

How Does Caffeine Affect Heart Rate?

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Have you ever wondered how a morning coffee is actually working to wake you up? Or what about that pepsi everyday at work? It is often thought that a dose of caffeine will wake you right up, and get your heart going, but how much do you really need before it starts working that way? We decided to look further into the question of how caffeine really does affect your heart. The way we carried out this experiment was by using Daphnia (water fleas). We took different dilutions of caffeine that are equivalent to the amount of caffeine in every-day caffeinated drinks. We tested the control heart rate, then the heart with each dilution of caffeine. After taking the differences between the control and caffeinated heart rates, we analyzed the data, and found that a drink as small as a coffee or a soda really does not alter the heart rate all that much, but for the heart rate to be changed drastically, a person would need to drink something as caffeinated as an energy shot.

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