

<https://doi.org/10.46344/JBINO.2022.v11i06.22>

## EVALUATION OF LINK BETWEEN LIKENESS OF LENTILS AND GLUCOSE IN URINE

Ayesha Batool Malik\*, Syed Bilal Hussain, Muhammad Imran Qadir, Muhammad Asif\*

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

Email : [ayesha.batool.malik@gmail.com](mailto:ayesha.batool.malik@gmail.com)

### ABSTRACT

Objective of this study was to inter-relate lentil likeness with glucose in urine. 92 subjects were included in this study. Glucose level in urine was measured by glucose test of urine. Outflow of glucose into the urine is called as glycosuria. Originally urine had no amount of glucose because kidney reabsorbs all of glucose that is filtered from tubular liquid. Lentils had all essential nutrients such as proteins, fibers, vitamins and minerals. It is the best option for those that had to boost up their intake of protein. There were no males and females with urine glucose while 100% males and females had no glucose in urine, and they did not like lentils. 11.76% males and 3.84% females had glucose in urine and 88.24% males, and 96.15% females had no glucose in urine. Main conclusion of this study was that lentil likeness had no inter-relation with urine glucose.

**Keywords:** Glucose in urine, co-relate with lentils likeness

## Introduction

Outflow of glucose into the urine is called as glycosuria. Originally urine had no amount of glucose because kidney reabsorbs all of glucose that is filtered from tubular liquid. Basically, it is caused by changing levels of glucose in blood or untreated diabetes. It leads to the extra loss of water into the urine which leads to the dehydration<sup>1</sup>. It can be alimentary when large amount of carbohydrates is taken then extra glucose comes to urine and cause glycosuria. It can also be induced artificially to treat diabetes mellitus type 2 by using inhibitor gliflozins. Filtrate collected in bowman's capsule contain amino acids, electrolytes, urea and glucose<sup>2</sup>. Then it passed into renal tubules and glucose is reabsorbed in the proximal tubules into the blood stream. It can absorb only some degree of quantity of glucose<sup>3</sup>. When glucose level in blood increases from the limited amount then proximal tubules become overloaded and starts to release glucose in urine.

Lentils had all essential nutrients such as proteins, fibers, vitamins and minerals. It is the best option for those that had to boost up their intake of protein<sup>4</sup>. They are free of gluten, and it is useful in those kitchens which are free of gluten. They had lower values of glycemic index. They also had content which is resistant to starch, and it is beneficial for diet of diabetic patients. They had protein content like that of meat. It is beneficial for health<sup>5</sup>. Fibers lower the cholesterol and provide protection against cancer of colon and diabetes. Potassium

lowers the blood pressure and reduces the damage causing effects of sodium<sup>6</sup>. Folate helps in formation of RBCs and in proper functioning of nerves. It is also important to increase blood volume of mother. Vitamin plays an important role in preventing anemia and provide protection against cancer diseases and dementia.

Objective of this study was too inter-relate lentil likeness with glucose in urine.

## Methodology

92 subjects were included in this study. Glucose level in urine was measured by glucose test of urine. Small device was used which is known as dipstick.

## Project Design

Questionnaire was designed about likeness of lentils and about glucose level in urine if present.

## Statistical Analysis

Statistical analysis was performed b using Excel.

## Result and Discussion

Evaluation of link between likeness of lentils and glucose in urine is given in table 1. There were no males and females with urine glucose while 100% males and females had no glucose in urine, and they did not like lentils. 11.76% males and 3.84% females had glucose in urine and 88.24% males, and 96.15% females had no glucose in urine, and they had likeness of lentils.

**Table 1: - Evaluation of link between likeness of lentils and glucose in urine.**

| Gender         | Lentil likeness          |                         | Lentils dis-likeness     |                         |
|----------------|--------------------------|-------------------------|--------------------------|-------------------------|
|                | Glucose in urine present | Glucose in urine absent | Glucose in urine present | Glucose in urine absent |
| <b>Males</b>   | 11.76%                   | 88.24%                  | 0%                       | 100%                    |
| <b>Females</b> | 3.84%                    | 96.15%                  | 0%                       | 100%                    |

Study based on the research had given considerable results.

**Conclusion**

Main conclusion of this study was that lentil likeness had no inter-relation with urine glucose.

**REFERENCES**

1. Qadir MI, Shahzad R (2018) Awareness about obesity in postgraduate students of biotechnology. *Int J Mod Pharma Res*, 7(2): 14-16.
2. Qadir MI, Rizvi M (2018) Awareness about thalassemia in post graduate students. *MOJ Lymphology & Phlebology*, 2(1): 14-16.
3. Urbano, G., Lopez-Jurado, M., Hernandez, J., Fernandez, M., Moreu, M. C., Frias, J., ... & Vidal-Valverde, C. (1995). Nutritional assessment of raw, heated, and germinated lentils. *Journal of Agricultural and Food Chemistry*, 43(7), 1871-1877.

4. Faris, M. E. A. I. E., Takturi, H. R., & Issa, A. Y. (2013). Role of lentils (*Lens culinaris* L.) in human health and nutrition: a review. *Mediterranean Journal of Nutrition and Metabolism*, 6(1), 3-16.
5. Erdoğan, A., Bozkurt, A., Altun, A., & Turan, A. (2020). Can we contribute to the diagnosis of diabetes and regulation of blood glucose by increasing the urologists' awareness of glucosuria? *Urologia Journal*, 87(4), 209-213.
6. Liman, M. N. P., & Jialal, I. (2020). *Physiology, glycosuria*.