

**HUBUNGAN ASUPAN PROTEIN DENGAN KADAR ZINK RAMBUT
PADA ANAK *STUNTING* USIA 24-59 BULAN DI PUSKESMAS ANAK
AIR, IKUR KOTO, DAN SEBERANG PADANG**

TESIS

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ABSTRAK

HUBUNGAN ASUPAN PROTEIN DENGAN KADAR ZINK RAMBUT PADA ANAK STUNTING USIA 24-59 BULAN DI PUSKESMAS ANAK AIR, IKUR KOTO, DAN SEBERANG PADANG

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Latar Belakang: *Stunting* menggambarkan gangguan pertumbuhan yang disebabkan masalah nutrisi. Zink merupakan nutrisi tipe 2 yang akan menghentikan proses pertumbuhan jika mengalami defisiensi. Asupan zink memiliki korelasi positif terhadap asupan protein dari makanan. Kadar zink tubuh dapat diukur melalui kadar zink rambut, yang lebih akurat menggambarkan kadar zink kronis dan sesuai untuk kondisi *stunting*.

Tujuan: Mengetahui hubungan antara asupan protein dengan kadar zink rambut pada anak *stunting* usia 24-59 bulan di Puskesmas Anak Air, Ikur Koto, dan Seberang Padang.

Metode: Penelitian *cross-sectional* dilakukan di tiga Puskesmas di Kota Padang dan Laboratorium Kesehatan Sumatera Barat dari Februari 2023 hingga Maret 2024. Subjek adalah anak *stunting* usia 24-59 bulan. Data asupan protein diukur dengan wawancara *food recall* 2x24 jam, sedangkan kadar zink rambut dianalisis menggunakan teknik *flame atomic absorption spectrometry* (FAAS).

Hasil: Sebanyak 97 subjek yang diteliti, 67% memiliki asupan protein kurang dengan median 13,92 gram, dan 67% memiliki kadar zink rambut kurang dengan median 123,80 ppm. Sebanyak 64,6% anak dengan asupan protein kurang juga memiliki kadar zink rambut rendah. Uji statistik menunjukkan $p=0,627$ ($p>0,05$).

Kesimpulan: Tidak terdapat hubungan yang bermakna secara statistik antara asupan protein dengan kadar zink rambut pada anak *stunting* usia 24-59 bulan.

Kata Kunci: Asupan protein, kadar zink rambut, anak, *stunting*.

ABSTRACT

THE RELATIONSHIP BETWEEN PROTEIN INTAKE AND HAIR ZINC LEVELS IN STUNTED CHILDREN AGED 24-59 MONTHS AT ANAK AIR, IKUR KOTO, AND SEBERANG PADANG HEALTH CENTERS

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Background: Stunting describes growth disorders, which is caused by nutritional deficiencies. Zinc is a type 2 nutrient that halts growth when deficient. Zinc intake has a positive correlation with dietary protein intake. Zinc levels in the body can be measured through hair zinc levels, which more accurately reflect chronic zinc levels and are suitable for stunting conditions.

Objective: To determine the relationship between protein intake and hair zinc levels in stunting children aged 24-59 months at Anak Air, Ikur Koto, and Seberang Padang Health Centers.

Methods: A cross-sectional study was conducted at three health centers in Padang and the West Sumatra Health Laboratory from February 2023 to March 2024. The subjects were stunting children aged 24-59 months. Protein intake data were collected through a 2x24-hour food recall interview, while hair zinc levels were analyzed using the flame atomic absorption spectrometry (FAAS) technique.

Results: 97 subjects studied, 67% had low protein intake with a median of 13.92 grams, and 67% had low hair zinc levels with a median of 123.80 ppm. Among children with low protein intake, 64.6% also had low hair zinc levels. Statistical analysis showed $p=0.627$ ($p>0.05$).

Conclusion: There is no statistically significant relationship between protein intake and hair zinc levels in stunting children aged 24-59 months.

Keywords: Protein intake, hair zinc levels, children, stunting.