

Descriptive Statistics: way to summarize data

mean is better term b/c we sometimes use "average" for norm

median=midpoint of data when ranged fr. smallest----->largest

mode=most common data point

in science, we do not usually use median or mode

range=gives us the lowest----->highest point

shows how wide-ranging the data is

excel gives data as 1 number, I would rather see the actual

range when you discuss the data, what is the lowest point, what is the highest point?

Heart Rate at Rest

Per G mean= range=

Per H mean= range=

Standard Deviation

also gives a range, but it shows where most of the data is found
 formula that gives indication of the spread or variability of the data
 it is calculated so that 68% of data lies w/in ± 1 SD from the mean

to calculate SD, you had to take each data point to see how it deviates
 (differs) from the mean

gives an idea of reliability of data

it is a reflection of how good, accurate, careful your methods were

a small SD is good, but it must be looked at in terms of the mean

heart rate data at rest

Per G	range=	mean=	SD=
Per H	range=	mean=	SD=

95% Confidence Interval

gives info about the true mean

what is the true mean? if we sampled every 16-17 yr old female in the world, we could find the true mean

but that is impossible, instead, we sample populations to get a mean
the 95% confidence interval is a statistical formula that says there is a 95% probability that the true mean lies within ± 1 CI from the mean

we use this info to tell us if one data set is significantly different from another one

if the CI range overlaps, then the true mean could be the same
if it does not overlap, the true mean is different (95% chance)

heart rate at rest

Per G	mean=	95%CI=
Per H	mean=	95%CI=