

## HUBUNGAN SARAPAN, AKTIVITAS FISIK DAN MAKAN MALAM DENGAN STATUS GIZI REMAJA DI KOTA YOGYAKARTA

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### INTISARI

**Latar belakang:** Konsumsi makanan dan aktivitas fisik merupakan faktor langsung yang mempengaruhi status gizi.

**Tujuan:** Untuk mengetahui hubungan sarapan, aktivitas fisik dan makan malam dengan status gizi.

**Metode:** Studi observasional dengan rancangan *cross-sectional*, pada bulan Januari-Februari 2017, di SMAN 11 Yogyakarta. Sampel sebanyak 121 orang, yang ditentukan dengan kriteria inklusi yaitu usia 15-18 tahun, tidak menjalani diet tertentu, tidak sedang puasa dan bersedia menjadi responden. Variabel bebas adalah sarapan, aktivitas fisik dan makan malam, masing-masing diukur dengan kuesioner kebiasaan sarapan selama 1 minggu, IPAQ (*International Physical Activity Questionnaire*) selama 1 minggu, *food recall questionnaire 3 x 24 hours*. Sarapan dikategorikan menjadi sering ( $\geq 4$  hari) dan jarang ( $< 4$  hari); aktivitas fisik dikategorikan menjadi kurang ( $\leq 1706$  MET-menit/minggu) dan cukup ( $> 1706$  MET-menit/minggu); makan malam dikategorikan menjadi lebih ( $> 25\%$ ) dan cukup ( $\geq 25\%$ ). Variabel terikat adalah status gizi, dinilai dengan IMT/U. Data dianalisis dengan uji *Chi-square* dengan SPSS versi 22.

**Hasil:** Sebanyak 72,7% responden mempunyai status gizi normal, 78,5% mempunyai kebiasaan sarapan sering, 64,2% mempunyai jumlah asupan makan malam cukup, dan 50,4% mempunyai aktivitas fisik kurang. Hubungan antara sarapan, aktifitas fisik, dan makan malam dengan status gizi menunjukkan nilai p & RP masing-masing ( $p=0,047$ ,  $RP=2,1$ ,  $CI$  95% 1,0-4,1), ( $p=0,786$ ,  $RP=0,9$ ,  $CI$  95% 0,4-1,8). dan ( $p=0,087$ ,  $RP=0,5$ ,  $CI$  95% 0,2-1,1)

**Kesimpulan:** Remaja yang jarang sarapan mempunyai risiko untuk menderita obesitas sebanyak 2,1 kali dibanding yang sering sarapan. Aktivitas fisik dan jumlah makan malam tidak mempunyai hubungan yang bermakna dengan status gizi.

**Kata kunci:** sarapan, makan malam, aktivitas fisik, status gizi, remaja.

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## ABSTRACT

### The Relationship Between Breakfast, Physical Activity, and Dinner with Nutritional Status of Adolescents in Yogyakarta

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**Background:** Food consumption and physical activity are the main factor that directly contribute toward nutritional status.

**Objective:** To study the relationship of breakfast, physical activity, and dinner with nutritional status.

**Methods:** This study was an observational research with cross sectional design. The study was conducted in SMAN 11 Yogyakarta started from January to February 2017. There were 121 pupils participating in this study who met all inclusion criteria such as aged 15-18 year old, not under certain diet and/or fasting, and agree to participate in this study. Independent variable used in this research including breakfast, physical activity, and dinner. Each variable examined using 1-week-breakfast-questionnaire, 1-week-IPAQ (International Physical Activity Questionnaire), 3 x 24-hours food recall questionnaire. Breakfast were categorized into frequent ( $\geq 4$  days) and infrequently ( $< 4$  days); physical activity were categorized into less ( $\leq 1706$  MET-minute/week) and enough ( $> 1706$  MET-minute/week); dinner were categorized into more ( $> 25\%$ ) and enough ( $\geq 25\%$ ). Dependent variables in this study were nutritional status that measured with anthropometric tools based on weight, height, and body mass index. All data from measurement would be categorized into BMI/Age index. Data were analyzed with Chi-square test using SPSS software version 22.

**Result:** Among the subjects, 72,7% had normal nutritional status, 78,5% frequently having breakfast, 64,2% subjects had adequate score for dinner consumption, and 50,4% had less physical activity. The relationship between breakfast, physical activity, and dinner with nutritional status showing p and RP respectively ( $p=0,047$ ,  $RP=2,1$ , CI 95% 1,0-4,1), ( $p=0,786$ ,  $RP=0,9$ , CI 95% 0,4-1,8) and ( $p=0,087$ ,  $RP=0,5$ , CI 95% 0,2-1,1).

**Conclusion:** Adolescent who is not often having breakfast is more likely to develop obesity 2,1 times than who is having breakfast frequently. Meanwhile there is no significant result between physical activity and dinner habit with nutritional status.

**Key words:** *breakfast, physical activity, dinner, nutritional status, adolescent.*

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