ABSTRAK

Latar Belakang: Ketidakseimbangan antara konsumsi energi dan kebutuhan energi tubuh menyebabkan obesitas. Beberapa variabel yang berkontribusi terhadap obesitas antara lain genetika, asupan kalori harian, dan konsumsi makronutrien (karbohidrat). **Tujuan:** Tujuan penelitian ini ialah guna mengetahui hubungan antara asupan energi karbohidrat, tingkat aktivitas fisik, dan status obesitas siswa SMA Negeri 12 Surabaya. **Metode:** Desain penelitian ini memanfaatkan rancangan potong lintang. Siswa SMA Negeri 12 Surabaya merupakan populasi. Sampel sebanyak 75 siswa dipilih memanfaatkan rumus Lemeshow. Alat yang digunakan ialah *recall* 2x24 jam dan kuesioner aktivitas fisik (IPAQ). **Temuan Penelitian:** Temuan uji Spearman memperlihatkan adanya korelasi (nilai-p = 0,000) antara asupan energi dan status obesitas. Status obesitas dan tingkat asupan karbohidrat meliputi hubungan (nilai-p = 0,000). Tingkat aktivitas fisik dan status obesitas meliputi hubungan (nilai-p = 0,001). Tingkat asupan energi dan karbohidrat saling berhubungan (nilai-p = 0,000). Sebaliknya, tidak ditemukan korelasi antara asupan energi dan aktivitas fisik (nilai-p = 0,170) atau antara aktivitas fisik dan asupan karbohidrat (nilai-p = 0,678). **Kesimpulan:** Berlandaskan temuan penelitian, kurangnya aktivitas fisik yang dikombinasikan dengan asupan kalori dan karbohidrat yang tinggi dapat menyebabkan obesitas.

Kata Kunci: Obesitas, Konsumsi Energi, Konsumsi Karbohidrat, Aktivitas Fisik, Remaja

ABSTRACT

Background: An imbalance between energy consumption and the body's energy needs leads to obesity. Some of the variables that contribute to obesity include genetics, daily calorie intake, and consumption of macronutrients (carbohydrates). **Objective:** The purpose of this research was to ascertain how students at SMA Negeri 12 Surabaya's energy intake from carbs, physical activity levels, and obesity status relate to one another. **Method:** A cross-sectional design was used in this investigation. Students at SMA Negeri 12 Surabaya made up the population. A sample size of 75 students was chosen using the Lemeshow formula. Two 24-hour recalls and the physical activity questionnaire (IPAQ) were the tools used. **Results of the study:** The findings of the Spearman's test indicated a correlation (p-value = 0.000) between energy intake and obese status. Obesity status and carbohydrate intake levels were related (p-value = 0.000). Physical activity levels and obesity status were related (p-value = 0.001). Levels of energy and carbohydrate intake were related (p-value = 0.000). In contrast, there was no correlation between energy intake and physical activity (p-value = 0.170) or between physical activity and carbohydrate intake (p-value = 0.678). **Conclusion:** According to the study's findings, a lack of physical exercise combined with high caloric and carbohydrate intake may lead to obesity.

Keywords: Obesity, Energy Consumption, Carbohydrate Consumption, Physical Activity, Adolescents