



To: Michael Tyrrell

Date: May 6, 2019

Study Title: Efficacy of Wholetones® 2Sleep Music on Sleep and Health Behaviors of Adults with Insomnia Symptoms: A Single Blind, Randomized, Controlled, Crossover Trial

RE: Revised Summary of the Study Findings (with references to the Full Report)

The purpose of this trial was to examine the efficacy of listening to Wholetones® 2Sleep Music and Classical Music 30 minutes before bedtime on people's sleep quality (using both self-report and objective sleep measures) and its resulting daytime effects.

In summary, listening to Wholetones® 2Sleep Music resulted in statistically significant improvements in sleep quality and daytime mood, fatigue levels, stress, anxiety, and productivity. Wholetones® 2Sleep Music outperformed Classical Music (prior research has found classical music to be most beneficial genre for sleep and health) on several measures indicating that Wholetones is more enjoyable and has better improvements on several sleep quality and mood assessments compared to Classical Music. In short, **listening to Wholetones® 2Sleep music before nighttime sleep is a simple and effective way to improve sleep quality and daytime mood and productivity.**

The following specific claims about Wholetones® 2Sleep can be substantiated by the results of this clinical trial [[please see the Tables referenced in the Full Report for verification](#)]:

- While listening to Wholetones® 2Sleep Music **100%** of the participants reported improvements in at least one sleep quality item compared to the control condition with no music [[refer to Table 13](#)]
 - Interpretation: All participants sleep quality improved when listening to Wholetones vs control with no music
- 66% (about 2/3) of the participants' ability to fall asleep within 30 minutes of going to bed improved when listening to Wholetones compared to control with no music [[refer to Table 13](#)]
 - Interpretation: 66% of the participants fell asleep faster when listening to Wholetones vs control with no music
- 61% of participants slept longer with Wholetones vs control with no music [[refer to Table 13](#)]



- 58% of people were less likely to wake up in the middle of the night or early morning while listening to the Wholetones compared to control with no music [\[refer to Table 13\]](#)
- 55% had less depression feelings (e.g., felt less sad, blue, hopeless) following listening to Wholetones compared to control with no music [\[refer to Table 14\]](#)
- 53% had more daytime energy/vigor (e.g., felt more lively, active, energetic) following listening to Wholetones compared to control with no music [\[refer to Table 14\]](#)
- 58% had improved focus/thinking/cognition (e.g., felt less confused, concentration improved, clarity/focus improved) following listening to Wholetones compared to control with no music [\[refer to Table 14\]](#)
- 68% were less tense (e.g., felt less tense, shaky, on edge) following listening to Wholetones compared to control with no music [\[refer to Table 14\]](#)
- 79% were in a better mood following listening to Wholetones compared to control with no music [\[refer to Table 14\]](#)
- 50% were less anxious following listening to Wholetones compared to control with no music [\[refer to Table 14\]](#)
- 66% were less stressed following listening to Wholetones compared to control with no music [\[refer to Table 14\]](#)
- 61% had less daytime fatigued following listening to Wholetones compared to control with no music [\[refer to Table 14\]](#)
- 61% reported sleeping longer while listening to Wholetones compared to control with no music [\[refer to Table 13\]](#)
- 45% spent more time in REM sleep following listening to Wholetones compared to control with no music [\[refer to Table 9\]](#)
- 55% spent more time in deep sleep following listening to Wholetones compared to control with no music [\[refer to Table 9\]](#)
- 69% had improved Integrated Sleep Recovery which means their sleep was more restful and they had more efficient sleep compared to control with no music [\[refer to Table 9\]](#)



JACKSONVILLE UNIVERSITY

BROOKS REHABILITATION
COLLEGE OF HEALTHCARE SCIENCES

Sincerely,

Heather Hausenblas

Heather Hausenblas, PhD

Professor, Kinesiology

Co-Director for the Center for Health and Human Performance