H_0: Food makes no diff $\Rightarrow \mu_1 = \mu_2 = \mu_3$

H_1: ~~it does~~ reject H_0

$$\text{F-stat} = \frac{SSB/m-1}{SSW/[m(n-1)]} \leftarrow \text{chi distr} = 12$$

$\alpha = 10\%$

Look to F-Distn Table

$df_{num} = 2 = m-1$

$df_{den} = 6 = m(n-1)$

$$F_c = 3.46$$

$\frac{SSB}{m-1}$ has a Chi-distn

$\frac{SSW}{m(n-1)}$ has a Chi-distn

F-stat has an F-distn, F for Fischer

mean ~~total~~