

## ASUPAN ZAT GIZI (ENERGI, PROTEIN, LEMAK) DAN STATUS GIZI TERHADAP HIPERTENSI PADA REMAJA DI SMA KOTA YOGYAKARTA

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### INTISARI

**Latar Belakang :** Asupan zat gizi dan status gizi yang tidak baik menimbulkan masalah kegemukan merupakan faktor risiko terjadinya hipertensi. Peningkatan prevalensi hipertensi pada remaja ini dipengaruhi oleh beberapa faktor, yaitu peningkatan insiden obesitas dan perubahan gaya hidup kurang beraktivitas, asupan makanan yang tinggi kalori, tinggi natrium, minuman yang mengandung alkohol dan kafein, kebiasaan merokok, stress mental, dan kurang tidur.

**Tujuan penelitian :** Mengetahui hubungan asupan zat gizi dan status gizi terhadap hipertensi pada remaja di SMA Kota Yogyakarta

**Metode penelitian :** Penelitian ini bersifat obeservasional dengan rancangan *penelitian case control*. Subjek adalah remaja kelas X dan XI SMA di Kota Yogyakarta sebanyak 226 orang dengan 113 orang sebagai kelompok kasus dan 113 orang sebagai kelompok kontrol. Pengukuran status gizi subjek menggunakan pengukuran berat badan dan tinggi badan berdasarkan standar WHO 2007. Pengumpulan data kebiasaan makan menggunakan SQFFQ.

**Hasil :** Asupan energi menunjukkan hubungan bermakna terhadap hipertensi pada remaja  $p=0,00$  (OR= 4,22; 95% CI: 3,16-5,64). Asupan protein menunjukkan hubungan bermakna terhadap hipertensi pada remaja  $p= 0,00$  (OR= 0,36; 95% CI: 0,211-0,631). Asupan Lemak menunjukkan hubungan bermakna terhadap hipertensi pada remaja  $p=0,001$  (OR= 2,17; 95% CI: 1,096-3,307). Status gizi menunjukkan hubungan bermakna terhadap hipertensi  $p=0,000$  (OR= 0,009; 95% CI: 0,001-0,062).

**Kesimpulan :** Terdapat hubungan bermakna antara asupan zat gizi (energi, protein, lemak), dan status gizi terhadap hipertensi pada remaja Sekolah Menengah Atas (SMA) di Kota Yogyakarta.

**Kata Kunci :** Hipertensi, remaja, status gizi, asupan energi, protein, lemak

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## THE INTAKE OF NUTRIENTS (ENERGY, PROTEIN, FAT), AND NUTRITIONAL STATUS TO HYPERTENSION ON ADOLESCENT IN HIGH SCHOOL STUDENT IN YOGYAKARTA

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### ABSTRACT

**Background:** caloric intake and nutritional status can lead to overweight as one of risk factor of hypertension. Increased incidence of obesity, alteration of lifestyle like lower physical activity, high intake, of calorie, sodium, alcohol, caffeine, smoking habit, mental stress, lack of sleep, may greatly contributing to escalating risk of hypertension prevalence on adolescents.

**Objective :** the purpose if this study is to analyze the relationship between intake energy, protein, fat , and nutritional status to hypertension on adolescent in high school students in Yogyakarta.

**Method :** this research is an observational study using case-control design. The samples in this research are 226 students consisting of 113 hypertension high school adolescent and 113 non-hypertension high school adolescent. Measurement of obesity status was taken by measurement of weight and height based on the reference standard of WHO. Data of consumption sugar sweetened beverages is collected by using *SQFFQ*. Data were analyzed by *Chi square test*.

**Result :** The energy intake show a significant relationship on the incidence of hypertention in adolescent,  $p=0,00$  (OR= 4,22; 95% CI: 3,16-5,64). The protein intake show a significant relationship on the occurrence of hypertension in adolescent,  $p= 0,00$  (OR= 0,36; 95% CI: 0,211-0,631). The fat intake show a significant relationship on the occurrence of hypertension in adolescent  $p=0,001$  (OR= 2,17; 95% CI: 1,096-3,307). The nutritional status shows a significant relationship on the occurrence of hypertension in adolescent;  $p=0,000$  (OR= 0,009; 95% CI: 0,001-0,062).

**Conclusion :** There is a significant relationship between intake energy, protein, fat and nutritional status to hypertention on adolescent in high school students in Yogyakarta.

**Keywords :** hypertension, adolescent, nutritional status, intake energy, protein, fat.

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