

UNIVERSITI TEKNOLOGI MARA

**DIETARY INTAKE AND ANTHROPOMETRY
CHANGES DURING RAMADAN FASTING
AMONG FEMALE STUDENTS
IN UiTM PAHANG**

By

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ABSTRACT

Fasting in Islam is defined as an ability of one Muslim to self curb wholly from foods, drinks, intimate intercourse from dawn until sunset. Thus, a study is carried out with an aim to investigate the changes in dietary intake and anthropometry that take place during Ramadan fasting among female students in UiTM Pahang. 67 female students in UiTM Pahang who strictly commit fasting, aged range from 18 to 21 years old were recruited in this study. The study was carried out for six weeks, which started a week before Ramadan until a week after Ramadan ended. Dietary intake and anthropometry measurement which comprised of body weight, body mass index (BMI), body fat percentage and waist-hip ratio (WHR) was monitored at four non-consecutive times: a week before Ramadan (T1), first week of Ramadan (T2), third week of Ramadan (T3) and a week after Ramadan (T4). Dietary intake was measured using a Food Diary Booklet which was distributed at T1 and collected back after Ramadan fasting ended. Based on the result analyzed, there were significant ($p < 0.001$) decreased in dietary intake, body weight, BMI and body fat percentage at T3 as compared to the initial measurement taken at T1. However, as Ramadan fasting ended, there were significant ($p < 0.001$) increased in dietary intake, body weight, BMI and body fat percentage from T3 to T4. However, WHR showed no significant difference ($p > 0.05$) throughout Ramadan fasting. Besides that, result interpreted showed that there was a significant correlation ($p < 0.001$) between dietary intake and anthropometry components throughout Ramadan fasting (T1 – T4). Correlation of dietary intake and body weight, BMI and body fat percentage showed a strong correlation, however, dietary intake and WHR showed a weak correlation. By combining all the results obtained from this present study, thus, it can be concluded that Ramadan fasting may serve as a mold of dietary modification and may alter different aspects of human health.