Mean\_1 = 100

Std Deviation\_1 = 15

n = 36

Mean\_2 = 108

H0 = The cornstarch diet has no effect on glucose levels

H1 = The cornstarch diet has affected glucose levels

With mean as 100 and n as 36 and σ as 15, with 95% confidence interval, the mean lies between the following values:

α = 0.05

α/2 = 0.025

z0.025 = 1.96

σ = 15

n = 36

mean = mean ± zα/2

= 100 ± 1.96 \* (15 / sqrt(36)) = 100 ± 4.9

Lower confidence interval = 95.1

Upper confidence interval = 104.9

With 95% confidence, we can reject the null hypothesis.