

## The Benefits of Microcurrents on Insomnia

### What is Insomnia?

Insomnia is characterized by difficulty falling and/or staying asleep. There are different causes of insomnia, including stress, illness, depression, lack of exercise, and many more. The Centre for Disease Control and Prevention defines it as a public health problem with an estimated 50-70 million adults in the United States having sleep or wakefulness disorder.<sup>1</sup> This problem is realized when you consider that the average adult needs 7-8 hours of sleep a night, and 30% of adults in the US get less than 6 hours of sleep per night.<sup>1</sup>

### How Microcurrent Therapy Can Help

Microcurrents have been well studied in their effects on insomnia. Cranial electrotherapy stimulation (CES) uses microcurrents to treat insomnia, and this method became FDA approved in 1979.<sup>2</sup> A study by Feusner *et al.* (2012) showed that 'relatively small perturbations in brain oscillation patterns may cause significant changes in brain activity and within intrinsic connectivity networks.'<sup>2</sup>

Another study by Rose *et al.* (2008) showed "CES therapy... affects the neurotransmitters, namely, serotonin, norepinephrine, and dopamine, which have been shown to influence the development of sleep disturbances and depressive symptoms."<sup>3</sup>

Microcurrents, when applied at the correct frequencies, can be used to aid the brain in falling into deep, uninterrupted sleep. Furthermore, microcurrents allow the body to achieve deep sleep *naturally*, compared to pharmaceuticals which tend to sedate the brain and cause the brain to fall out of its normal night time cycles.

### Cell MedX

Cell MedX has developed a state of the art microcurrent therapy device called the ebalance Pro. Using unique software, the ebalance Pro is able to read the body and use this information to emit electrical frequencies best suited to specific issues in different areas of the body. The treatment is completely non-invasive, has no known negative side effects, and is potentially useful in helping treat an array of ailments including diabetes, Parkinson's disease, high blood pressure, insomnia, edema, and different neuropathies.

### References

- 1) Centre for Disease Control (2015). *Insufficient sleep is a public health problem*. Retrieved from: <http://www.cdc.gov/features/dssleep/index.html#References>
- 2) Feusner, James *et al.* (2012). *Effects of cranial electrotherapy stimulation on resting state brain activity*. Brain Behavior; 2(3): 211-220.
- 3) Rose, Karen (2008). *Cranial Electrical Stimulation Potential Use in Reducing Sleep and Mood Disturbances in Persons With Dementia and Their Family Caregivers*. Family Community Health; 31(3): 240-246.