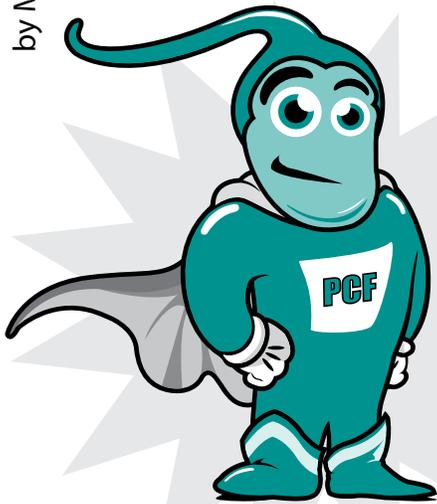


Pepper Power for Your Pain



Research reviews come in handy when scientists look at the effectiveness of a substance, treatment modality or side effects, for instance. A review of several similar studies on topical sports creams mostly containing salicylate (aspirin) for pain fell short of providing relief and menthol fared about the same.¹ In comparison, capsaicin offered pain relief for musculoskeletal, neuropathic, osteo and rheumatoid arthritis.² The review authors noted “For patients with chronic moderate or severe pain, even a small reduction in pain can be beneficial”. Despite newer agents, capsaicin continues to control both the market and a wide variety of pain more effectively, according to another 2009 review.³

Using a topical for pain is old fashioned common sense. While you may think of your skin as just a protective covering for your “insides”, it’s also an organ with specific functions. Its outer and inner surfaces contain blood vessels and nerve cells that facilitate touch, help maintain body temperature via sweat glands and fatty layers, and send pain warning signals upon trauma. In fact, you might say that it’s not only beauty that is skin deep — so is pain. When you touch a hot stove for example, nerve impulses (neurotransmitters) travel from your hand to your brain requesting instructions on what to do and back again to remove your hand from the hot surface. This all happens at lightening speed, and faster if you have a previous “pain” memory of burning your hand on something hot!

One of those neurotransmitters that help send pain signals is substance P. While pain is a good warning signal, it often accompanies the healing process, too. Sometimes pain can linger long after the physical recovery, becoming chronic in nature. In fact, substance P levels are often found 2-3 times higher in people with chronic pain conditions, including fibromyalgia. Capsaicin has the ability to lower substance P levels to help you turn the pain signaling down, if not off. It seems ironic that the fiery bite of this substance from hot peppers can take a bite out of your pain but it can.

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How does Capsaicin work?

Researcher M. Hayman defines capsaicin as “a naturally

occurring alkaloid derived from chilies that is responsible for its hot pungent taste. It is an odorless fat soluble compound that is rapidly absorbed through the skin. Capsaicin is thought to produce analgesia (pain relief) by depleting substance P in small fibre nociceptor (sensory) neurons on which Transient Receptor Potential action channel (subfamily V), type 1 (TRPV1) is predominantly located. It binds to the vanilloid

receptor TRPV1, which acts as a molecular integrator of chemical and physical painful stimuli.”⁴ *Translation:* Capsaicin depletes substance P in nerve cells that sense pain by binding to the receptor in charge of processing the signals.

What is the best way to apply capsaicin?

First of all, use gloves! Capsaicin is hot! If applied without gloves, your hands could transfer the capsaicin to sensitive areas such as your eyes, to pets or children. Second, apply sparingly and just enough to cover the area to be treated. Lightly massage into skin. Re-apply 2-3 times a day, “layering” on the same spot. As the capsaicin irritates

the nerve cell, it depletes substance P to reduce the pain signaling. Less signaling turns the pain volume down and in some instances off.

What if I hurt all over?

Pick your worst pain spot and start there. Often pain is referred and by reducing your worst pain area, overall pain is reduced as well.

Pepper Power for Your Pain

continued

Is it possible to apply too much?

Yes. Less is better so use a light touch until you know what you can tolerate. You can flush the area with cool water if you skin feels too warm. Wait 2-3 hours between each “layering”.

When will I notice pain relief?

It depends on your pain. Chronic pain like fibromyalgia or neuropathic pain needs to deplete more substance P than minor muscle pains or aches. Those who apply at the maximum of 2-3 times a day may note relief faster; in studies chronic pain took up to 6 weeks, neuropathy up to 12 weeks.

How long do I use capsaicin?

For as long as you want pain relief. My husband David, who has fibromyalgia, has been using TyH’s capsaicin for 20 years almost every day. Once substance P is depleted, you’ll notice that you will need fewer applications. Some people control the pain with once a day use while others apply every 2-3 days to maintain lower substance P (and pain) levels. Capsaicin can help keep muscles and joints a bit warmer and more comfortable in chilly, damp weather and air conditioning, making it a year round helper!

Why do you include glucosamine?

Oral glucosamine (1500 mg daily for 3 months) is shown to protect joint cartilage and as an anti-inflammatory in osteoarthritis. Topical glucosamine appears to act in a similar manner to support capsaicin in safely reducing joint pain over non-steroidal creams.

How does Boswellin® help with pain?

This patented ingredient has a long history in Ayurvedic medicine for its anti-inflammatory and antiarthritic activities. Today we know it inhibits an inflammatory enzyme 5-LO, to help decrease pain related to inflammation.

Why look for capsaicin on the label?

Capsaicin is the power in the pepper. If the label does not say “capsaicin” as the active ingredient, you may not be getting that pain-reducing power! Like chili peppers, capsaicin comes in degrees of “hotness”; typically from 0.025% to a higher 1% (hotter). Use a midway strength (around 0.05%) in a combination cream with other helpful pain modifiers for the best relief.

What else should I know about capsaicin?

Capsaicin may not mix well with hot sun and sweating, fabrics that don’t breath (like nylon) or in hot tubs. Again, it’s what you can tolerate as some get “used to” the warmth and no longer feel it although capsaicin continues to work for them. Do not apply to broken skin, eyes or sensitive membranes. This is only a partial list; a pamphlet of instructions comes with each jar and we are always happy to help with any questions you may have.

Capsaicin in Research Studies

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- ◆ Acute & Chronic Pain
 - ◆ Arthritis
 - ◆ Backaches
 - ◆ Bladder Disorders
 - ◆ Cluster Headaches
 - ◆ Diabetic Neuropathy
 - ◆ Fibromyalgia
 - ◆ Joints & Muscles
 - ◆ Mastectomy
 - ◆ Muscle Sprains, Strains
 - ◆ Postherpetic Neuralgia
 - ◆ Post-Surgical Pain/Nausea
 - ◆ Pruritis
 - ◆ Psoriasis
 - ◆ Sports-Related Injuries
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