

*The Cannabis Papers:  
A citizen's guide to cannabinoids (2011)  
By Publius*

#9

To sleep, perchance to dream –

*Shakespeare*

Doctors and poets agree to the necessary role of sleep and dreams to our health. Common sense suggests that they are essential to the human experience. This is confirmed by research which shows that sleep reduces stress, improves alertness and memory, helps repair the body, and restores one's spirit.

Our 24-hour culture is a challenge to the natural rhythms of our sleep-wake cycle, making it difficult to slow down and rest. This creates many sleep disorders. Most conventional sleep aids, prescription and non-prescription, are fraught with problems. Some are simply ineffective while others create dependency. This is because they miss the mark. They are not cannabinoid-based and do not activate the body's own sleep aid – the ECS.

***“Oh sleep, o gentle sleep,  
Nature's soft nurse,  
How have I frighted thee,  
That thou no more wilt weigh my eyelids down  
And steep my senses in forgetfulness?”***

There's the rub. Nature already provided us with a sleep aid – endocannabinoids and retrograde signaling. Once this system is activated, sleep can begin. My personal experience with sleep problems isn't uncommon. The use of cannabis to activate “Nature's soft nurse” eased the transition between consciousness and sleep.

Many people use cannabis for better quality sleep. They also report that the sleep experience is effective. This contrasts with the pharmaceuticals and their reported side effects – things like dizziness, symptoms of the common cold, and morning drowsiness. Nor do cannabinoids lead to frightening experiences of extended sleep walking or even more dangerously, to sleep driving. The intense desire for a normal night's rest makes people willing to endure such extreme side effects.

***“Weary with toil,  
I haste to my bed,  
The dear repose for limbs with travel tired,  
But then begins a journey in my head,***

***To work my mind when body's work's expired.”***

The research on sleep and cannabinoids is more promising. The Chemistry & Biodiversity Journal reported in 2007 that patients given cannabis extracts experienced more restful sleep, an increase in their daytime level of function, and an improved quality of life. This study of 2,000 patients using a cannabinoid medicine found “marked improvement in subjective sleep parameters.”

Americans spend nearly \$3 billion annually on sleep medications. Millions more are spent selling pharmaceuticals to us. Our government has noticed. The National Institutes of Health (NIH) is calling for more research into insomnia and its treatments. Many drugs taken for insomnia have not been tested for long-term use, even though patients tend to take them for years. Furthermore, according to a recent NIH report, some commonly used treatments for sleeplessness — including antidepressants and antihistamines — are not approved for insomnia.

***“The pangs of despised love,  
The law's delay,  
The insolence of office,  
And the spurns that patient merit . . .”***

More severe sleep disorders than insomnia exist. Sleep apnea is a disorder that affects 12 million Americans. It is characterized by frequent interruptions in breathing of up to ten seconds or more during sleep. The condition is associated with numerous physiological disorders, including fatigue, high blood pressure, heart attack, stroke and death.

Several years ago, in 2002, the Journal of the American Academy of Sleep Medicine reported beneficial results for cannabinoids on sleep-related apnea. Researchers at the University of Illinois-Chicago reported “potent suppression” of sleep-related apnea in rats given cannabinoids. They found that the herbal cannabinoid delta-9-THC and the endocannabinoid oleamide each stabilized respiration during sleep.

A 2008 review made it clear: “The activation of the CB1 receptor leads to an induction of sleep.”

***“When day's oppression is not eased by night,  
But day by night and night by day oppressed,”***

Recent research continues to confirm the relationship between cannabinoids and sleep. Talk to cannabis consumers about the quality of their sleep and you'll often hear positive responses. Anecdotally, I can attest to that. But then all good sleep is anecdotal. Just think of a friend “oppressed” from a sleep disorder, and imagine the relief a cannabis cookie could do before bedtime.

***“To be or not to be –  
That is the question:  
Whether ‘tis nobler in the mind to suffer  
The slings and arrows of outrageous fortune,  
Or to take arms against a sea of troubles  
And, by opposing, end them.”***

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### ***Search terms***

Oleamide; sleep regulation and CB1 receptor; sleep apnea and CBs; Shakespeare and cannabis; sleep-wake cycle; Dale Boger; Eric Murillo-Rodriguez; Ethan Russo.

### ***Research and selected readings***

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