

## ABSTRAK

**Latar Belakang:** Prevalensi gizi lebih pada remaja usia 13-18 tahun sebesar 7.1% hingga 14.1% diantara tahun 1993 dan 2014. Kesadaran dan Puasa Ramadan telah menjadi alternatif pilihan untuk mengatasi gizi lebih.

**Tujuan:** Kita mengevaluasi efektivitas Intervensi Sadar Puasa Ramadan (ISPR) versus Standar Diet Puasa Ramadan (SDPR) pada remaja putri dengan gizi lebih untuk memperbaiki asupan makanan dan aktivitas fisik.

**Metode:** 48 remaja putri dengan gizi lebih dari Sekolah Menengah Atas Negeri (usia 15-17 tahun) dirandomisasi untuk kelompok ISPR atau SDPR. Kelompok ISPR diberikan 6 x 60 menit sesi edukasi gizi dengan pendekatan kesadaran and SDPR diberikan 6 brosur edukasi gizi standar. Edukasi gizi diberikan selama 2 minggu sebelum Puasa Ramadan. Dua minggu sebelum dan sesudah Puasa Ramadan, asupan zat gizi makro, serat dan gula dikur menggunakan 2x24 *recall*, aktivitas fisik diukur menggunakan IPAQ, dan indeks massa tubuh per umur diukur menggunakan timbangan digital dan stadiometer.

**Hasil:** Asupan energi dan karbohidrat berkurang signifikan di kelompok ISPR dan SDPR (p-value <0.05). Asupan protein dan gula berkurang signifikan di kelompok ISPR (p-value <0.05). Asupan serat tidak meningkat signifikan di kelompok ISPR dan SDPR (p-value >0.05).. Uji independent t-test menunjukkan bahwa tidak ada perbedaan asupan zat gizi makro, serat dan gula di kedua kelompok ISPR dan SDPR (p-value >0.05). Aktivitas fisik berkurang signifikan baik di kelompok ISPR dan SDPR (p-value <0.05). Namun, uji independent menunjukkan tidak ada perbedaan aktivitas fisik diantara kedua kelompok ISPR dan SDPR p-value >0.05).

**Kesimpulan:** Intervensi ISPR dan SDPR menunjukkan kemampuan untuk mengatasi gizi lebih pada remaja putri

**Kata kunci:** Gizi Lebih, Remaja Putri, Sadar Puasa Ramadan, Asupan Zat Gizi Makro, Aktivitas Fisik

## ABSTRACT

**Background:** The prevalence of overweight among adolescents 13-18 years from 7.1% to 14.1% between 1993 and 2014, respectively. Mindfulness and Ramadan Fasting have gained attention in treatment of overweight.

**Objectives:** We evaluate the efficacy of Mindful Ramadan Fasting Intervention (MRFI) versus Standard Dietary for Ramadan Fasting (SDRF) in adolescent girls with overweight for improving dietary intake and physical activity

**Methods:** Forty eight overweight adolescents girls from Public Senior High School (age 15 – 17 years) were randomized to MRFI or SDRF groups. The MRFI was administered in six 60-min sessions nutrition education with mindfulness approach and SDDR was provided in six nutrition education brochure administration. Nutrition education was conducted over two weeks before Ramadan Fasting. Two weeks before and after Ramadan Fasting, dietary macronutrients, fiber and sugar intake were measured by 2x24 hour recall, physical activity was measured by IPAQ<sup>R</sup> and body mass index for age was measured by digital weighing and stadiometer.

**Results:** Dietary energy and carbohydrates were significantly decreased among both MRFI and SDDR groups ( $p$ -value  $< 0.05$ ). Dietary protein and fiber were significantly decreased in MRFI group ( $p$ -value  $< 0.05$ ). Dietary fiber was not significantly decreased among both MRFI and SDDR groups ( $p$ -value  $> 0.05$ ). Independent  $t$ -test showed that there was no difference of dietary macronutrients, fiber and sugar in both MRFI and SDRF groups ( $p$ -value  $> 0.05$ ). Physical activity was significantly decreased among both MRFI and SDRF groups ( $p$ -value  $< 0.05$ ). However, independent  $t$ -test showed there was no difference of physical activity among both MRFI and SDDR groups ( $p$ -value  $> 0.05$ )

**Conclusions:** Both MRFI and SDDR showed feasibility to cure overweight among adolescents girls in urban areas.

**Keywords:** overweight, adolescent girls, mindful Ramadan fasting, dietary macronutrients, physical activity