Utsav: Intro

Anusha: Intro

Utsav: Our project is “Blood Alcohol Content and Food Model Comparison.” We model food consumption alongside alcohol intake to find out the impact of eating on Blood Alcohol Concentration.

Anusha: We are using our one-compartment model as a baseline here. The one-compartment model is a “bag of blood” model that implements alcohol and food intake instantaneously in the body. The effectiveness of this model will be compared to the three compartment model, which is just a fancy way of representing the actual blood processing that happens in our body. After being ingested, the alcohol is processed by the stomach and the small intestine and then gets absorbed into the bloodstream. The BAC at that point also depends on the lean body mass of the person.

Utsav: Here, we are trying to answer the following question about BAC:

1. How does eating impact theoretical Blood Alcohol Concentration (BAC)?
2. How much food consumption “balances” *n* drinks?
3. How do both models compare?