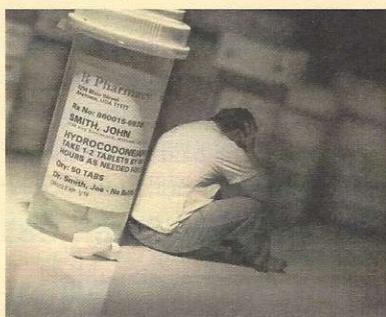




The Opioid Crisis

Answering the Need for Pain Relief Without the Risk of Addiction

America is in the midst of a health crisis due to the misuse of opioids, a class of pain-relieving medications that include morphine, heroin, codeine, hydrocodone, oxycodone, fentanyl and many others. In 2018 alone about 47,000 people died from opioid overdose, with about one-third of these deaths coming from prescription drugs. Between 20-30% of people who are prescribed opioids for chronic pain misuse them and about 8-12% develop an opioid use disorder.

An estimated 4-5% of the people who misuse their medication end up switching to illegal opioids like heroin because of their addiction. In fact, about 80% of the people who take heroin first misused prescription opioids, so many of the deaths from illegal opioids trace back to the use of prescription opioids. The Center for Disease Control (CDC) estimates that the total economic burden of prescription opioid misuse is \$78.5 billion a year in the United States alone.

Opiates are not new. They have been around for a long time. The first opiate was morphine, an alkaloid derived from the opium poppy in the early 1800s. Opium had been in use as a pain medication and as a hallucinogenic drug for almost 5,000 years before the isolation of morphine.

Even though these drugs have been around for a while, it wasn't until the 1970s that we understood how they worked. A researcher named Candice Perk, working with the neuroscientist Solomon H. Snyder, discovered that certain brain cells had receptor sites for opiates or rather, that opioids bind to receptor sites for neurotransmitters such as endorphins. These neurotransmitters are designed to help reduce pain and aid sleep. So, by attaching to these receptor sites, opiates block pain and make people drowsy.

Endorphins are also released when exercising (the runner's high), getting a massage, meditating or eating certain foods. They produce a feeling of well-being, providing a reward for doing good things for the body. Opiates artificially induce this sense of well-being without engaging in any healthy behaviors that promote well-being.

Addiction occurs because the body down-regulates any neurotransmitter system that is being artificially stimulated. When taking a drug, the body adapts to its presence, which means it is difficult to get the natural sense of well-being from normal healthy behaviors after using it. Thus, addiction to opiates is not a character flaw, but one of the potentially serious side effects of using them.



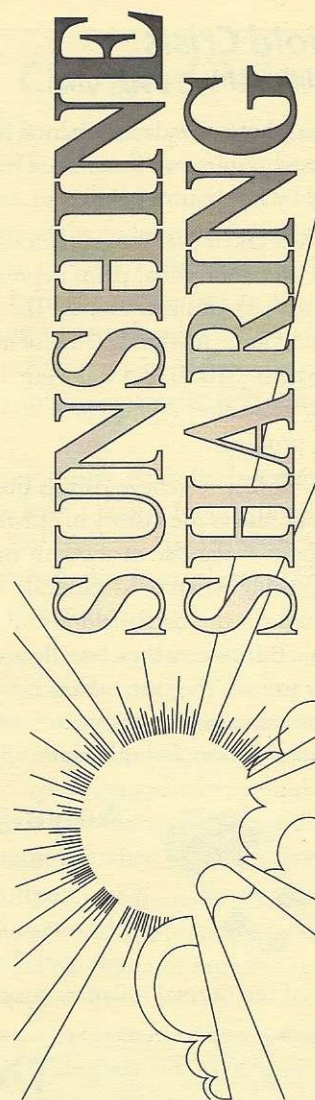
Why the Current Crisis?

The history of opiate addiction is well known. So why are opiates still in use? The current problem started in the late 1990s, when pharmaceutical companies reassured the medical community that patients would not become addicted to the newer synthetic opioid medications.

As a result opioids started being prescribed at greater rates. It has now become clear that the pharmaceutical companies were wrong. These drugs are addictive. Ordinary people, who would never consider using recreational drugs, became addicted and the deaths from overdose began to rise. By 2017, an estimated 1.7 million people suffered from substance abuse disorders from prescription opioids, and since 1999, about a half a million people have died from opioid overdose around the world.

Even if a person doesn't become addicted to opiates, they have other potentially serious side effects. Opiates active the endorphin system which induces sleepiness and slows intestinal peristalsis and respiratory function. In the short run, this means opiates can cause nausea, vomiting, dizziness and tired, sluggish feelings. They can also

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Your guide to better health the natural way.

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Opioid Crisis

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cause euphoria, headache, mental fog, constipation, lethargy and depressed respiratory function. Death from overdose is typically caused by respiratory failure.

When taken over longer periods, they can cause severe constipation and abdominal pain, depression, irregular heart beat and increased risk of heart attack. The slowing of intestinal peristalsis contributes to the development of small intestinal bacterial overgrowth (SIBO) and leaky gut syndrome, something that can last for years after taking them and contribute to a host of other health problems.

The ability to relieve pain is one of the hallmarks of modern medicine and as the history of opiates below explains, opiates were a big part of the rise of modern medicine. And, opioids can be a good thing when used carefully. For example, giving a soldier wounded on the battlefield a shot of morphine is merciful and helpful. But, when these medications are used repeatedly as an answer to pain they are a danger. It may seem like a good idea to use opiates to relieve chronic or severe pain, but there is a great risk for addiction and other side effects.



Solving the Puzzle of Pain

To deal with the problem of pain, you need to understand that pain is not the real problem. Pain is a signal that tells you that the body has been damaged and is part of the normal inflammatory process the body uses to deal

with injury. Without pain, you wouldn't recognize that you were hurt and wouldn't feel the need to immobilize and protect injuries and take steps to fix the damage.

Using a drug, like an opioid, to block the pain signal doesn't aid the healing process directly. It does make it easier for doctors to set broken bones and treat the injuries so they can heal. Pain relievers also make it easier to rest while the healing takes place.

As tissues heal, inflammation and the acute pain associated with it subside. The body uses chemical messengers, like endorphins and cannabinoids to modulate the pain signals and restore feelings of wellbeing. Chronic pain usually means the damage has never fully healed, which means the inflammation is still present. Pain relief therefore, must involve assisting the body in the healing process, and not just blocking or modulating pain signals.

Anti-inflammatories and Pain

One of the best strategies for chronic pain (that also helps with severe acute pain to a lesser extent) is to help reverse the inflammation and promote healing. Herbs that ease pain in this manner include **turmeric**, mangosteen and boswellia. This also includes one of the principle compounds in turmeric, **curcumin**.

In a human clinical trial using turmeric for osteoarthritis, it was shown that taking a 500 mg turmeric extract twice daily significantly reduced pain and improved functionality. Patients taking turmeric extract also had significantly reduced usage of other analgesics and NSAIDs.

So, a good strategy for people who are taking opioids for pain relief after surgery or accidents is to also take an anti-inflammatory

The Addictive History of Opioids



Opiates have been around for a long time. In the early 17th century, Thomas Sydenham, who is considered the English Hippocrates, introduced the tincture of opium into medical practice.

Known as laudanum, it was widely used for pain. Sydenham believed opium was a gift from God to relieve man's suffering. There was no doubt its ability to ease pain was a wonderful discovery, but its widespread use led to problems with addiction.

In the early part of the 1800s, the alkaloid morphine was extracted from opium. Named after the Ancient Greek god of dreams Morpheus, morphine was widely used to treat pain and opium addiction. It became a mainstay of US medical treatment for a wide variety of conditions. Besides pain, these included, anxiety, respiratory problems and consumption (tuberculosis). Morphine was used during the Civil War to manage pain from battle wounds. So many soldiers were addicted to it by the end of the war that morphine addiction became known as Soldier's Disease.

Heroin was the next opioid that came on the scene. Synthesized in 1898, Bayer (the aspirin company) sold it as a non-addictive

morphine substitute and cough suppressant. It was outlawed in 1924 after its highly addictive nature became widely known.

In 1916 German scientists synthesized a new wonder drug—oxycodone. This was supposed to be the new non-addictive opioid. It was sold under the trade name Oxycontin. In 2007 Purdue Pharma pled guilty to misleading the public about Oxycontin's addictive nature and settled with the government for \$635 million.

As indicated on page one, despite this history of failure, doctors were again reassured in the 1980s that the new opioid drugs were safe and that addiction would be rare. Prescriptions increased with over 227 million opioid prescriptions being written in the United States in 2015.

One of the new synthetic opioid problems is fentanyl. It is 50-100 times more potent than morphine. The drug is so powerful that a sugar-packet-sized bag of fentanyl can provide about 500 lethal doses. Made in China, small quantities are shipped legally into the United States and Canada for medical use, but the drug is also shipped in bulk to drug cartels in Mexico where it is mixed with heroin or other drugs and smuggled across the border. Deaths from these illegal drugs have been dramatically increasing.

Given the history of problems with opiates, it's wise to seek other alternatives for pain whenever possible or quit taking them as soon as possible when they are necessary.

like curcumin or an **Anti-inflammatory Pain Formula** combining a high curcumin standardized extract of turmeric with boswellia, mangosteen and andrographis. This will speed healing of damaged tissues after surgery or injuries, while reducing pain and allowing the person to take less opioids or other prescription analgesics.

CBD: Another Way to Reduce Pain Signals

Helping tissues heal is important, but people also need a way to ease the pain while they are healing. Another plant that's been used to relieve pain for thousands of years is cannabis.

Cannabis works because it contains chemicals that act with another pain modulating system in the body, the endocannabinoid system (ECS). These chemicals, known as phytocannabinoids, modulate pain signals. One of the major phytocannabinoids is cannabidiol or CBD, which is a non-addictive pain reliever that can help with many types of severe or chronic pain as explained in the sidebar.

Omega-3 Essential Fatty Acids

One of the reasons people don't heal properly and therefore suffer from chronic pain is that their diets are high in omega-6 fatty acids, but deficient in omega-3 fatty acids. Researchers have found that the high ratio of omega-6 to omega-3 fatty acids is pro-inflammatory. Decreasing this ratio by consuming **omega-3 essential fatty acids** has helped many people find relief from pain and chronic inflammation.

It's also interesting to note that omega-3 essential fatty acids are also important for the proper functioning of the endocannabinoid system which modulates pain and inflammation. Hemp seed oil (from cannabis) is one of the richest plant sources of omega-3 fatty acids, providing another pain relieving mechanism from the cannabis plant.

Increasing Endorphins Naturally

We've already pointed out, opiates work by attaching to receptor sites for endorphins and stimulating them. It follows then, that finding ways to increase the release of endorphins can help to ease pain. Here are some ways to do this. These techniques are helpful for any type of pain and can also be used to help wean people off of opiates or reduce the dose needed to ease pain.

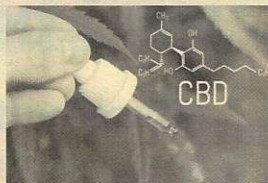
Meditating/Deep Breathing: Meditation is known to increase endorphin release and promote a feeling of well-being. It also has been used as a tool to control chronic pain and aid the healing process. Meditative practices usually begin by breathing slowly and deeply while allowing the body to relax. Deep breathing alone relieves pain by bringing more oxygen to the tissues and alkalizing

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Additional Help and Information

For more information about weaning people off opioids and other prescription pain killers and/or relieving pain without drugs contact the person who gave you this newsletter. Some of the sources used for information in this newsletter are listed below:

<https://www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis#nine>
<https://www.rd.com/health/wellness/natural-endorphin-boosters/>
<https://www.cdc.gov/opioids/index.html>



CBD and Pain

One of the most promising answers to the problem of chronic pain can be found in a newly discovered system known as the endocannabinoid system (ECS). The ECS system modulates nerve transmissions and immune reactions. This includes both the inflammatory processes and the nerve impulses that transmit pain signals. The ECS helps to down regulate pain signals once the message has been delivered that the body is damaged. It also down regulates the inflammatory responses to allow healing.

It is now believed that many people who are experiencing pain and chronic inflammation have a poorly functioning ECS. Part of this may be due to a lack of omega-3 essential fatty acids, which are needed both to make the bodies internal cannabinoids and also to make cannabinoid receptors.

Phytocannabinoids (which are found in plants like hemp) are proving very helpful in restoring balance to the ECS. The most well known is the non-addictive, non-psychoactive cannabinoid known as CBD. CBD helps increase the effectiveness of the body's endocannabinoid receptors rather than directly stimulating them. This means CBD does not build tolerance, so there do not appear to be any withdrawal symptoms when discontinuing use.

Many people are finding CBD is an effective alternative to opioids in relieving pain. It may even be helpful in opioid withdrawal as it helps to rebalance the nervous and immune system and has been shown to help people overcome addictions. CBD has a further advantage over opioids for pain relief because the endocannabinoid system does not adversely affect gut or respiratory function, which are the primary serious side effects from opioids. So, there is no risk of death or serious health problems if a person accidentally takes too much.

CBD can be taken internally or used topically to ease the pain of arthritic joints, migraine headaches, neuropathy and pain associated with injuries or surgery. A phenomenon known as the entourage effectively demonstrates that CBD and other phytocannabinoids work synergistically with the terpenes found in essential oils. This makes it possible to increase the effectiveness and speed of CBD in pain relief.

Topically CBD can be used synergistically with pain-relieving essential oils such as copaiba, turmeric, **wintergreen**, **clove** and **lavender**. It can also be used in a **CBD Topical Analgesic** Formula where a high CBD hemp extract is combined with menthyl salicylate, eucalyptus oil, rosemary and arnica.

Internally it can be used with anti-inflammatory and pain-relieving supplements like **turmeric or curcumin**, boswellia, **alpha lipoic acid**, **glucosamine** and **MSM**. A **Hemp Oil with Terpenes** formula that is completely THC free can also be used internally to help modulate pain and inflammatory processes. It contains turmeric, peppermint oil, ginger oil and hemp seed oil.

Of course, CBD is best used in combination with some of the other holistic methods of addressing pain, which will aid the healing process, thereby eliminating the reason for the pain signals.

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the system. Once the body is in a relaxed, meditative state it's possible to passively observe the pain in a disconnected manner and use your mind to calm down the pain signals. So, people who suffer from chronic pain may benefit from learning to meditate or at least practice deep breathing.

Laugh: Laughter also releases endorphins, which eases pain. Watching funny movies or engaging in other activities that promote laughter or a happy disposition will also decrease pain naturally.

Acupuncture: Used in China for thousands of years to manage pain, there are studies which suggest acupuncture can be very effective for easing some types of pain. It appears that acupuncture releases endorphins as part of its pain relieving abilities.

Naturally Enhance Endorphins: Dark chocolate has been found to help endorphins and also contains a cannabinoid associated with pain relief. Vanilla has also been shown to stimulate endorphin release. Maybe that's why so many of us like chocolate and/or vanilla. Smelling lavender oil also releases endorphins and can modulate pain signals.

Using Topical Analgesics for Pain

Natural analgesics often work faster and more effectively when applied directly to painful joints or muscles. They are even more effective when used with pain-relieving massage, which stimulates blood flow and lymphatic drainage. This helps reverse the inflammation and speed the healing. Massage also stimulates endorphin release providing a natural reduction in pain signaling.

A great **Topical Analgesic Lotion** contains camphor, menthol, methyl salicylate, eucalyptus essential oil and arnica flower extract. The arnica in this formula has been traditionally used to reverse inflammation in injuries, reducing both swelling and pain. The other ingredients stimulate blood flow to the area or act as natural pain relievers. You can also use a **CBD Topical Analgesic Formula** like that described on page three.

Alkalize the Body to Ease Pain

Chronic pain often happens when the body becomes too acidic. The body needs to maintain a slightly alkaline state in order to have the energy to affect healing to damaged tissues. The kidneys need water to flush the acid from the system to maintain this alkaline environment and many people have found that simply drinking 1/2 ounce of pure water per pound of body weight every day has prevented them from getting headaches, eased aches and pains and improved overall health. .

It may help to add some alkalizing minerals like potassium, magnesium and calcium to the water as well. Even a little pinch of salt (sodium) can be helpful. You can also try adding an **Electrolyte Drink Powder** to the water containing ingredients like the aforementioned minerals, vitamin C and B-complex vitamins and glucosamine.

It also helps to eat more fresh fruits and vegetables, especially raw ones as they contain antioxidants, which donate electrons to the body for healing, while reducing inflammation. An **Antioxidant Blend** of some type may also be helpful.

Electrical Stimulation for Pain

Acidic tissues are lacking in electrons, which can be supplied by using electrical currents. Many devices now exist which apply microcurrents to damaged and/or painful areas of the body. Many such devices are even FDA approved for pain relief as there is ample research to show that microcurrents stimulate tissue healing as well as reduce pain. This field of energy medicine holds a lot of promise as a drug-free way to relieve pain.

Becoming Drug Free and Pain Free

Given their addictive nature, it's best wherever possible to avoid opioids and use some of these natural approaches instead. And, always remember that pain is a signal something in the body is damaged. The suggestions found in this newsletter are only a starting place. Ultimately, whatever you can do to help the body heal will ease pain.