MENDRAH

18.1 Mean of blood glucose levels $\mu = 100$
Std. deviation $\sigma = 15$
$n = 36$
Sample mean $\bar{x} = 108$

Null hypothesis Ho = Raw cornstarch had effect
Alternate hypothesis Ha = Raw cornstarch will not have effect

Assume confidence to be 95%. So Z value at 95% = 1.96 = Z critical value
Z for given sample value

$$Z = \frac{\bar{x} - \mu}{\sigma/\sqrt{n}} = \frac{108 - 100}{15/\sqrt{36}}$$

$$= \frac{8 \cdot 4}{15 \times 63}$$

$$Z = 14.61$$

Z calculated value > Z critical value.
Since $Z_{cal} > Z_{crit}$ there is enough proof that Ho is rejected. It means that $\mu \neq 100$ and hence Ha is accepted and conclusion is, "Diet including cornstarch increases blood glucose level."