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Biostatistics
MIDTERMS Part 2

1. Is there a significant difference between the weight results before applying the capsule vitamins? Variables: Weight Before (between 50-70kg) Weight After (between 70-100kg)

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Weight_Before - WeightAfter1	-24.855	11.044	.781	-26.395	-23.315	-31.827	199	5.241E-80

Ho=There is no significant difference between the before and after weight of the patients prior to applying capsule vitamins.

A paired T-test was conducted to compare the weight of selected patients before and after taking the capsule vitamins in NCR. Analysis revealed that *there is a significant difference* in the weight of the patients before and after taking the vitamins as shown on the computed alpha of 5.241E-80, which is lower than the critical value of 0.05, suggesting to reject the null hypothesis. The results merely indicate that the capsule vitamins provided by healthcare officials have been successful in increasing the appetite of the patients, leading to a gain in weight.

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2. Is there a significant difference between the weight of the patient (after taking the drug) when grouped by location?
Variables: Weight After (between 70-100kg - same as number 1), Location (Manila, Mandaluyong, Makati, Taguig)

ANOVA

WeightAfter1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	263.941	3	87.980	1.286	.280
Within Groups	13410.214	196	68.419		
Total	13674.155	199			

Ho=There is no significant difference between patients' weight after taking the drug and their location in NCR

An ANOVA test was conducted to compare the weight of the selected patients after taking the vitamins in NCR when grouped according to their location. Analysis revealed that *there is no significant difference* in the weight of the patients after taking the vitamins when grouped according to their location as shown by the computed alpha of 0.28, which is higher

than the critical value of 0.05, suggesting to reject the null hypothesis. The results merely indicate that the weight of the patients after taking the vitamins, if the location is the main concern, will not yield any differences. This concludes that the location of the patients is not significantly associated with their weight after taking the vitamins.

3. Is there a significant difference between drug 1 and drug 2 effects in weight?
Variables: Drug 1 weight and Drug 2 weight (between 50 and 110kg)

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	WeightAfter1 - WeightAfter2	5.780	20.608	1.457	2.906	8.654	3.966	199	0.000102

Ho= There is no significant difference between the effects in weight of Drug 1 (Weight after applying capsule vitamins) and Drug 2

A paired T-test was conducted to compare the weight of selected patients after taking capsule vitamin 1 and capsule vitamin 2 in NCR. Analysis revealed that ***there is a significant difference*** in the weight of the patients after taking vitamins 1 and 2 as shown on the computed alpha of 0.000102, which is lower than the critical value of 0.05, suggesting to reject the null hypothesis.. The results merely indicate that the capsule vitamins 1 and 2 provided by healthcare officials have varying effects on the patient's weight.