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Relation of normal body temperature with cheek dimples

Abstract

The purpose of current study was to spot the relation of normal body temperature with cheek dimples. Body temperature is defined as the ability of our body to generate heat. Our body maintains its temperature within a moderate range even the outer temperature of environment is change. Thermometer is a device used to measure body temperature either in Fahrenheit (°F) or degree Celsius (°C). We can measure body temperature from different parts of our body. Cheek dimples appear on our face when we smile or make any facial expression. Dimples are actually deformation of skin muscles. Deformation in double zygomatic muscle of face leads to the formation of cheek dimples. After taking consent we measure their body temperature with the help of a digital thermometer. Then we asked them whether they have dimples on their cheeks or not? We wrote their answers on a separate sheet along with their body temperatures. Total 160 subjects were participated in this movement. These subjects were students at Bahauddin Zakariya University Multan, Pakistan. Our study concluded that there is no scientific relation among normal body temperature and cheek dimples.[1–4]

Keywords: cheek dimples, normal body temperature, dimples and body temperature

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Muhammad Imran Qadir, Hafiz Muhammad Noman Ajmal

Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University, Multan, Pakistan

Correspondence: Hafiz Muhammad Noman Ajmal, Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University, Multan, Pakistan, Email junaidajmal784@gmail.com

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Introduction

Body temperature is defined as the ability of our body to generate heat. Our body maintains its temperature within a moderate range even the outer temperature of environment is change. Like when we are feeling too hot, our body starts sweating to maintain its temperature within optimum range and the evaporation of sweat cools our body.[5] When we feel too cold, the surface area of our blood vessels reduced to save heat by decreasing blood flow. We start shivering and by trembling of muscles our body generate more heat. Normal temperature of human body is 98.6°F or 37°C. It is an average body temperature and it may be above or below 1°F or 0.6°C depending upon the activity of body. Thermometer is a device used to measure body temperature either in Fahrenheit (°F) or degree Celsius (°C). We can measure body temperature from different parts of our body like armpit, mouth, the ear and the forehead.[6] To take temperature reading from rectum is the most accurate way of measuring body temperature. If body temperature is less than the normal body temperature, this condition is said to be hypothermia. There are different reasons of hypothermia like being out in cold or excessive use of alcohol and some disorders like low thyroid. If body temperature is more than normal body temperature, this condition is known as fever or heatstroke. When heatstroke occurs human body fails to control its temperature within normal range and the temperature of the body keep rising. Heatstroke is deadly even it cause dehydration and the organs of body stop working. We need special medical treatment whenever we face this conditions.[7–9]

Cheek dimples appear on our face when we smile or make any facial expression. Dimples are actually deformation of skin muscles. Deformation in double zygomatic muscle of face leads to the formation of cheek dimples. It appears as a hollow area on cheeks when we smile or make some facial expressions. Dimples are inherited from parents to offspring and controlled by dominant genes. If both parents have homozygous dominant genes for dimples than there is 100% chance of dimples in their child. Some scientists told that it is an irregular dominant trait and controlled by some other genes. People with homozygous dominant genes have dimples on their both sides of cheek but people with heterozygous genes have dimple on one side of their cheek. New born babies have dimples due to the presence of body fats on their skin but their dimples disappear when their body fats becomes mature because they are not inherited. Only inherited dimples can stay on cheeks for longer time due to the presence of dominant genes. Dimples are too attractive and beautiful and everyone wish to have dimples. There are some ways to reduce the size of dimples but we cannot remove them permanently. The purpose of current study was to spot the relation of normal body temperature with cheek dimples.[10]

Material and methods

Designing of project

First of all we obtain permission from each subject to measure their body temperature. After taking consent we measure their body temperature with the help of a digital thermometer. Then we asked them whether they have dimples on their cheeks or not? We wrote their answers on a separate sheet along with their body temperatures. Then we made two lists, one list containing body temperatures of those subjects who do not have cheek dimples and one list containing body temperature of those individuals who have cheek dimples. Total 160 subjects were participated in this movement. These subjects were students at Bahauddin Zakariya University Multan, Pakistan.[11]

Statistical analysis

To perform statistical analysis we use MS Excel software and t test was applied to evaluate results.

Results and discussion

Above Table 1 illustrate the normal body temperature (Average±SD) of subjects with their p values. Male subjects have 96.4°F body temperatures with 2.97 SD who do not have cheek

dimples while male subjects have 97.5°F with 0.5 SD. Female subjects have 96.1°F body temperatures with 2.77 SD who do not have cheek dimples while female subjects have 96.7°F with 0.5 SD having cheek dimples. Combined result of male and females is 97°F with 1.5 SD having dimples and 98°F with 2.0 SD not having dimples. *P* values of males, females and combined is 0.35, 0.22 and 0.28. Questionnaire based studies have brought a considerable enhancement in recent studies.[12–15]

Table 1 Relation of normal body temperature (Average±SD) to cheek dimples

Gender	Dimples	No dimples	P value
Male	96.4±2.97	97.5±0.5	0.35
Female	96.1±2.77	96.7±2.35	0.22
Combined	97±1.5	98±2.0	0.28

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

Conclusion

Our study concluded that there is no scientific relation among normal body temperature and cheek dimples because *P*>0.05 so result is non-significant.

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Conflicts of interest

The author declares there is no conflict of interest.

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