrey Tucker

RECOMMENDING TOPICALS

What's the Objective?

Our objective is to relieve our patient's pain using manipulative therapy, soft tissue therapy, and lifestyle changes related to nutrition, stretching, and exercise. In addition, we have various topical products at our disposal that we can use as part of a treatment plan. Since patients seek and trust what you recommend, it is important that you are well versed on the current treatment options and their effectiveness.

The difference between counterirritants and anti-inflammatory ingredients

Topical treatments are designed to deliver pain relief that is localized to the affected area. However, not all topicals are created equal. Some ingredients, like menthol, are counterirritants and are designed to simply mask the pain. Other ingredients, like hemp-derived CBD, are anti-Inflammatory and need to penetrate the skin to be effective. These are important distinctions when choosing among your available options.

When using a hemp-derived CBD-based product, it is important to choose one proven to penetrate through the layers of the skin

Patients need your knowledge and experience

Patients want to feel better and get back to their normal life, life before pain interfered with their daily activities. Many of these patients prefer a product that will target their pain locally, rather than having to take an oral medication. Unfortunately, many patients get their information about such products from the internet or other nonprofessional sources.

Most chiropractors are familiar with topicals and will recommend them as a way for patients to achieve their goal of suitable pain relief. Topical treatments can provide relief between chiropractor visits and keep your patients focused on their treatment plan to achieve long-term success.

What do chiropractors need to know before they recommend a product?

This depends on your objective with the patient. When I personally recommend a product to a patient, I choose a product that is proven to be successful for their particular concern. For example, if my goal is to reduce pain, then I decide between a counter-irritant and a hempderived CBD anti-inflammatory. Because they work very differently, my choice is based on the patient's profile. Penetration is key for the effectiveness of hemp-derived CBD anti-inflammatories, so choosing a proven formulation is critical.

I also avoid fixed combination products containing menthol AND hemp-derived CBD as the penetration requirements for these two ingredients are significantly different.

Here's a summary of the steps to take and things to consider::

- Choose between a counterirritant and hempderived CBD anti-Inflammatory based on patient's profile
- When choosing a hemp-derived CBD anti-Inflammatory, choose one that has proven penetration
- Avoid fixed combination menthol and hempderived CBD products, as the hemp-derived CBD is mostly inactive in these nonpenetrating formulations.
- Provides my patient with proper dosing / administration instructions.

TOPICALS

Longstanding and Current Treatment Options

One of the major advantages to a topical treatment is that they target the area where the pain is located and do not distribute throughout the body. This makes them a good option compared to some oral medications, which can have unwanted systemic side effects ^[2]. Given that they are directly applied to the painful area, they are effective for localized pain and can achieve tissue concentrations that are greater than would be achieved with an oral medication.

Topicals work differently to provide localized pain relief with minimal systemic side effects

Current topical treatments and how they work

When recommending topicals to patients, you want to make sure they are going to work for the type of pain the patient is experiencing. Using and recommending the appropriate topical is important to the desired outcome and patient satisfaction. There are a number of topical treatments available for pain relief. The current topical treatments for pain are outlined here:

Topical	How it Works	What it's Used For	Precautions
Counter-Irritants (AKA Rubefacients) Menthol and Camphor	 Cause irritation of the skin to distract from the underlying pain^[3] Induce blood vessel dilation, leading to reddening of the skin and feeling warm ^[3] 	• Muscle, joint, tendon or musculoskeletal pain ^[4]	Designed to irritate the skin Tend to have an unfavorable smell Leave a residue behind that can stain clothes
Capsaicin (Active compound in chili peppers)	 Binds to receptors responsible for pain perception [5] Cause itching, pricking, or burning sensation [6] 	Wide range of chronic conditions, including postherpetic neuralgia, peripheral diabetic neuropathy, osteoarthritis and rheumatoid arthritis ^[7-9]	Using it too much or too often can cause nerve endings to stop functioning correctly [5] High concentration formulas must be applied by a trained healthcare professional
Lidocaine (Anesthetic)	Dampens pain perception receptors [10] Reduces over-excitement of the CNS [10]	• Postherpetic neuralgia, traumatic nerve injury [11]	• Long-term use may cause loss of nerve fibers in certain layers of the skin [11]
Hemp-Derived CBD (Hemp-derived Cannabinoid)	• Affects ECS (endocannabinoid system) receptors, which regulate pain and inflammation [13]	Anti-Inflammatory Pain and Inflammation	Must contain ≤0.3% THC to prevent psychoactive effects [14] Formulation is important – must penetrate layers of skin to be effective

Counterirritants are the most commonly recommended topical for pain relief. Their ingredients (usually menthol or camphor) work by irritating the skin, causing the sensation of burning or tingling. Most patients interpret this sensation as the topical working to relieve their pain when, in reality, it is simply distracting them from the pain underneath. Hemp-derived CBD acts as an anti-inflammatory and must penetrate the skin to reach endocannabinoid system (ECS) receptors in order to be effective.

Hemp-Derived CBD:

A New Anti-Inflammatory Option

What to look for:

Hemp-derived CBD products are the newest development in topical products. Hemp-derived CBD, or cannabidiol, is found in hemp plants, and interacts with receptors found on immune cells and in nervous tissues to regulate pathways involved with inflammation and pain regulation [13]. For this reason, cannabidiols are increasingly used in creams and serums, as topical pain relief, and have shown promising results so far.

When using or recommending products containing hemp-derived CBD, there is a certain stigma that comes along with it. This has developed from a misunderstanding of the difference between THC (the psychoactive ingredient in marijuana) and CBD. Here are a few myths and facts about hemp-derived CBD, to set the record straight:

Myth	Fact	
Hemp-derived CBD is illegal	The passing of the Farm Bill, removed hemp and hemp seed from the DEA's controlled substances schedule and separated them from marijuana. However, you should check local state regulations and professional guidelines.	
Hemp-derived CBD will get you high	Most hemp-derived CBD comes from hemp which contains <0.3% THC, which is considered THC-free. Hemp-derived CBD with <0.3% THC does not have psychoactive effects and will not get you high.	
Topical hemp-derived CBD works on top of the skin and penetration is not important	Hemp-derived CBD must penetrate the skin to be effective [15]. Hemp-derived CBD has poor bioavailability when taken orally [16], so targeted spot administration with a proven formulation may be preferred over the oral route in some patients[17].	

Topical products will contain varying amounts of CBD. When choosing a hemp-derived CBD product you should take into account two main things:

1. The amount of hemp-derived CBD and THC claimed on the label. A study at the University of Pennsylvania showed that only 30% of hemp-

Counterirritants (menthol) work by irritating the skin and offsetting the pain. They do not require skin penetration to work.

derived CBD products tested were within 10% of the hemp-derived CBD content they advertised on the label [18]. Additionally, as stated above, the source of the hemp-derived CBD matters in terms of whether or not there is THC in the product. Hemp-derived formulas must have less than 0.3% THC as required by law [14]. Ask the manufacturer for a Certificate of Authenticity (COA) that will identify how much Hemp Derived CBD and THC are in the product.

2. Look for formulations that are scientifically proven to penetrate the skin. If it has not been proven to penetrate the skin, the product will not be effective and the amount of hemp-derived CBD in the formulation is irrelevant. Superior formulations often contain less hemp-derived CBD that delivers more active ingredient to deeper layers due to advanced penetration and retention characteristics. Ask the manufacturer for "diffusion testing" results. Diffusion testing is the gold standard for skin penetration and retention testing. If they are truly invested in the product and are serious about making the best formulation, they should be able to provide you with this information.

PHYTO-ZOL®

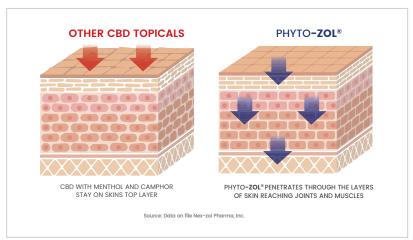
A New Approach to Topical Hemp-Derived CBD

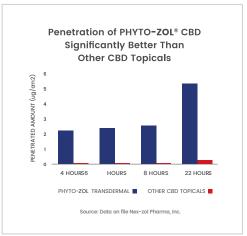
How is PHYTO-ZOL® different?

PHYTO-ZOL® is a uniquely formulated, hemp-derived CBD in a transdermal serum that delivers high concentrations to local areas of joint or muscle discomfort. There are five ways it is different from the other available topical anti-inflammatory:

1. PHYTO-ZOL® penetrates deeper

For a topical formulation to be effective, it must first pass through the many layers of the skin to the affected tissues. Most current topicals come in the form of creams which tend NOT to have good penetration [2]. **PHYTO-ZOL®** is a topical transdermal serum, containing hemp-derived CBD, that is proven to penetrate the skin.





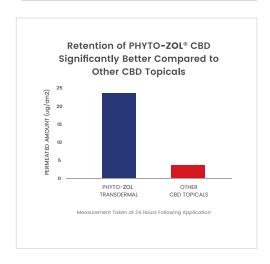
2. PHYTO-ZOL® is retained in the skin longer

PHYTO-ZOL® is designed with the patent-pending L.E.T.S technology (Locally Enhanced Transdermal Serum) to penetrate deep into the skin and be retained and released in bursts, increasing local concentrations.

PHYTO-ZOL® has a proprietary microencapsulated hemp-derived CBD formula with microvesicles. These vesicles slowly release over time, allowing for significantly better skin retention and penetration over time.

A study comparing **PHYTO-ZOL**® to other hemp-derived CBD topicals measured the amount of hemp-derived CBD that remained in the skin 24 hours after treatment. With the other topicals, very little remained in the skin 24 hours later. However, with **PHYTO-ZOL**®, a significant amount was retained in the skin. This demonstrates how powerful the formula is for both penetration and retention.

PHYTO-ZOL® penetrated significantly better than other hemp-derived CBD topicals.



3. PHYTO-ZOL® meets chiropractors and patients' needs Patients have certain things they want when looking for a topical pain-relieving treatment. Mostly, they want it to work, but they also want something that is convenient, not messy or smelly. PHYTO-ZOL® is specially formulated without irritants like menthol (no smell) or camphor (no burn). Compared to other topicals, the dosing is easy and accurate.

Chiropractors want reliable and consistent products to help patients between office visits. They also want something they can trust. **PHYTO-ZOL®** is made with the highest-grade medical ingredients and manufactured under GMP standards.

4. PHYTO-ZOL® is designed exclusively for the health care professional practice

PHYTO-ZOL® is hemp-derived and contains 0% THC, so you can trust you are giving your patients a THC-free product with no chance of having psychoactive effects. It is also formulated with the highest medical-grade ingredients that are well accepted in the medical industry. PHYTO-ZOL® is the only hemp-derived CBD transdermal topical that has distinct dosing guidelines.

PHYTO-ZOL® Dosing:

- Apply to affected area, then repeat application every hour for 3 hours (a total of 4 applications)
- Continue to apply 3–4 times per day as continuous application has demonstrated improved results
- 1 pump covers a 4" x 4" area about the size of a deck of cards





PHYTO-ZOL® comes with a medicalgrade pump, which distributes the same amount of product each time, to ensure accurate dosing.









This formula results in a deeper penetration to target the painful area, improving therapeutic outcomes and enhancing patient compliance

I prefer recommending and selling pain relieving topicals that are only sold to health care professionals. This allows me to demonstrate to patients how to use the topical, to ensure they are using the product correctly after they leave my office. Additionally, if it works, it keeps the patient coming back, which means they more consistently receive treatment and achieve better results.

How does PHYTO-ZOL® stack up against what I look for in a topical treatment?

	PHYTO-ZOL®	Counter Irritants or Other Hemp-Derived CBD Topicals
Reduces inflammation	\checkmark	?
Has proven penetration and retention	\checkmark	?
Has no odor or burn	\checkmark	?
Has ONLY medical-grade ingredients	\checkmark	?
Sold ONLY through health care professionals	\checkmark	?

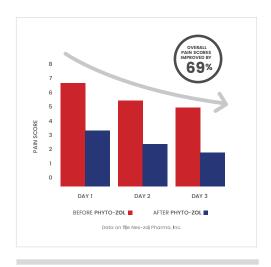
Another advantage of **PHYTO-ZOL®** is that it comes with company support. Nexzol Pharma Inc. offers an office support program that provides individual education and training along with local social media support to help build your practice.

5. PHYTO-ZOL® works

In an open label experiential trial, patients with every day musculoskeletal pain were asked to use **PHYTO-ZOL®** for three consecutive days. The participants were then asked to fill out a questionnaire designed to capture the efficacy of **PHYTO-ZOL®** by scoring the patients pain, along with describing their sensory experiences. Over the course of the three days of application, patient pain scores improved by 69%.

Patients in the study also reported that **PHYTO-ZOL**® applied smoothly, absorbed quickly into the skin, and did not leave a residue. Over 50% preferred the gel/serum formulation to creams. All patients preferred that **PHYTO-ZOL®** had no or little scent. They also preferred the medical-grade pump mechanism to a tube or jar.

PHYTO-ZOL® works for our patients and it works for us. It has been scientifically proven to be the most powerful product available. So, when you're thinking about what kind of topical to recommend to your patients for their pain, I recommend you think of **PHYTO-ZOL®**.



83% of patients in the study reported they would recommend PHYTO-ZOL®

BEST PRACTICES

Medical Best Practices for Topical Hemp-Derived CBD **PHYTO-ZOL**®

There are a number of different ways that PHYTO-ZOL® has been used by chiropractors to improve the effectiveness of their treatments. Below are some of my experiences along with testimonials from chiropractors who have used PHYTO-ZOL® in their practice, and the different ways they have found it to be beneficial.

<u>Ultrasound and Soft Tissue Therapy</u>

Due to **PHYTO-ZOL®'s** no smell, non-sticky formula and quick absorption combined with conducting gel, **PHYTO-ZOL®** gets transported into the tissues by means of phonophoresis and has a profound effect on pain and inflammation.

Used in conjunction with soft tissue treatments **PHYTO-ZOL®** has been effective in:

- Facial Therapy
- Massage
- Instrument Assisted Tool

Chronic Tendonitis

Chronic tendon injuries are common athletic and occupational injuries that account for many physician visits. **PHYTO-ZOL®** has been effective in treating chronic tendonitis and doesn't and create unneeded hot/cold feelings.

Injury Prevention

In addition to stretching, hemp-derived topicals such as **PHYTO-ZOL®** are being used for pain relief. I recommend rubbing **PHYTO-ZOL®** serum into tight areas on the body for injury prevention before and immediately after workouts.

Adjustments

PHYTO-ZOL® is very effective when used pre & post adjustments.

ESTABLISHING A SYSTEM

For Recommending a Topical Product

When it comes to recommending a topical product to patients, there are several things you want to consider in addition to which topical is best for their type of condition. Establishing a system within your practice for recommending topical products, making sure everyone is on the same page and is up-to-date with the latest topical treatment options, is also important. This will involve training all staff and marketing topicals within your practice.

Staff Training

PHYTO-ZOL® provides live staff support and training. Areas of training include, but are not limited to:

- What is PHYTO-ZOL®
- The facts on who gets PHYTO-ZOL® and why
- Answering the phone about office procedures and products
- The importance of clinical follow-up
- The ideal patient to receive a topical treatment

<u>Marketing Your Practice – Hemp-Derived CBD</u> <u>integration</u>

When marketing hemp-derived CBD topicals to your patients it is helpful to have a product that is sold only by health care professionals. As we discussed earlier, this allows you to demonstrate to the patient how to use the topical and ensure they are using the product correctly. It also allows you, the healthcare professional, to work with the patient to decide the most appropriate treatment for the condition they have, versus the patient trying to make this determination on their own.

The best way to market hemp-derived CBD products to your patients is to make sure they are educated on what hemp-derived CBD products are and how they work.

Forms of marketing you'll want to consider to when integrating hemp-derived CBD into your practice are:

- Educational brochures
- Website presence
- Digital & social media
- Office open house for patients
- Use in procedures, then recommend

The makers of **PHYTO-ZOL®** will provide you with information needed to display and market **PHYTO-ZOL®** to your patients and provide stocking options.

PHYTO-ZOL® is only available through health care professionals and not available at retail locations, including Amazon.

Facts about PHYTO-ZOL® compared with your current topical recommendations

www.PHYTOZOL.com	Phyto-Zol® Transdermal Serum	Counterirritants and other Hemp-Derived CBD Topicals
Proven scientifically to be the most powerful product available	<	?
Formulation contains hemp-derived CBD <u>without</u> menthol (no smell) or camphor (no burn) and contains 0% THC (no high)	⊘	?
Has demonstrated in comparative scientific studies to be significantly better in penetrating the skin to the targeted area and being retained in the targeted area	⊘	?
Is formulated only with the highest medical-grade ingredients that are well accepted in the medical industry	⊘	?
Has demonstrated real results from an open-label patient experience study	⊘	?
Provides science-backed recommendations on how to apply the product to create a "lag effect" and significantly improve penetration and retention	⊘	?
Is sold only through health care professionals, so patients need to return to your office, making compliance less of an issue	⊘	?
Has a medical grade pump for accurate administration, removing the possibility of cross contamination as seen with jars	<	?
Company provides office support, including staff training and in-office marketing support and volume discounts	€	?
Pricing structure allows you to buy at a significant discount and sell to patients at a premium because you are protected by limited distribution to health care professionals only	<	?

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