

**EFFECT OF 15 MINUTES EXERCISE ON DEPLETION OF
BLOOD GLUCOSE LEVEL ON VARIED INGESTION**



BY

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A THESIS

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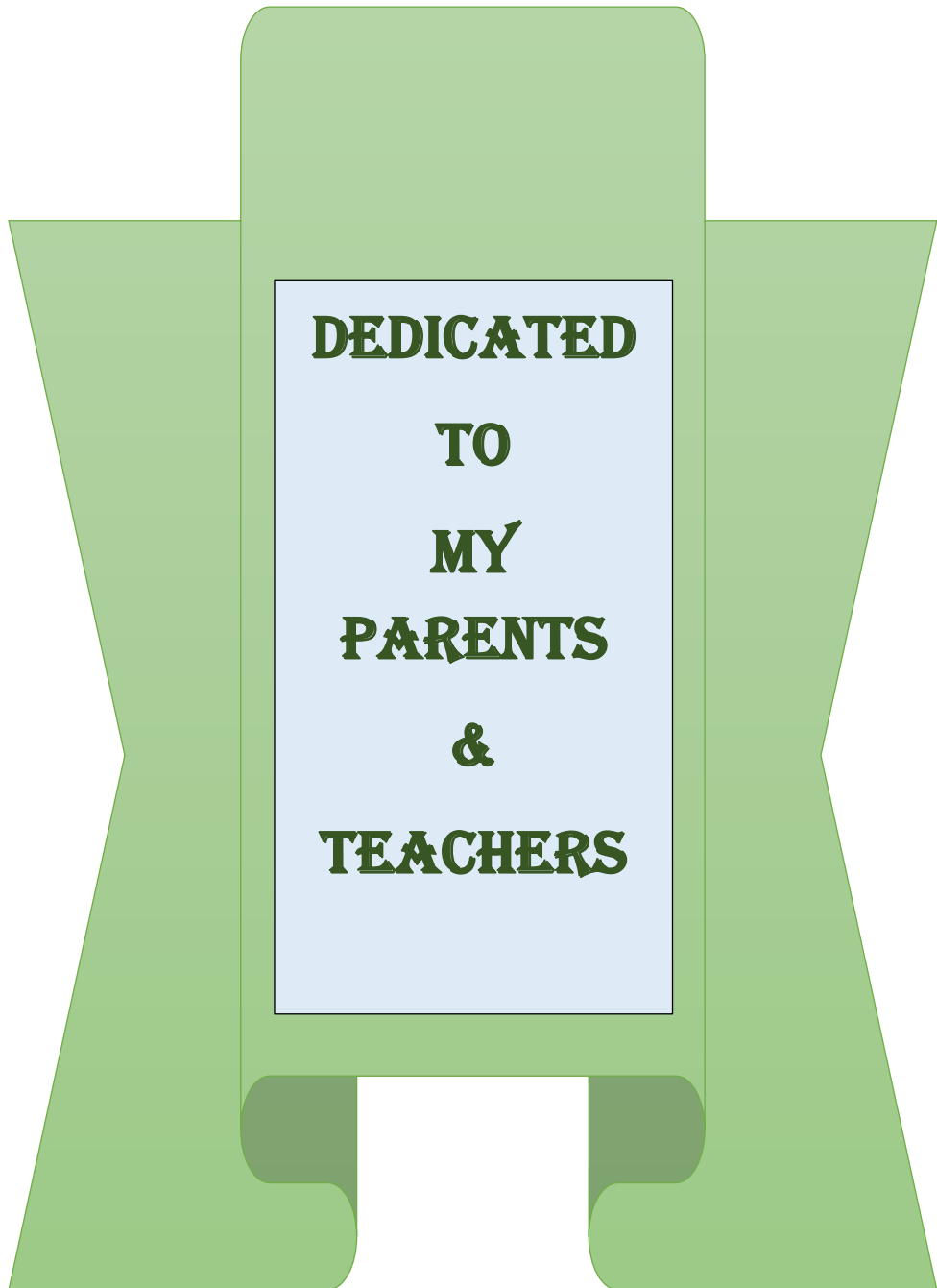
MASTER OF PHYSICAL EDUCATION

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CERTIFICATE BY THE SUPERVISOR

This is to certify that **Rajesh patra** is a regular student of Mugberia Gangadhar Mahavidyalaya under Vidyasagar University, in the season of 2021-2023. For the Master of Physical Education, semester-IV carried out his research study in my supervision and guidance for the requirements of the master of Physical Education degree with his thesis entitled “***EFFECT OF 15 MINUTES EXERCISE ON DEPLETION OF BLOOD GLUCOSE LEVEL ON VARIED INGESTION***”. The material and data composed from students in this study are genuine and were collected by him.

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DECLARATION

I declare that the thesis entitled “EFFECT OF 15 MINUTES EXERCISE ON DEPLETION OF BLOOD GLUCOSE LEVEL ON VARIED INGESTION” is my own work, conducted under the supervision of Asst. Prof. Biswajit Dhali, Department of physical Education, Mugberia Gangadhar Mahavidyalaya, Purba Medinipur, West Bengal, India, which was approved by the Research Degree Committee.

I, further declare that to the best of my knowledge, the thesis does not contain any work, which has been submitted for the award of any degree either in this university or in any other university without proper citation.

Date: 21.07.2023



(Rajesh patra)

M.P. Ed, IV SEMESTER

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I am highly indebted to Mr. Biswajit Dhali for his guidance and constant supervision as well as for providing necessary information regarding the Dissertation & also for his support in completing the whole work.

I would like to express my sincere gratitude to all my respected Teachers and non-teaching staff, Mugberia Gangadhar Mahavidyalaya, for their kind co-operation and encouragement which helped me to complete my dissertation.

My thanks and appreciations also go to B.P.Ed. students as subject of my study and my native friend who have willingly helped me through collecting data.

I would like to extend my sincere thanks to all of them.

Date: 21.07.2023



Rajesh patra
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SUMMARY, CONCLUSIONS AND RECOMANDATIONS

5.1. SUMMARY

Exercise is nowadays playing an increasingly important role in the lifestyle of the Western world. Objectives of the present study were to find out the difference of blood glucose level at rest, after varied ingestion and after exercise and to compare among them. To achieve purpose of the study only 12 male subjects were selected from B.P. ED. students of dept. of physical education, Mugberia Gangadhar Mahavidyalaya in west Bengal of age 21-25 years for the study. The subject was homogeneous type, there age, height, weight, almost same. Purposive sampling was done. Variables were age, standing height, body weight and blood glucose level. 15 minutes continuous and medium intensity treadmill exercise average 8km/hour (2km/15M) were selected in each trial of data collection. In this study after the collection of resting blood glucose level, subjects were ingested 250ml of water composed with 25gm, 50gm and 75gm Glucose D powder per three trials of data collection in different days respectively. Descriptive statistics were used to analyze the data by mean and standard deviation (SD). The significance of statistical difference between resting blood glucose level and post-ingestion blood glucose level as well as post-ingestion blood glucose level and post-exercise blood glucose level was measured by applying paired sample 't' - test at 0.05 level of significance. Statistical difference between three trials of different graded ingestions and exercise on blood glucose level was measured by applying ANOVA test at 0.05 level of significance. It was stated that there was significant difference of blood glucose level between rest and after 1st trial of 25gm glucose D intake; after 1st trial of 25gm glucose D intake and 1st trial post exercise result; rest and after 2nd trial of 50gm glucose D intake, after 2nd trial of 50gm glucose D intake and 2nd trial of post exercise result; rest and after 3rd trial of 75gm glucose D intake, after 3rd trial of 75gm glucose D intake and 3rd trial of post exercise result respectively. Statistical findings showed that blood glucose level increased after varied ingestion decrease after completing the 15 minutes Treadmill exercise. It was indicated that there was significant difference of Blood Glucose level among 25gm glucose intake, 50gm glucose intake and 75gm glucose intake. It was stated that there was no significant difference of Blood Glucose level among three post exercises after taking 25gm, 50gm and 75gm glucose D intake respectively. Finally it may be concluded that resting blood glucose level increases after glucose D intake and decreases after 15 minutes treadmill

exercise. There was significant difference of blood glucose level among 25gm glucose intake, 50gm glucose intake and 75gm glucose intake but not significant after exercise.

5.2. CONCLUSIONS:

Finally it may be concluded that resting blood glucose level increases after 25gm glucose D intake and decreases after 15 minutes treadmill exercise and this value is less than resting level. Resting blood glucose level increases after 50gm and 75gm glucose D intake and decreases after 15 minutes treadmill exercise and this value is more than resting level. There was significant difference of blood glucose level among 25gm glucose intake, 50gm glucose intake and 75gm glucose intake but not significant after exercise.

5.3. RECOMMENDATIONS:

On the basis of result and conclusion drawn following recommendation were made for future investigation.

- Similar study may be conducted with the Post Prandial (PP) blood glucose level.
- Similar study may also be conducted with female subjects.
- Similar study may also be conducted with another type of subjects.
- Same type of study may be conducted with another type of activities.
- Same type of study may be conducted after taking a specific kind of food.

Ethical Permission

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Dated: 21/07/2023

From: The Principal

Resolution of Code of conduct Committee Meeting dated 11.04.2023

Members Present

1. Dr. Swapan Kumar Misra
2. Dr. Bidhan Chandra Samanta
3. Dr. Kalipada Maity
4. Dr. Biswajit Garai
5. Dr. Prasenjit Ghosh
6. Dr. Debasis Ray
7. Irani Banerji Chatterjee
8. Taniya Neogi
9. Subha Sahoo Jana

The committee members resolved in its meeting dated 11.04.2023 (Resolution No.1) that Payel Chakraborty, Rahul Laskar, Rajesh Patra and Sharmistha Barman, students of M. P. Ed Department of Physical Education of our college can collect data from human body as part of their dissertation paper (MPCC-403) maintaining the code of conducts laid down in the college website.

Attested
21.07.2023
Principal
Mugberia Gangadhar Mahavidyalaya

Sd/- Dr. Swapan Kumar Misra
Chairman

Certificate



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From – The Principal / Secretary

Date: 20.07.2023

CERTIFICATE BY THE PRINCIPAL

This is to certify that Rajesh Patra, M.P.Ed. a student of Department of Physical Education, Mugberia Gangadhar Mahavidyalaya, in the season of 2021-2023 has collected the data from our college for his M.P.Ed. dissertation paper (MPC-403) entitled "EFFECT OF 15 MINUTES EXERCISE ON DEPLETION OF BLOOD GLUCOSE LEVEL ON VARIED INGESTION".

I wish his success for this Research Study.

Swapan Kumar Misra 20-07-2023
(Dr. Swapan Kumar Misra)

Principal

Mugberia Gangadhar Mahavidyalaya

Principal
Mugberia Gangadhar Mahavidyalaya