When it comes to sex and alcohol consumption, unfortunately, there is no sex equity. Due to physiological difference between the sexes, biologically born females will get intoxicated quicker than males. One reason is that males and females have different body water content. On average, males are approximately 68% water and women are 55%. Males tend to have more muscle tissue than women. Muscle tissues have more water than fat tissues do. Females simply have less body fluid to dilute alcohol. Another reason is that biologically born females have 30% less of the liver enzyme, alcohol dehydrogenase (ADH) which is responsible for metabolizing alcohol. The final reason for inequity is that biological males tend to weigh more than females.

So what does this mean for male to female (MTF) and female to male (FTM) transgender students? This writer could not find any research on this specific topic (I see a thesis paper in someone’s future), but I was able to consult with endocrinologist, Mitchell Parker, MD. Those who hormonally transition from female to male will see a decrease in adipose tissue, an increase in muscle mass, and therefore more body fluid. This should make their BAC levels increase slower than they would have before they transitioned. But, their bodies will not produce more ADH. For those who transition from male to female, it follows that they would still have the benefit of producing ADH like they did when they were male. However, they would be more at risk for quicker and higher BAC levels because of a decrease in muscle mass and an increase in adipose tissue. The greater factor, according to Dr. Parker, is ADH, which remains a factor of the genetic sex as well (though currently, there is no empirical evidence to support this).

I’m telling you, grad students, this is your opportunity.

The take home message, whether one is born male or female, or transitions to another sex, is that there are biological, hormonal and chemical factors that one must consider to remain safer if you choose to drink alcohol.