

UNIVERSITI TEKNOLOGI MARA

**EFFECT OF HONEY SUPPLEMENTATION ON
ANAEROBIC PERFORMANCE**

HARITH ZAQWAN BIN SAIFULLIZAN

Thesis submitted in partial fulfillment
of the requirement for the degree of
Bachelor of Sports Science (Hons.)

Faculty of Sports Science and Recreation

JULY 2019

DECLARATIONS

BACHELOR OF SPORTS SCIENCE
FACULTY OF SPORTS SCIENCE AND RECREATION
UNIVERSITI TEKNOLOGI MARA


I, Harith Zaqwan Bin Saifullizan (I/C Number: 960424105139) hereby declare that:

This work has not previously been accepted in substances of any degree, locally or for any other degree.

This project paper is the overseas and is not being concurrently submitted results of my independent work and investigation, except where otherwise stated, I absolve Universiti Teknologi Mara (UiTM) and Faculty of Sports Science and Recreation from any blame of my results of my work.

All verbatim extracts have been distinguished by question marks sources of my information have been specifically acknowledged.

Signature :



(HARITH ZAQWAN BIN SAIFULLIZAN)

UiTM ID : 2017652228

Date :

ABSTRACT

The purpose of this study was to investigate the effect of honey supplementation on anaerobic performance among recreational runners from Faculty of Sports Science and Recreation. A total of thirty subjects ($N=30$); (20.43 ± 0.50) in years, height (169.33 ± 5.19) in centimeters and weight (64.37 ± 8.44) in kilograms. Body mass index (22.41 ± 2.53) in $\text{kg}\cdot\text{m}^{-2}$ were involved in this study and selected through purposive sampling method. The study is to investigate the effect of honey supplementation on anaerobic capacity. Paired Sample T-Test was used to analysed this study, the study includes pre-test and post-test by using all thirty sample. All subjects were selected by attend the selection and able to surpass the inclusion criteria needed. During pre-test, all subjects performed 30 seconds Wingate test. After the pre-test, all subjects must drink a honey drink that contains 20g of Kelulut Honey and 300ml of water and blood sample will be collected. All subjects must rest passively for 3 hours and every one-hour blood pressure, heart rate and room temperature will be measured. For the post-test, all subjects performed the 30 seconds Wingate test and blood sample will be collected. Based on the Paired Sample T-Test results, there is no significant between pre-test and post-test ($P = 0.553$). The overall results also indicated the pre-test (13.37 ± 0.69) and post-test (13.52 ± 0.69). To conclude, this finding suggests honey supplementation does not had effect on anaerobic performance among recreational runner Faculty of Sports Science and Recreation.

Keywords: *Anaerobic Capacity, Honey, Wingate test.*

LIST OF TABLES

TABLES	TITLE	PAGE
Table 1.1	Nutritional facts of honey	3
Table 4.1	Physical characteristic data of subjects	18
Table 4.2	Comparison of anaerobic capacity	20
Table 4.3	Comparison of blood lactate	21
Table 4.4	Comparison of peak power	22
Table 4.5	Comparison of fatigue index	23

LIST OF FIGURES

FIGURES	TITLE	PAGE
Figure 3.1	Subject selection	13
Figure 3.2	Research protocol	15
Figure 4.1	Mean of anaerobic capacity	20
Figure 4.2	Mean of blood lactate	21
Figure 4.3	Mean of peak power	22
Figure 4.4	Mean of fatigue index	23