# Opioids Vs Natural Solutions

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Shelton Chiropractic, 13931 Gold Circle, Omaha, NE 68144
WiseHealingsbyDesign.com/Chiropractic dale@shelchiro.omhcoxmail.com 402-334-1500

"Overall, the results indicate that the medical profession is doing a poor job of appropriately prescribing opioid painkillers. Even though the rates have leveled off, we have a long way to go in improving medical care so these are not as overprescribed as they are currently ... [T]here are a lot of leftover medications. In many cases, physicians could write smaller prescriptions, or avoid them completely for those who benefit from ibuprofen or acetaminophen."

Dr. Wilson Compton, Deputy Director of the National Institute on Drug Abuse (1)

Prescription opioids are medications that are typically prescribed by dentists, family doctors and hospitals as a response to acute pain. The medication is only supposed to be used for a short period of time, but studies have found those who are prescribed opioids can take them from 2 weeks to 10 years or more. Opioids are chemically similar to endorphins, which is a substance our body makes naturally to relieve pain. Opioids can be made naturally from plants, be a blend of natural and synthetic compounds or completely synthetic.

#### **How do Opioids Affect the Brain?**

Opioids attach themselves to receptors in the brain. The chemical structure of opioids mimics our natural neurotransmitter. With the two being very similar, the body is unfortunately fooled into locking the opioid into a receptor site which activates the nerve cells. Once the opioid is attached into place, the body starts to experience what is known as the "Opioid effect". This is where the body starts to slow down breathing rates, reduces or blocks pain and creates an overall calming effect. (7)

Opioids also target our body's reward system. Opioids open the flood gates and overwhelm the circuit with dopamine. Dopamine is a neurotransmitter located in parts of the brain that help with emotion, cogitation, motivation, and feelings of pleasure. This constant overstimulation of our rewarding system leads to an increase of misuse and addiction to opioid medication. <sup>(7)</sup> An article posted in the CBS news in June 2017 stated the alarming fact that opioid overdoses are the leading cause of deaths in Americans under the age of 50. <sup>(8)</sup>

## Are there Side Effects of taking Opioids?

Some of the most common side effects of taking opioids include: constipation, itch, low blood pressure, excessive constriction of the pupil of the eye (miosis), nausea, sedation, urinary retention and suppressed respiration.

# **Natural Nondrug Solutions for Pain Relief**

## **Reduce Sugar in the Daily Diet**

Sugar consumption has a direct correlation to inflammation. A rise in blood sugar causes a cascade of events which includes the release of inflammatory chemicals. There are multiple inflammatory chemicals released, including histamines, prostaglandins and interleukins.

These inflammatory chemicals cause an internal response that requires the immune system to step in and respond to the cleanup process. Elevated levels of inflammation dramatically accelerate degeneration in the body and can lead to a host of cell damaging diseases that greatly reduces longevity. (2)

## Take a High Quality Animal- Based Omega 3 Fats:

Omega- 3 fats block the chain of events that cause inflammation and regulate the migration of inflammatory cells and chemicals to the sites of inflammation. Consumption of Omega 3 fats are found in dark green leafy vegetables, flaxseed, walnuts, butternuts, salmon, halibut, tuna, and avocados. By taking the natural route, one is unlikely to experience the side effects of gastro-intestinal or cardiovascular systems mentioned before that are common when taking anti-inflammatory drugs. (3,4)

#### **Supplement with Bromelain:**

Bromelain is an enzyme found in pineapples. Although mostly used as a digestive aid, it has been linked to analgesic properties which have been documented to have influence on pain mediators such as bradykinin. (6) Bromelain accounts for many therapeutic benefits like the treatment of angina pectoris, bronchitis, sinusitis, surgical trauma, and thrombophlebitis, debridement of wounds, and enhanced absorption of drugs, particularly antibiotics. It also relieves osteoarthritis, diarrhea, and various cardiovascular disorders. (5)

## **Supplement with Curcumin:**

The anti-inflammatory properties of Curcumin has been shown to help with Osteoarthritis. Curcumin inhibits multiple pro-inflammatory molecules such as cytokines and prostaglandins. The effects of curcumin have been documented in many clinical trials demonstrating its ability to prevent or reduce cellular death and oxidative stress. (9) Clinical trial dosages between 200mg-3,000mg for curcumin have shown benefits depending on the case. It is important to talk to a physician about appropriate dosage per case.

## **Importance of Vitamin D**

Vitamin D is an important vitamin in the body that helps the absorption of essential vitamins and minerals necessary for overall bone and muscle health. (11) Levels less than 32 ng/mL have been shown to reduce intestinal calcium absorption, reduced bone density, reduced immune system, increased insulin resistance and risk of many types of cancer. Sources of vitamin D include sun exposure, food intake and dietary supplement of Vitamin D3.

#### Vitamin C

A study was conducted by Dr. Zollinger et al, in a double blind random study with participants with reflex sympathetic dystrophy post wrist fractures. Vitamin C was given pre-surgery and demonstrated no reports of reflex sympathetic dystrophy. The participants were given a daily dosage of 500mg 2 days prior to surgery and continued with vitamin C 7-week post-surgery.

Vitamin C is considered an anti-oxidant and is needed to manufacture collagen and work with the immune system. Collagen is needed to support the connective tissue, tendons and cartilage. It is also needed to prevent poor wound healing and supports healthy gums. (14)

#### What to do now?

It is important to meet with a qualified clinical nutritionist to review your personal health information to determine proper supplements and dietary recommendations. At our practice, we use a complement of diagnostic testing to put together a natural health plan to address your individual needs. Contact our office today to see how we can help!

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