

## **Hubungan Asupan Makronutrien, Variasi Makan, dan Praktik Pemberian Makan dengan Status Gizi Anak Sindrom Down di Semarang**

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### **ABSTRAK**

**Latar belakang:** Sindrom Down merupakan kelainan genetik yang menyebabkan kelebihan di kromosom 21. Penderita sindrom Down di Indonesia meningkat dari 0,13% menjadi 0,21% pada tahun 2018. Anak sindrom Down memiliki *energy expenditure* lebih rendah dan berisiko kegemukan.

**Tujuan:** Memberikan gambaran asupan makronutrien, variasi makan, dan praktik pemberian makan pada anak sindrom Down serta menganalisis hubungan terhadap status gizinya.

**Metode:** Penelitian menggunakan metode observasional *cross-sectional* dan melibatkan 47 anak sindrom Down usia 6 – 17 tahun beserta pengasuh utama. Pengambilan data karakteristik dengan kuesioner, asupan makronutrien dengan *semi quantitative food frequency questionnaire* (SQ-FFQ), variasi makan dengan *dietary diversity score* (DDS), dan praktik pemberian makan dengan *child feeding questionnaire* (CFQ). Pengukuran antropometri meliputi berat badan dan tinggi badan menggunakan timbangan digital dan *microtoise*. Analisis bivariat dengan uji *pearson* dan *spearman*.

**Hasil:** Rerata asupan energi, karbohidrat, protein, dan lemak secara berurutan adalah 1.768,5 kkal/hr, 241,1 g/hr, 66,2 g/hr, dan 63,1 g/hr. Sebanyak 29 (61,7%) anak sindrom Down memiliki variasi makan sedang. Sebanyak 29 (61,7%) orangtua bersikap mengontrol makan anak. Tidak ditemukan hubungan signifikan antara asupan makronutrien, variasi makan, praktik pemberian makan dengan status gizi ( $p < 0,05$ ).

**Simpulan:** Asupan makronutrien, variasi makan, dan praktik pemberian makan tidak berhubungan dengan status gizi (z-skor IMT/U) anak sindrom Down di Semarang.

**Kata kunci:** sindrom Down, asupan makan, praktik pemberian makan, status gizi

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## **Correlation of Macronutrient Intake, Dietary Diversity, and Feeding Practices with Nutritional Status of Down Syndrome Children in Semarang**

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### **ABSTRACT**

**Background:** Down syndrome is a genetic disorder that causes an extra chromosome 21. The numbers of Down syndrome patients in Indonesia increased from 0,13% to 0,21% in 2018. Children with Down syndrome have lower energy expenditure and are at risk of obesity.

**Objective:** Provides an overview of macronutrient intake, dietary diversity, and feeding practices in children with Down syndrome and analyze the relationship to their nutritional status.

**Methods:** The study used cross-sectional observational method and involved 47 children with Down syndrome aged 6 – 17 years and their primary caregiver. Data collection on characteristic using questionnaire, macronutrient intake using SQ-FFQ, dietary diversity using DDS, and feeding practices using CFQ. Anthropometric measurement include body weight and height using digital scales and microtoise. Bivariate analysis using pearson and spearman tests.

**Results:** The average intake of energy, carbohydrate, protein, and fat consecutively is 1.768,5 kcal/day, 241,1 g/day, 66,2 g/day, and 63,1 g/day. A total of 29 (61,7%) children with Down syndrome have moderate diversity score. A total of 29 (61,7%) parents tend to controlled their child's eating. No significant relationship found between macronutrient intake, diversity score, feeding practices with nutritional status ( $p < 0,05$ ).

**Conclusion:** Macronutrient intake, diversity score, and feeding practices are not related to nutritional status (BMI z-score) of children with Down syndrome in Semarang.

**Keywords:** down syndrome, food intake, feeding practices, nutritional status

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