

[illegible]

CORRECTED EQUATION USED	
Wilcox, M. V. et al. Repeated Binge-Like Ethanol Drinking Alters Ethanol Drinking Patterns and Depresses Striatal GABAergic Transmission. Neuropsychopharmacology 39, 579–594 (2014).	
ORIGINAL EQN:	PROBLEM: Values WAY too high for mice (in 10s of g/kg)
Vol 20% EtOH consumed (Vc) = ((W_final - W_initial) - W_waste) / (D20e) I(g/kg) = (Vc x De) / MouseWeight(kg)	ERROR IN EQUATION:; THEY DID NOT ACCOUNT FOR Vc of EtOH = Vc * 20%
CORRECTED EQUATION :	
I (g/kg) = (Vce x De) / MW Vce = (Wi - Wf [-Waste]) * D20e * 0.2	
FOR OUR EXPERIMENTS, WE CALCULATE Vc BASED ON # OF LICKS	OUR EQUATION (BASED ON # OF LICKS)
<u>20% EtOH Consumed (g) / # Licks</u> 0.002451353	Vce = (# of licks * g/Licks) * D20e * 0.2 Intake (g/kg) = (Vce X De) / Mw (kg)

***My Calculating g/kg Ethanol Intake from Grams of 20% EtOH Consumed**

CORRECT WAY TO CALCULATE INTAKE (G/KG)

- **ORIGINAL EQUATION:**
 - I(g/kg)= (Vc x De) / MW(in kg)
 - Intake = volume consumed(Vc) X density of ethanol(De) , divided by mouse weight(MW)(in kg)
 - Density of ethanol=0.789 g/ml
 - **Must first calculate Vc:**
 - Vc=(Wi-Wf [-Waste])*D20e
 - volume consumed = initial bottle weight - final weight -waste weight [if including in your eqn] * density of 20% ethanol
 - Density of 20% ethanol = 0.97336 g/ml
 - Vc is NOT the same value used in the Intake equation!
 - **Vce = volume consumed of ethanol (alone) = Vc X 0.2 (since 20% ethanol)**
- **CORRECTED EQUATION :**
 - I (g/kg) = (Vce x De)/MW
 - **Vce= (Wi-Wf [-Waste])*D20e*0.2**