

How to Get High Off of Exercise

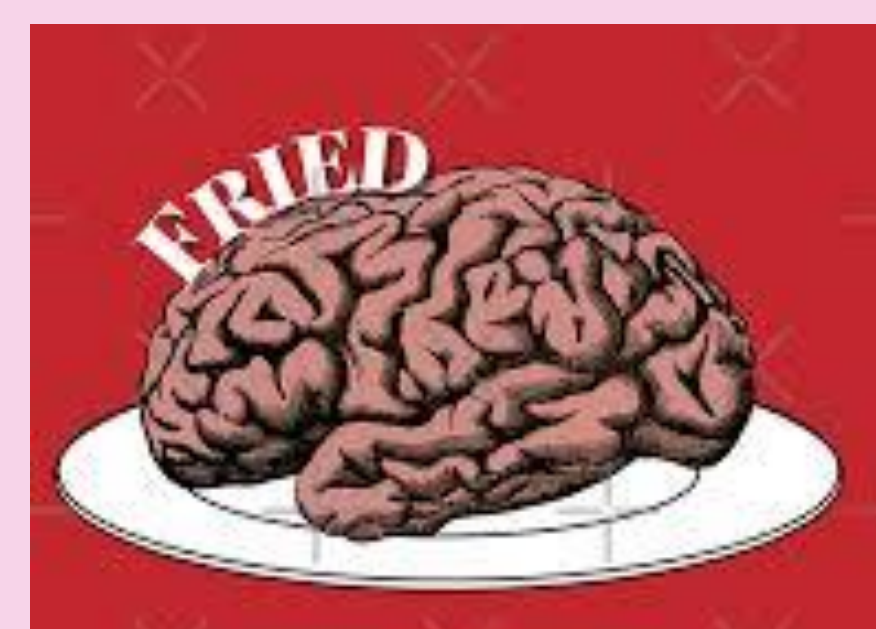
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Introduction:

- Substance use disorders (SUDs) affected nearly 50 million americans in 2024 (American Addiction Centers, 2025)
- Exercise has been shown to be a practical adjunctive treatment for SUDs (Marrero-Cristobal et al., 2021, Ellingsen et al., 2021, Wang et al., 2014)
- The main methods used to treat SUDs are drug replacement therapy and psychoeducation.

Methods+References:

- Google scholar was used my search terms included:
- SUD plus exercise
- resistance training+SUD
- aerobic exercise effects on SUD
- SUD+exercise randomly controlled trial



<https://www.redbubble.com/sticker/Your-brain-on-drugs-by-Gabymelara/31776959/7306>

Mind Body Exercises:

- Improves quality of life (mental health, blood pressure decreases, flexibility, and resting heart rate)
- Qi gong improved respiratory function and also served to increase mindfulness.(Zhu et al., 2020)

Figure 1. Changes in V/M ratio Unhjem et al., 2016

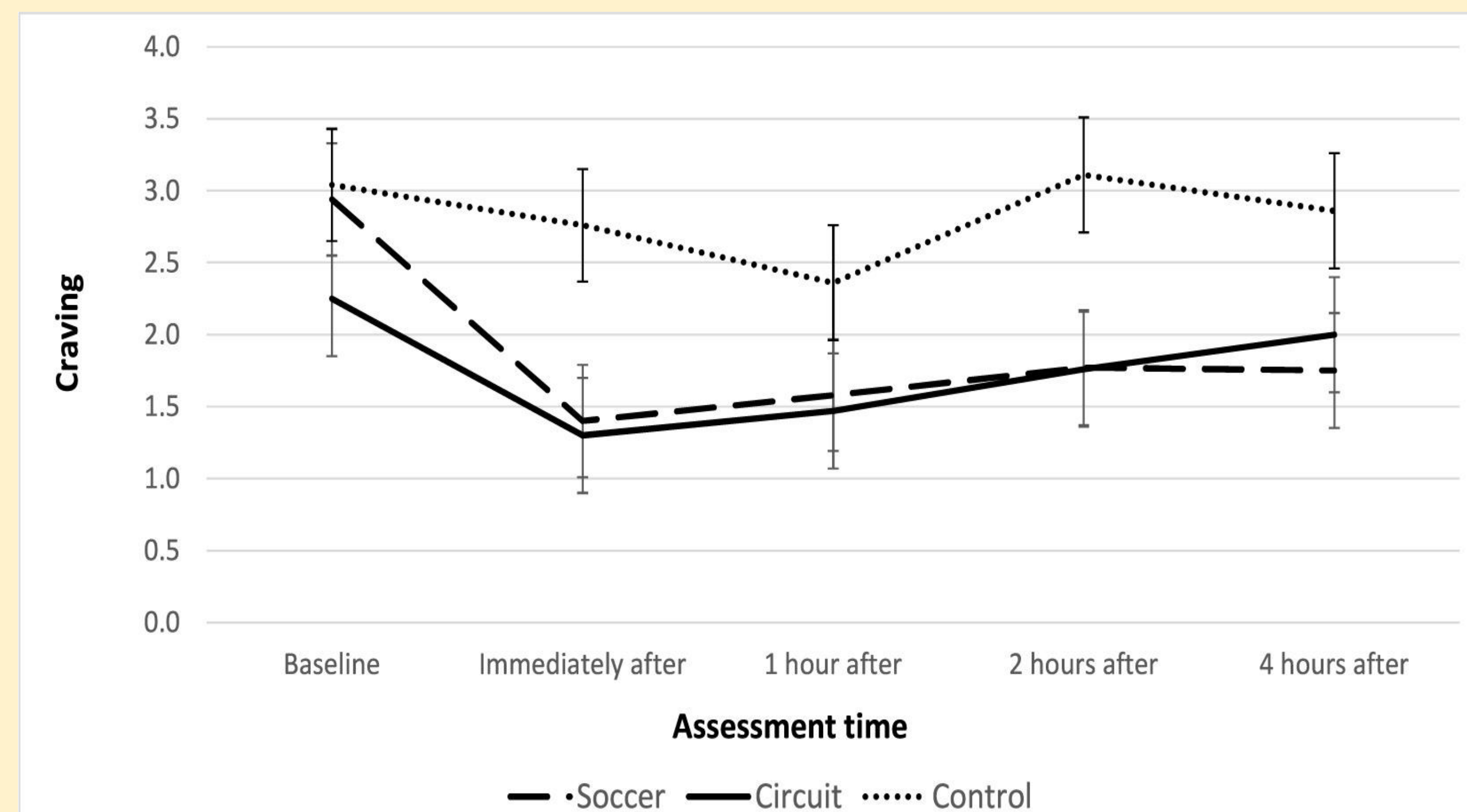
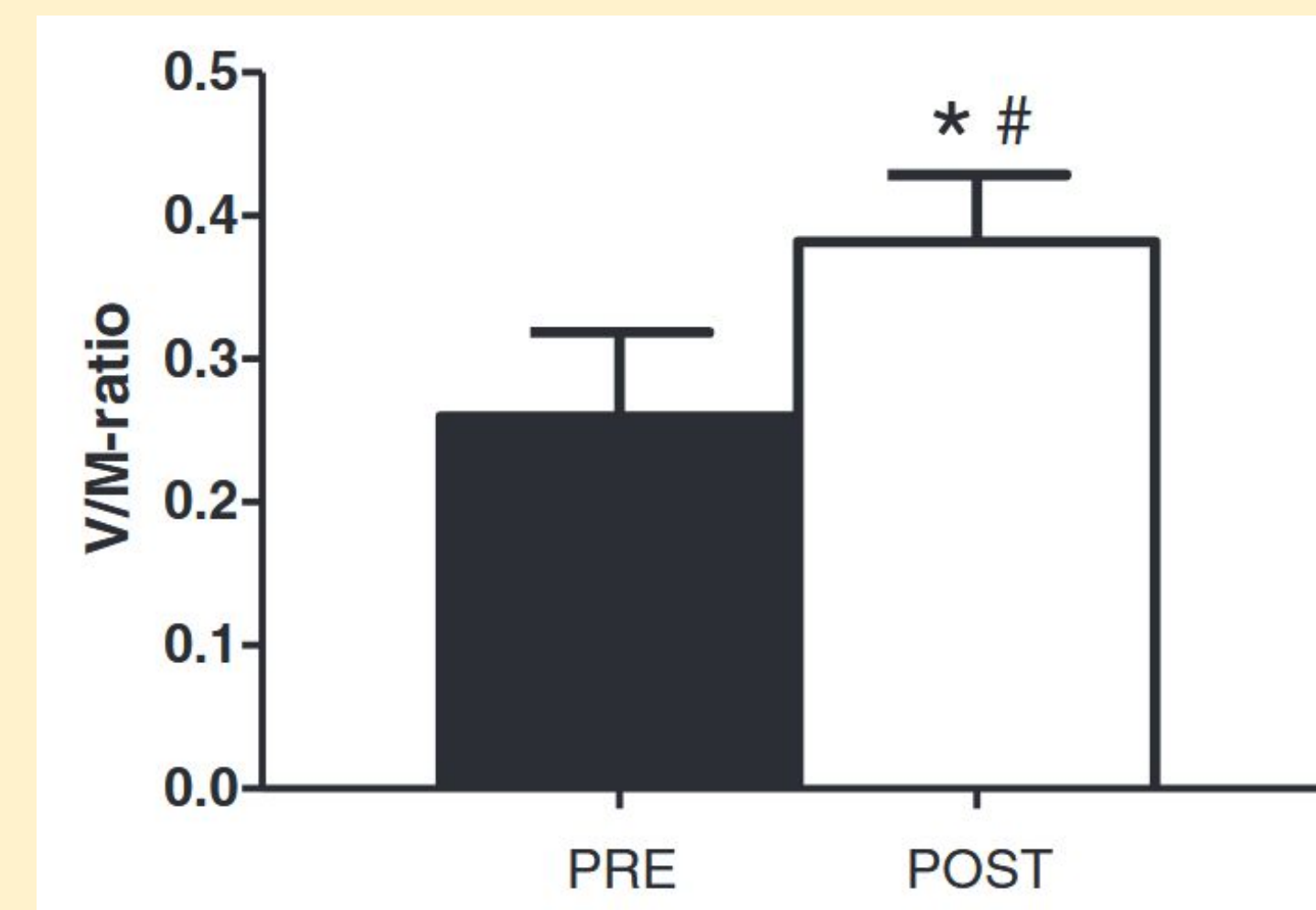


Figure 2. Assessments of craving level at certain times. Ellingsen et al., 2021

Resistance Training:

- Improves quality of life (mental health, bone density, ↑FFM, neural adaptations, sleep, etc)
- Neural adaptations made during resistance training can help reverse damage done to the same pathways from substance abuse.(Unhjem et al., 2016, Wang et al., 2014)
- Circuit training lead to a reduction in craving and mood elevation for individuals with poly-SUDs(Ellingsen et al., 2021)



Figure 3. Changes induced by resistance training that decrease chances of relapse. Davidson et al., 2025

Aerobic Exercise:

- Accesses the mesocorticolimbic dopamine system similarly to illicit substances(Marrero-Cristobal et al., 2021, Wang et al., 2014)
- Improves quality of life (mental health, cardiorespiratory fitness, resting heart rate, blood pressure decreases, blood glucose levels, HDL increases, sleep, etc)
- Many forms and intensities of aerobic exercise attenuate withdrawal symptoms, anxiety, craving level, and depression for those with SUDs.(Wang et al., 2014, Allen et al., 2018, Nazmin et al., 2024, Marrero-Cristobal et al., 2021)

Conclusion:

- Many forms of exercise have been shown to ameliorate withdrawal symptoms, cravings, and improve mood for those with SUDs
- Aerobic exercise has been shown to have more of a lasting effect on mood, craving level, and withdrawal symptoms
- I would like to see more research with higher sample sizes and with adolescents