

INTISARI

Hubungan Asupan Makanan Selama Puasa Ramadhan dengan Kadar Leptin pada Individu *Overweight* dan Obesitas di Fakultas Kedokteran Universitas Gadjah Mada

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Latar Belakang: Obesitas masih menjadi masalah kesehatan di Indonesia. Prevalensi obesitas di Indonesia menurut data Riskesdas (2013) untuk dewasa mencapai 19,7% pada laki-laki dan 32,9% pada perempuan. Indonesia merupakan negara muslim terbesar di dunia yang setiap tahunnya menjalankan puasa Ramadhan. Leptin merupakan hormon yang berkaitan dengan hipertensi terkait obesitas. Puasa diduga dapat menurunkan kadar leptin dalam darah melalui mekanisme penurunan asupan makanan sehingga dapat memperbaiki profil metabolik individu yang berpuasa.

Tujuan: Penelitian ini bertujuan meneliti hubungan perubahan asupan makanan selama puasa dengan kadar leptin pada individu dengan *overweight* dan obesitas

Metode: Penelitian ini merupakan penelitian observasional dengan jenis rancangan kohort pada mahasiswa dan staf di Fakultas Kedokteran UGM di Yogyakarta. Terdapat 40 orang yang bersedia menjadi subjek penelitian

Hasil Penelitian: Diketahui terjadi perubahan yang signifikan pada asupan makanan dan Indeks Massa Tubuh (IMT). Penurunan asupan makanan pada subjek laki-laki dan perempuan masing-masing $332,1 \pm 669,9$ kkal (12,5%) dan $287,1 \pm 447,9$ kkal (15,7%). Penurunan IMT pada subjek laki-laki dan perempuan masing-masing $0,66 \pm 0,28$ kg/m² (2,5%) dan $0,55 \pm 0,47$ kg/m² (1,9%). Penurunan kadar leptin pada subjek laki-laki dan perempuan masing-masing $0,42 \pm 1,53$ ng/ml (5,7%) dan $2,20 \pm 8,93$ ng/ml. Melalui analisis *Pearson Correlation* diketahui bahwa tidak terdapat hubungan antara perubahan asupan makanan dengan IMT, IMT dan kadar leptin, serta asupan makanan dan kadar leptin ($p > 0,05$).

Kesimpulan: Terdapat penurunan asupan makanan, IMT, dan kadar leptin selama Puasa Ramadhan namun tidak terdapat hubungan antara perubahan asupan makanan dengan IMT, IMT dan kadar leptin, serta asupan makanan dan kadar leptin.

Kata kunci: puasa Ramadhan, asupan makanan, IMT, leptin

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ABSTRACT

The Relationship Between Food Intake During Ramadan Fasting and Leptin Concentration in Overweight and Obese Individual at The Faculty Of Medicine Gadjah Mada University

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Background: Obesity is still a growing health problem in Indonesia. The prevalence for obesity in male and female adults according to Riskesdas (2013) reached 19,7% and 32,9% respectively. Indonesia has the largest Moslem population in the world that performs Ramadan fasting every year. Leptin is a hormone that is associated with obesity-related hypertension. Fasting can allegedly lower leptin concentration in blood by a mechanism that involves the reduced food intake which results in the improvement of metabolic profile.

Objective: This research aims to study the relationship between change in food intake during Ramadan fasting and leptin concentration in overweight and obese individuals.

Method: This research is an observational study with cohort design in students and staffs at the Faculty of Medicine Gadjah Mada University. Forty (40) people participated as research subject.

Results: This research shows a significant change in food intake and body mass index (BMI). Food intake decreases in male and female subjects were $332,1 \pm 669,9$ kcal (12,5%) and $287,1 \pm 447,9$ kcal (15,7%) respectively. BMI decrease was $0,66 \pm 0,28$ kg/m² (2,5%) in males and $0,55 \pm 0,47$ kg/m² (1,9%) in females. The leptin concentration decreases for male and female subjects were $0,42 \pm 1,53$ ng/ml (5,7%) and $2,20 \pm 8,93$ ng/ml respectively. Using Pearson Correlation analysis, it is known that there are no relationship between food intake change and body mass index (BMI), BMI and leptin concentration, as well as food intake and leptin concentration ($p > 0,05$).

Conclusion: There are decreases in food intake, BMI, and leptin concentration during Ramadan fasting, but no relationship between food intake change and BMI, BMI and leptin concentration, as well as food intake and leptin concentration.

Keywords: ramadan fasting, food intake, BMI, leptin

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