

## ABSTRAK

Innayah, Alma M. 2017. **Hubungan antara Asupan Zat Besi, Zink, dan Kalsium Harian dalam Makanan dengan Status Gizi (TB/U) pada Balita di 5 Kecamatan Wilayah Kabupaten Blitar.** Tugas Akhir, Program Studi Ilmu Gizi, Fakultas Kedokteran Universitas Brawijaya. Pembimbing: (1) Widya Rahmawati, S. Gz., M. Gizi, (2) Catur Saptaning Wilujeng, S. Gz., MPH.

Status gizi berdasar tinggi badan menurut umur (TB/U) merupakan indikator yang menunjukkan pertumbuhan linier pada balita. Salah satu faktor yang mempengaruhi TB/U pada balita adalah asupan makanan, termasuk asupan mineral seperti zat besi, zink, dan kalsium. Penelitian ini bertujuan untuk mengetahui hubungan antara asupan zat besi, zink, dan kalsium harian dalam makanan dengan status gizi TB/U pada balita di 5 kecamatan wilayah Kabupaten Blitar. Penelitian analitik observasional ini dilakukan dengan desain *cross-sectional* yang dilakukan kepada balita usia 0-59 bulan. Lokasi penelitian dipilih melalui *multistage random sampling* dan subjek penelitian dipilih melalui *consecutive sampling* hingga didapatkan 81 responden. Variabel yang diteliti adalah asupan zat besi, zink, serta kalsium dan z-score TB/U. Pengambilan data dilakukan melalui pengukuran panjang badan, tinggi badan, dan *24-hours recall*. Analisis bivariat yang digunakan adalah Uji Korelasi *Spearman*. Hasil penelitian menunjukkan bahwa terdapat 10,8% balita sangat pendek dan 16,2% balita pendek dari kategori usia 1-3 tahun serta rata-rata nilai asupan zat besi, zink, dan kalsium menunjukkan keadaan defisit. Terdapat hubungan antara asupan zat besi dengan TB/U balita usia 48-59 bulan ( $p=0,035$  ;  $r=0,636$ ) dan terdapat hubungan antara asupan zink dengan TB/U balita usia-48-59 bulan ( $p=0,032$  ;  $r=0,645$ ), tetapi tidak terdapat hubungan antara asupan kalsium dengan TB/U balita 0-59 bulan.

Kata Kunci: TB/U, asupan harian, zat besi, zink, kalsium

## **ABSTRACT**

Innayah, Alma M. 2017. **The Relationship between Daily Trace Elements Intake (Ca, Zn, Fe) from food and Nutritional Status according to HAZ Value of under 5 years old Children in Blitar Regency.** Final Assignment, Nutrition Department, Faculty of Medicine, Brawijaya University. Supervisors: (1) Widya Rahmawati, S. Gz., M. Gizi, (2) Catur Saptaning Wilujeng, S. Gz., MPH.

Nutritional status particularly height for age z-score (HAZ) is an indicator showing the condition of linear growth in children under 5 years old. One of the factors which influences HAZ value is daily intake of trace elements such as calcium, zinc, and iron. This study was aimed to provide evidence the relationship between daily trace elements intake (Ca, Zn, Fe) from food and nutritional status according to HAZ value of children aged 0-59 months old in Blitar Regency. An analytic observational study using cross-sectional design was accomplished to children aged 0-59 months old. The location of this study were selected by multistage random sampling and the subjects were selected by consecutive sampling up to 81 subjects were accomplished. The variables measured were the level of trace elements intake from food and HAZ value. This research was using the non parametric *Spearman Correlation* test. There were 10,8% of very stunted and 16,2% of stunted children aged 1-3 years old and the subjects had deficit intake of iron, zinc, and calcium based on mean intake. There was relationship between daily intake of iron and HAZ value of children aged 48-59 months old ( $p=0,035$  ;  $r=0,636$ ) and there was relationship between daily intake of zinc and HAZ value of children aged 48-59 months old ( $p=0,032$  ;  $r=0,645$ ), but there was not relationship between daily intake of calcium and HAZ value of children aged 0-59 months old.

Keywords: HAZ, daily intake, iron, zinc, calcium