THE ENDORPHIN SOLUTION

A Natural Way to Calm, Comfort, and Well Being

OVERVIEW

The opium poppy plant has been used for centuries to create potent pain and stress relieving elixirs. However, over time, the dangers of opioid drugs, such as morphine, became dramatically clear, including the risk of tolerance, dependence, addiction, and death. Given their remarkable benefits as well as their serious liabilities, opioids have been the subject of extensive research. Over 35 years ago, Drs. Candace Pert and Eric Simon discovered the specific receptors in the nervous system that bind to opioids. It did not take long for Drs. John Hughes and Hans Kosterlitz to demonstrate that the body contains its own endogenous opioids that naturally activate opioid receptors in the same way as exogenous opioids, such as morphine. Dr. Eric Simon[1] coined the term endorphin to describe this “endogenous morphine,” which Candace Pert referred to as the “molecules of emotion.”

Ever since these discoveries, the world has been actively searching for ways to effectively tap the power of endorphins, the body’s own natural pain and stress relieving biochemicals. While well-known for their ability to create a sense of calm and well being, from “runner’s high” to “meditator’s tranquility”, there has been little progress made, until now, in discovering how to safely and effectively regulate these endogenous opioids, endorphins, to naturally reduce emotional and physical pain and distress, rather than rely on exogenous opioid drugs, such as morphine and oxycodone, with their notorious risks and side effects.

This is the story of Dr. Stanley Crain’s relentless quest to solve this mystery, leading to the Endorphin Solution. Through decades of research as a Neuroscience professor at Albert Einstein College of Medicine, Dr. Crain made a paradigm-changing breakthrough when he and his assistant, Dr. Ke-Fei Shen, discovered the “bimodal” (excitatory/inhibitory) properties of opioid receptors, which has become the key to unlocking the power of endorphins. Following this discovery, Dr. Crain was able to develop a method to reduce many of the dangerous side effects of opioid drugs by co-treating them with specific pharmaceutical agents that rebalance opioid receptor signaling, such as ultra-low-dose naltrexone (ULDN), an opioid formulation that has been used successfully in FDA-approved clinical trials (Webster et al, J. Pain, 2006).

However, Dr. Crain was not content to simply create a better narcotic opioid drug, since his ultimate vision was to unleash the natural analgesic potency of endogenous opioids. With his novel understanding of endorphins and opioid receptors, Dr. Crain combined specific agents that enhance endorphin levels with agents that rebalance opioid receptors. The synergistic effect of this formulation was to dramatically enhance the pain relieving effectiveness of endogenous opioids, endorphins, without exogenous opioids. These non-opioid formulations were successful in animal pain studies and published in Brain Research (2008).
Towards translating these preclinical endorphin studies to clinical applications, Dr. Crain joined with his psychotherapist son, Dr. Steven Crain to conduct human cold pressor induced pain trials to test these novel methods for pain relief. It rapidly became clear that by enhancing and balancing the endorphin systems, they had discovered methods to not only reduce aches and pains, but to enhance a sense of calm, comfort, well being, and positive mood. They realized that many emotional and physical distress conditions, including anxieties, addictions, and pain, are caused by depleted endorphins and unbalanced opioid receptors. From these exciting discoveries, they developed a more fundamental understanding of the function and regulation of the endogenous opioid system.

In a search for the safest and most natural methods to enhance and balance the endorphin and related neurotransmitter systems, Drs. Crain were able to identify natural products, including herbs and amino acids, that have been used safely for decades and have pharmacologic properties similar to the drugs used in the original preclinical and clinical studies. Several hundred individuals have used these nutraceutical formulations in order to help them reduce aches and pain, anxieties, and addictions. By simply and naturally bringing balance to the endorphin system, normal cognitive, emotional, and pain functions are maintained, allowing the individual to respond more effectively to stressful and even painful situations, with an underlying sense of calm, comfort, well being, and positive mood.

This is their story, bringing together the laboratory and the psychotherapy couch, to find the Endorphin Solution – using scientifically formulated combinations of health-promoting natural plant extracts, amino acids (and metabolites), minerals, and vitamins to enhance and rebalance the endogenous opioid system. Their nutraceutical development program at Pondera Pharmaceuticals has recently released Endorphinate®, which uses the body’s own endorphins to help bring emotional and physical relief and support the path toward a world of calm, comfort, well being, and happiness. Just as the discovery of SSRIs transformed the world of depression by rebalancing serotonin, these revolutionary discoveries may help to enhance and rebalance neurotransmitters even more central to physical and emotional pain and distress – endorphins.

[1] Dr. Simon is a member of the Pondera Scientific Advisory Board.