

Is there any Association between Urine Specific Gravity and Stress Eating?

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Abstract: *The presence of particles like glucose, protein and other molecules in urine is called urine specific gravity. The average specific gravity is in between 1.010 to 1.030 in urine. In most of people's the increase of stress and tension in their life lead towards the abundant eating is called stress eating. The stress eating caused obesity and major diseases and also bring negative impacts on health of human. The 80 students test their urine by urinalysis test to determine the concentration of specific gravity in urine. There is no association between urine specific gravity level and stress eating.*

Keywords: *urine, specific gravity, stress eating, urinalysis*

1. INTRODUCTION

The presence of particles like glucose, protein and other molecules in urine is called urine specific gravity. The average specific gravity is in between 1.010 to 1.030 in urine. The urine specific gravity is lead to abnormal kidney function. The high specific gravity in urine indicated the presence of extra bilirubin, glucose, red blood cell, crystal, protein and white blood cell in urine. The symptoms of urine specific gravity is diabetes insipidus, hyponatremia, dehydration, kidney infection, low sodium level, heart failure, kidney failure, over-hydration, hypernatremia, shock, and urinary tract infection. The causes of low specific gravity level in urine is diabetes insipidus, aldosterone's, glomerulonephritis, excessive fluid uptake, edema and pyelonephritis while high level of specific gravity included diabetes mellitus, congestive heart failure, excessive water loss and syndrome of abnormal antidiuretic secretion (1).

In most of people's the increase of stress and tension in their life lead towards the abundant eating is called stress eating. The stress eating caused obesity and major diseases and also bring negative impacts on health of human. The HPA (hypothalamic pituitary adrenal) axis is a chronic stimulation that occurred due to stress eating. It result in exposure of glucocorticoid that are responsible for visceral obesity development. The HPA axis is act as conductor for stress response and compactly intertwined with appetite endocrine hormone regulation. Reward Based Stress Eating theory explained that cortisol help in reward circuitry stimulated calorically heavy foods consumption and neuroendocrine mediator are elevated relationship in the interval eating and stress. The reward pathway stimulation either by highly palatable food intake, HPA stimulation induced by stress and by both of these result in neurobiological adaptation that promote uncontrollable nature of overeating (2).

2. MATERIALS AND METHODS

The 80 subjects took part in present research. All subjects were students of Bahauddin Zakariya University, Multan, Pakistan.

The specific gravity of urine is examine by using urinalysis test. Firstly the urine collect into small vessel that is non-contaminated and dirt free. The urine collected by placing vessel under urine ejection. Then test the urine sample to check the specific gravity level in urine.

Statistical Analysis

The Ms Excel Used To Examine The Analysis. The *P* Value Less Than 0.1 Demonstrate As Significant.

3. RESULT AND DISCUSSION

The association between specific gravity of urine and stress eating is given in table 1. The urine specific gravity is lead to abnormal kidney function. Reward Based Stress Eating theory explained that cortisol help in reward circuitry stimulated calorically heavy foods consumption and neuroendocrine mediator are elevated relationship in the interval eating and stress. The male with 1.02 average and 0.01 SD while female 1.29 average and 1.817 SD with p value 0.02 says that they are adduct to more eating during stress. The male with 1.028 average and 0.002 SD while female with 1.630 average and 1.557 SD with p value 0.45 says that they are not addict of more eating during stress (3-10).

Table1. Association between stress eating (Average \pm SD) and urine specific gravity

Gender	People have addict of stress eating	People have not addict of stress eating
Male	1.02 \pm 0.01	1.028 \pm 0.002
Female	1.29 \pm 1.817	1.630 \pm 1.557

$p < 0.1$

4. CONCLUSION

There is no association between urine specific gravity level and stress eating.

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