Additional Data

**Research question: What is the relationship between a person’s caffeine intake and their energy level during the day?**

The Food and Drug Administration (FDA) [considers caffeine](http://www.fda.gov/downloads/UCM200805.pdf) to be both a drug and a food additive. They recommend a maximum intake of 400 mg a day which is around 4 average-sized cups per day (WEBMD,2021). Caffeine is a stimulant. In the brain, it blocks the effects of a chemical called [adenosine](https://www.webmd.com/vitamins/ai/ingredientmono-1067/adenosine), which makes you feel sleepy. You then feel more alert and energetic, which is why many people drink coffee or tea to stay awake.

Humans typically start to feel the effects of caffeine [within 5-30 minutes](https://www.betterhealth.vic.gov.au/health/healthyliving/caffeine) of drinking it, and the effects can last for up to 12 hours. Like many drugs, it is possible to become dependent on caffeine. If you miss out on your usual coffee, you might start to feel the symptoms of [caffeine withdrawal](https://theconversation.com/health-check-why-do-i-get-a-headache-when-i-havent-had-my-coffee-100163), including headaches, irritability, tiredness, and muscle pain. A habitual coffee drinker who stops drinking it altogether might find these symptoms last for up to a week ([Queensland](https://www.qld.gov.au/) Health, 2019).

Therefore, I was interested in collecting additional data about the caffein intake during an activity and how it effects their energy level as one starts to feel their effect very quickly according to research.