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RELATION OF BLOOD GLUCOSE LEVEL TO CHEEK DIMPLES

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ABSTRACT

The goal of current study was to analyze the relation of blood glucose level to dimples. Blood sugar concentration is sugar or glucose amount present in blood. Normal blood glucose concentration during fasting hours is 79-110 mg/dl. Glucometer is a device used to measure blood glucose level. Dimple is a deformation of muscles in skin and cheek dimple appear face when we smile. It is due to the deformation in double zygomaticus major muscle. We check blood glucose level of subjects by glucometer after taking their blood samples in fasting conditions. Than we made a list of subjects with their blood glucose level and asked them whether they have dimples or not? Than we indicate either they have dimples or not after mentioning their blood glucose level. Almost 120 subjects involved in this activity. The subjects were students at Bahauddin Zakariya University Multan, Pakistan.

KEYWORDS

Cheek dimples, Blood glucose level, Dimples and Blood glucose level.

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INTRODUCTON

Blood sugar concentration is sugar or glucose amount present in blood. Human body regulates sugar level in the normal range for the proper functioning of the body because increase or decrease in sugar level can affect the other functions of the body. Glucose is the main source of energy for the human body, person with average weight of 70kg has about 4grams of sugar in the body. Glucose level is usually low in the fasting hours and increase with the food uptake. In our body insulin regulates the blood glucose level and glucose is transported to all other parts of the body via bloodstream. Glucose regulation can face two conditions, hyperglycemia and hypoglycemia, hyperglycemia defines the increase in blood glucose concentration and hypoglycemia defines the

decrease in blood glucose concentration. Diabetes mellitus is an example of hyperglycemia. Blood glucose concentration is measured in mg/dl. Normal blood glucose concentration during fasting hours is 79-110 mg/dl. Glucometer is a device used to measure blood glucose level. It consists of a needle pen, blood strips which contain glucose oxidase and a glucometer which interlinked with a strip by interface. Turn on glucometer and insert a test strip in it and with the help of a needle pen pierce your skin and pour blood at the tip of the strip and wait for glucometer reading and it will give you your blood glucose concentration. Sudden increase or decrease in sugar level of body may cause weakness, pale coloring of skin, unconsciousness, nerves damage, and trauma.

Dimple is a deformation of muscles in skin and cheek dimple which appear on the face during smile is due to the deformation in the major muscle of double zygomaticus which locates on the zygomatic bone of face. It looks like a hollow portion on cheeks during a person smiles and in case of chin dimple it appears as a line on a chin of a person. It is an inherited trait. It is controlled by dominant genes and transferred from parents to offspring's. If both mother and father have dimple then this trait will transfer to their child because gene transfer chances will become 100% but this idea is rejected by some scientists. People who have homozygous dominant genes will have dimples on both sides of the cheeks and people with heterozygous genes, one dominant and one recessive gene will have dimple on one side. Dimple is very usual in babies because their skin consists of baby fats. Babies who have un inherited dimples, their dimples vanish with time as their fats mature. Inherited dimples last forever due to the presence of inherited gene. Dimple is taken as a beauty symbol but scientifically it is a muscle deformation.

The goal of current study was to analyze the relation of blood glucose level to dimples.

MATERIAL AND METHODS

Project designing

First of all we take permission from every subject to check their blood glucose level. Than we check their blood glucose level by glucometer after taking their blood samples in fasting conditions. Than we made list of subjects with their blood glucose level and asked them whether they have dimples or not? Than we indicate either they have dimples or not after mentioning their blood glucose level. Total 120 subjects involved in this activity. The subjects were students at Bahauddin Zakariya University Multan, Pakistan.

Statistical Analysis

MS Excel was used for statistical analysis and to analyze results t test was applied.

RESULTS AND DISCUSSION

Table shows average and Standard deviation of subjects as well as their *p* value. Blood glucose level of male subjects was 90 with 7.0 SD who have dimples and blood glucose level of males subjects with no dimples was 92 with 5.2 SD and their *p* value was 0.57 which is non-significant because *P*>0.05. Blood glucose level of female subjects was 97 with 7.7 SD who have dimples and blood glucose level of females subjects with no dimples was 91 with 7.7 SD and their *p* value was 0.77 which is non-significant because *P*>0.05. Combined result of blood glucose level of both male and female subjects was 90 with 7.4 SD and 91 with 7.0 SD with no dimples having 0.58 *p* value and it is also non-significant.

Questionnaire based studies have given a significant improvement in recent studies.

Table No.1: Relation of normal blood glucose level (Average ± SD) to cheek dimples

S.No	Gender	Dimples	No Dimples	*P* value
1	Male	90±7.0	92±5.2	0.57
2	Female	97±7.7	91±7.7	0.77
3	Combined	90±7.4	91±7.0	0.58

(*P*>0.05 hence p considered as non-significant)

CONCLUSION

There is no scientific relation between blood glucose level and dimples because P>0.05 and result is non-significant.

ACKWOLEDGEMENT

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CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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