Is there any Relationship between Body Weight and Urine Ketones?

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Abstract
The objective of this study was to correlate normal body weight with urine ketones. When there is insufficient level of glucose in our body, body use fats as an alternate source of energy. The substance produced is known as ketones, this will be shown in our blood and urine. If the patients are diabetics, then urine contain ketones means we are not producing insulin. There is another condition in which we are not diabetics but can develop ketones. Life of a patient or an individual is highly affected by its weight. Cardiac vascular diseases are all due to the overweight than to normal. Pulmonary disorders are also the results of overweight. People were asked to collect their urine in a container and then we imposed the dipstick method and analyzed the results for the ketones in the urine and noted the readings of the people. A questionnaire was prepared and asked the people about weight and ketones presence in their urine. All the experiments were conducted when the persons were at normal conditions. None of them is using any medicines or certain kind of drugs. The data described us that there was not a scientific relationship between the human body weight and urine ketones. It was inferred that there was no relationship between the body weight and normal ketones in urine.

Keyword: Ketones; Body Weight; Ketoneuria

Introduction
Quantification of ketone levels in our urine is normally done by test. Actually human body consumes glucose as a source of energy. When there is insufficient level of glucose in our body, body use fats as an alternate source of energy [1]. The substance produced is known as ketones, this will be shown in our blood and urine. When there is a high level of ketone in urine, it is an indication of diabetic ketoacidosis; this is the fatal conditions that can lead to death. Ketone test is performed to estimate the high risk of ketone development in an individual. If people are diabetics, then urine contain ketones means we are not producing insulin [2]. There is another condition in which we are not diabetics but can develop ketones. These conditions include, if a person experience vomiting, diarrhea, digestive disorder, strenuous exercise and disorders in eating.

Life of a patient or an individual is highly affected by its weight. Cardiac vascular diseases are all due to the overweight than to normal. Pulmonary disorders are also the results of overweight. To maintain the regular weight of a person, we must regularize our eating timings. If a
person gets more sleep, he can lose weight. It is a strategy to lose weight [3-10]. Take brown rice and buckwheat as a source food to lose weight. Becoming underweight is also a disastrous condition, use eggs and potatoes to increase weight.

The objective of this study was to correlate normal body weight with urine ketones.

Materials and Methods

Measurements of Urine Ketones

There were 100 people in our recent study. Students were asked to collect their urine in a container and then we imposed the dipstick method and analyzed the results for the ketones in the urine and noted the readings of the people.

Results

Results showed that there was least percentage of the individuals that have ketones in their urine. Results were depicting that there was no scientific relationship between human body weight and urine ketones. In male, ketone presence was observed in the people having weight (40-50) kg and (60-70) kg had only 2% weightage of the whole data. In female, a similar trend was observed in Table 2 as the data depicted in the Table 1. The data described us that there was no scientific relationship between the human body weight and urine ketones.

### Table 1: Relationship between body weight and ketones in urine.

<table>
<thead>
<tr>
<th>Male (weight in kg)</th>
<th>Urine Ketones Positive%</th>
<th>Urine Ketone Negative%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(40-50)kg</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>(50-60)kg</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>(60-70)kg</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>(70-80)kg</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

### Table 2: Relationship between body weight and ketones in urine.

<table>
<thead>
<tr>
<th>Female (weight in kg)</th>
<th>Urine Ketones Present%</th>
<th>Urine Ketones not Present%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(40-50)kg</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>(50-60)kg</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>(60-70)kg</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(70-80)kg</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Discussion

A questionnaire was prepared and we asked the people about weight and ketones presence in their urine. Majority of the individuals were unaware about their body weight and did not know about ketones in urine. They were told about the dangers of ketone presence in the urine. For this purpose, seminars were conducted and gave knowledge about parameters of urinalysis specifically for the ketones in the urine. The symptoms like it gave fruity smell when someone urinates and it is due to burning of body fats in the absence of enough glucose to carry out the normal metabolic processes. When there is a lack of sufficient glucose, then body fat converted into the alternate source of energy. If the concentration of ketones in urine is more, then it was the condition known as ketoacidosis and it is fatal [11-13]. So, for avoidance we must consult with our doctor and do proper treatment. A study was also conducted, to describe the relationship between the human body weight and normal blood pressure. All the experiments were conducted when the persons were at normal conditions. None of them is using any medicines or certain kind of drugs.

Conclusion

It was inferred that there was no scientific relationship between the body weight and normal ketones in urine.

References


