

## Hubungan antara Konsumsi Ultra-Processed Food dengan Status Gizi Siswa Sekolah Dasar di Kelurahan Srandol Wetan

Immanuel Bion Prakoso<sup>1</sup>, Ninik Rustanti<sup>1</sup>, Dewi Marfu'ah Kurniawati<sup>1</sup>, Rachma Purwanti<sup>1</sup>

Korespondensi : [immanuelbion80@gmail.com](mailto:immanuelbion80@gmail.com)

### ABSTRAK

**Latar Belakang :** Obesitas anak sekolah di Indonesia, termasuk Semarang, meningkat signifikan (data SSGI 2022), sering dikaitkan dengan konsumsi *ultra-processed food* yang padat energi dan berdampak negatif pada status gizi.

**Tujuan :** Penelitian ini bertujuan untuk menganalisis hubungan konsumsi UPF dengan status gizi siswa sekolah dasar di Kelurahan Srandol Wetan.

**Metode :** Penelitian *cross-sectional* ini melibatkan 96 siswa kelas 5 dan 6 Sekolah Dasar Srandol Wetan 02 menggunakan metode *purposive sampling*. Data status gizi diukur melalui pengukuran antropometri dengan indikator Z-score (IMT/U). Data presentase kecukupan energi total dan asupan energi UPF diukur menggunakan *semi-quantitative food frequency questionnaire*. Data aktifitas fisik menggunakan *physical activity questionnaire*. Data disajikan dalam bentuk numerik dan dianalisis menggunakan uji bivariat korelasi pearson dan uji multivariat regresi linear berganda.

**Hasil :** Analisis bivariat menunjukkan asupan energi UPF ( $r=0,254$ ;  $p=0,012$ ) dan kecukupan energi total ( $r=0,421$ ;  $p<0,001$ ) berkorelasi signifikan dengan peningkatan nilai status gizi. Analisis multivariat menunjukkan kecukupan energi total secara signifikan berhubungan positif dengan peningkatan nilai status gizi ( $p<0,001$ ), namun asupan energi UPF ( $p=0,058$ ) dan aktifitas fisik ( $p=0,878$ ) tidak.

**Simpulan :** Tidak ada hubungan signifikan antara konsumsi energi UPF dan peningkatan nilai status gizi siswa sekolah dasar di Kelurahan Srandol Wetan. Setelah disesuaikan dengan faktor-faktor lain total kecukupan energi, adalah prediktor utama peningkatan nilai status gizi di populasi ini.

**Kata Kunci :** *ultra processed food*, siswa sekolah dasar, status gizi

---

<sup>1</sup> Program Studi Gizi, Fakultas Kedokteran, Universitas Diponegoro

## **The Relationship between Ultra-Processed Food Consumption and Nutritional Status of Elementary School Students in Srandol Wetan Village**

Immanuel Bion Prakoso<sup>1</sup>, Ninik Rustanti<sup>1</sup>, Dewi Marfu'ah Kurniawati<sup>1</sup>, Rachma Purwanti<sup>1</sup>

**Correspondence :** immanuelbion80@gmail.com

### **ABSTRACT**

**Background :** Obesity of school children in Indonesia, including Semarang, has increased significantly (2022 SSGI data), often associated with the consumption of ultra-processed food which is energy dense and has a negative impact on nutritional status.

**Objective :** This research aims to analyze the relationship between UPF consumption and the nutritional status of elementary school students in Srandol Wetan Village.

**Methods :** This cross-sectional research involved 96 students in grades 5 and 6 of Srandol Wetan 02 Elementary School using a purposive sampling method. Nutritional status data is measured through anthropometric measurements with the Z-score indicator (BMI/U). Data on the percentage of total energy adequacy and UPF energy intake were measured using a semi-quantitative food frequency questionnaire. Physical activity were measured using a physical activity questionnaire. Data are presented in numerical form and analyzed using the bivariate Pearson correlation test and the multiple linear regression multivariate test.

**Result :** Bivariate analysis showed that UPF energy intake ( $r=0.254$ ;  $p=0.012$ ) and total energy adequacy ( $r=0.421$ ;  $p<0.001$ ) were significantly correlated with increasing nutritional status. Multivariate analysis showed that total energy adequacy was significantly positively related to increasing nutritional status ( $p<0.001$ ), but UPF energy intake ( $p=0.058$ ) and physical activity ( $p=0.878$ ) were not.

**Conclusion :** There is no significant relationship between energy UPF consumption and increasing nutritional status of elementary school students in Srandol Wetan Village. After adjusting for other factors total energy adequacy, was the main predictor of increasing nutritional status in this population.

**Keyword :** ultra processed food, elementary school students, nutritional status

---

<sup>1</sup> Nutrition Study Program, Faculty of Medicine, Diponegoro University