

ABSTRACT

Background : *Excess weight is one of the biggest public health challenges in the world. Intermittent Fasting is a popular diet method because it can reduce weight and improve body composition, thereby preventing the emergence of metabolic syndrom including dyslipidemia. However, Intermittent Fasting is thought to cause side effects of digestive disorders due to changes in diet.*

Method : *This research uses an experimental research design and sequential sampling technique. The sample consisted of 31 medical study program students who were overweight. Data on total cholesterol levels and body composition (body weight, muscle mass, body fat percentage and visceral fat) were obtained from the pre-test and post-test groups which were examined using photometrics and Bioelectric Impedance Analysis and analyzed using the Paired T-test and Wilcoxon test. Signed. Meanwhile, data on whether or not the effects of digestive disorders are obtained through a post-intervention questionnaire and constipation will be measured using the Rome IV criteria. Intermittent Fasting intervention type 5:2 is carried out for 4 weeks.*

Results : *Intermittent fasting has a significant effect on changes in total cholesterol levels ($p=0.004$), body weight ($p=0.000$), as well as women muscle mass, body fat percentage, visceral fat ($p=0.038$, $p=0.000$, $p=0.001$) and men visceral fat ($p=0,038$). Meanwhile, in men, there were no significant changes in muscle mass and body fat percentage ($p=0.929$ and $p=0.284$). Furthermore, from the results of the post-intervention questionnaire, some respondents ($<50\%$) experienced digestive disorders such as bloating, constipation, and vomiting during the intervention.*

Conclusion : *There is an effect of intermittent fasting on total cholesterol levels, body composition of women and body weight and visceral fat of men. Intermittent fasting caused gastrointestinal distress during the intervention although it was minimal.*

Keywords : *Intermittent Fasting, Total Cholesterol Levels, Body Composition, Digestive Disorders.*

ABSTRAK

Latar Belakang : Berat badan berlebih merupakan salah satu tantangan kesehatan masyarakat terbesar di dunia. *Intermittent Fasting* merupakan metode diet yang populer karena efeknya dapat menurunkan berat badan serta memperbaiki komposisi tubuh sehingga dapat mencegah munculnya sindrom metabolik termasuk dislipidemia. Akan tetapi, *Intermittent Fasting* diduga dapat menimbulkan efek samping gangguan pencernaan akibat perubahan pola makan.

Metode : Penelitian ini menggunakan desain penelitian eksperimental dan teknik pengambilan sampel *consecutive sampling*. Sampel berjumlah 31 mahasiswa prodi kedokteran dengan berat badan berlebih. Data kadar kolesterol total dan komposisi tubuh (berat badan, massa otot, persentase lemak tubuh, dan lemak visceral) diperoleh dari *pre-test* dan *post-test group* yang diperiksa menggunakan photometrik dan *Bioelectric Impedance Analysis* serta dianalisis dengan uji Paired T-test dan Wilcoxon Signed. Sedangkan data ada atau tidaknya efek gangguan pencernaan diperoleh melalui kuesioner *post-intervensi* dan konstipasi akan diukur menggunakan kriteria Rome IV. Intervensi *Intermittent Fasting* tipe 5:2 ini dilakukan selama 4 minggu.

Hasil : *Intermittent fasting* berpengaruh signifikan terhadap perubahan kadar kolesterol total ($p=0,004$), berat badan ($p=0,000$), serta massa otot, persentase lemak tubuh, lemak visceral perempuan ($p=0,038$, $p=0,000$, $p=0,001$), dan lemak visceral laki-laki ($p=0,038$). Sedangkan pada massa otot dan persentase lemak tubuh laki-laki tidak terdapat perubahan signifikan ($p=0,929$ dan $p=0,284$). Kemudian, dari hasil pengisian kuesioner *post-intervensi*, sebagian responden ($<50\%$) mengalami gangguan pencernaan berupa kembung, sembelit, dan muntah selama menjalani intervensi.

Kesimpulan : Terdapat pengaruh *intermittent fasting* terhadap kadar kolesterol total, komposisi tubuh perempuan serta berat badan dan lemak visceral laki-laki. *Intermittent Fasting* menimbulkan gangguan pencernaan selama intervensi meskipun minim.

Kata Kunci : *Intermittent Fasting*, Kadar Kolesterol Total, Komposisi Tubuh, Gangguan Pencernaan