**Sierra R Post to week 2 discussion 1**

Alcohol and caffeine affect the body completely differently. Alcohol is absorbed through the gastrointestinal tract, which includes the stomach lining and the upper intestine. The liver metabolizes most of the drinks placed in a person's body at roughly 85 percent (Advokat et al., 2018).   Alcohol affects the central nervous system. Ethanol is an inhibitor of glutamate receptors. The ethanol inhibition of glutamate receptors is restricted in the hippocampus, amygdala, and the striatum when alcohol is consumed (Advokat et al., 2018). Changing the receptors in the brain will change the behavior of a person. The GABAA receptor allows ethanol to bind to it and activate an increase in chloride iron flow in the nervous system, stimulate behaviors such as muscle relaxation, sedation, impairment of motor skills, and cognition (Advokat et al., 2018). Consuming alcohol reduces the ability to think clearly. Alcohol is not used to treat overdoses or addictions because alcohol drops respirations and heart rates to a deadly low by itself and mixed with other medications; it can kill individuals.

Caffeine has an entirely different effect on the body. Caffeine is adsorbed within minutes of digestion. Two significant metabolites of caffeine are paraxanthine and theophylline (Advokat et al., 2018). Caffeine is also metabolized in the liver by the CYP-1A2 enzymes. Individuals that take SSRI antidepressants that are potent inhibitors of CYP-1A2 can exhibit toxicity to caffeine or intolerance to caffeine (Advokat et al., 2018). Caffeine can be beneficial, or it can be harmful. When caffeine is being mixed with other drugs such as alcohol, it can start to cause complications. Drinking caffeine from coffee can reduce many health concerns that individuals have in society. Caffeine is not used to treat overdose or addiction because it can be lethal in a small dose in short periods; roughly 3 grams of caffeine in a short period can be fatal to someone (Advokat et al., 2018). Massive consumption of caffeine can cause insomnia and anxiety. Alcohol nor caffeine are used to treat drug overdose nor addiction.

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Advokat, C. D., Comaty, J. E., & Julien, R. M. (2018). [Julien's primer of drug action: A comprehensive guide to the actions, uses, and side effects of psychoactive drugs](https://ashford.instructure.com/courses/75300/modules/items/3809146) (14th ed.). Retrieved from [https://vitalsource.com (Links to an external site.)](https://vitalsource.com/)