Abstract IDDF2021-ABS-0028 Figure 1

(IDDF2021-ABS-0028 Figure A, IDDF2021-ABS-0028 Figure B, IDDF2021-ABS-0028 Figure C, IDDF2021-ABS-0028 Figure D, IDDF2021-ABS-0028 Figure E, IDDF2021-ABS-0028 Figure F)

Conclusions The result of this study may add evidence to the microbiologic etiology of recurrent cholelithiasis and help to develop new prevention methods to avoid recurrence post EST.

IDDF2021-ABS-0029

GLUCOSE LEVELS DECREASE AFTER PERFORMING ISLAMIC FASTING MODELS BUT NOT ONLY RAMADAN FASTING IN HIGH-FAT-HIGH-FRUCTOSE-INDUCED RATS

Naufal Arif Ismail*, Endah Sari Ratna Kumala, Miranti Dewi Pramaningtyas. *Department of Physiology, Faculty of Medicine, Universitas Islam Indonesia, Indonesia*

10.1136/gutjnl-2021-IDDF.23

Background High-fat-high-fructose (HFHF) intake contributes to developing type 2 diabetes mellitus (T2DM) as a comorbid. Intermittent fasting in Islam, such as Ramadan fasting (RF), Dawood fasting (DF), and Monday-Thursday fasting (MTF), have been suggested that ameliorate glucose levels. However, there has been no research investigating the effects of DF and MTF on glucose levels. This study investigates the effect of fasting in Islam on glucose level changes in HFHF-induced rats.

Methods Twenty-five 8-week-old male Wistar rats were randomly divided into five groups after acclimatisation for seven days. Group 1 was maintained as standard diet control; Group 2 was maintained as HFHF control diet; Group 3 was treated with RF, which fasted every day; Group 4 treated with DF, which on the 1st day performed fasting (no food and drink), the 2nd day is not performed fasting (free to eat and drink), and the 3rd day is performed fasting again and

repeated so on; Group 5 was treated with MTF which fasted only on Mondays and Thursdays. The treatment group fasted after 14 days of HFHF induced, with a fasting duration of 14 hours (17:00 to 07:00), for 29 days. Glucose measurement is performed after HFHF induction (pre-test) and after fasting treatment (post-test). The data was analysed using paired-samples T-test.

Results After fasting treatment, glucose levels decreased significantly in the Group 3 ($p=0.012$), Group 4 ($p=0.042$), and Group 5 ($p=0.008$) compared to pre-tests. Meanwhile, Group 1 and Group 2 did not show any significant changes in glucose levels ($p>0.05$) (IDDF2021-ABS-0029 Figure 1. Glucose levels).

Conclusions This result suggests a new insight into fasting in Islam, RF, DF, and MTF can be an alternative in lowering high glucose levels caused by HFHF.

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