

## IS THERE ANY RELATIONSHIP BETWEEN MORNING WALK AND URINE BILIRUBIN?

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### ABSTRACT

This study is conducted to know the relationship between the morning walk and urine bilirubin level. Morning walk is a good activity and prevents from many diseases. Urine bilirubin is a break down product of the heam groups of hemoglobin and other heamproteins. It is the function of the liver to breakdown the bilirubin and convert it into the soluble form which is excreted from the body. If the bilirubin is not converted into the soluble form then the bilirubin accumulates in the body and causes the different diseases. In this study the urine bilirubin level is tested and the results are compared to know the relationship between the morning walk and the urine bilirubin level. The results show that there is relationship between the morning walk and urine bilirubin level.

**Keywords:** Morning walk, Bilirubin, Role of liver, Correlation,



## Introduction

Morning walk is a healthy activity. Most of the people who go for a morning walk regularly remains healthy during their whole life. They do their work efficiently. It is the good habit of early risers as they regularly do morning walk (Robertson 2015). The morning walk keeps one fit and healthy. They spend the pleasant and healthy life. Their mood and face remain fresh. They remain active during whole day. One of the major benefits of the morning walk for the people are that they do their works on time. They have a lot of time to do their works. They never get late. The scenes in the morning are very beautiful. They see the sun to rise. They enjoy the natural beauty. Most of their activities are healthy activities. They are safe from most of the diseases. Morning walkers spend the long and disease-free life (Beriault, Carpentier et al. 2009). Out of all these things the morning walkers are creative thinkers. They always do something creative. From all these things we reach on a point that the person who wants to spend a healthy life should regularly take a morning walk.

Bilirubin in urine measures the level of bilirubin in your urine. Bilirubin is a yellow pigment. It is formed by the breakdown of the red blood cells and is excreted by the liver. Bilirubin is a breakdown product of heme groups of hemoglobin and other heme proteins (Wang, Chowdhury et al. 2006). High levels of bilirubin can cause the jaundice. In fetuses the bilirubin collects in the intestines (Blumenthal, Stucker et al.

1980). The liver makes the bilirubin water soluble and removes from the body through the stools (Yamaguchi, Shioji et al. 2002). If the liver is not working well then, the bilirubin is not converted into the soluble form and so cannot be removed from the body and the level of bilirubin is increased the normal level. This increased level of the bilirubin can cause blockage in the body (Wang, Chowdhury et al. 2006). They may form the gallbladder stones in the gall [1]. The increased level of bilirubin causes the liver diseases. Bilirubin test can provide the pre-information before the severe liver diseases [2].

This study is conducted to find any relationship between the morning walk and the bilirubin level in the urine. If there is some correlation than we can easily be prevented from the diseases due to the increased bilirubin level in the urine.

## Materials and Method

### Project Design

The people have been selected for the study. We selected the people who do morning walk regularly and the people who do not do morning walk. Their urine was collected and tested for the bilirubin in the urine. All people selected for the samples were taken from the Institute of Molecular Biology and Biotechnology Bahauddin Zakariya University Multan.

### Measurement of Bilirubin in Urine:

Urine was collected in the sampling bottles from the people who regularly do morning walk and who do not do morning

walk. The bilirubin level was tested using the strips. The strips were dipped into the urine and different color appears on the strips. Each color has its specific value. The color is matched and the value is noted. After the measurement of the bilirubin level the results were compared to find the relationship between the morning walk and bilirubin in urine.

**Statistical Analysis:**

To calculate and compare the results of tests M-state Software was used. The results were summarized in the table and graph was drawn to show the relationship.

**Results and Discussion:**

The results calculated shows that the persons who do morning walk have the low level of bilirubin in their urine as compared to the persons who do not do

morning walk. The percentage obtained for the male is 40% positive for bilirubin who do morning walk and 60% negative for the bilirubin in urine. The percentage for the females who do morning walk is similar to males. Bilirubin level for the persons who do not do morning walk is 36.17% positive and 68.32% negative for males while for the females the ratio is same as in case who do morning walk. The results have been shown in the table.1. The results show that the person who do morning walk have low levels of bilirubin in their urine. Although the results show no significant difference but we can consider them in some conditions.

| Gender | Do Morning Walk    |                    | Do Not do Morning Walk |                    |
|--------|--------------------|--------------------|------------------------|--------------------|
|        | Bilirubin Positive | Bilirubin Negative | Bilirubin Positive     | Bilirubin Negative |
| Male   | 40%                | 60%                | 36.17%                 | 68.32%             |
| Female | 40%                | 60%                | 40%                    | 60%                |

Table.1. shows the level of bilirubin in the persons who do morning walk and who do not do morning walk.

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