

**TESIS**

**PENGARUH ASUPAN ENERGI DAN PROTEIN  
TERHADAP PERUBAHAN STATUS GIZI PASIEN  
ANAK SELAMA DIRAWAT DI RSUP Dr. KARIADI  
SEMARANG**

**THE EFFECT OF ENERGY AND PROTEIN INTAKE ON  
CHANGES OF NUTRITIONAL STATUS IN CHILDREN  
PATIENTS DURING HOSPITALIZED CARE IN CENTRAL  
GENERAL HOSPITAL OF Dr. KARIADI SEMARANG**



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# PENGARUH ASUPAN ENERGI DAN PROTEIN TERHADAP PERUBAHAN STATUS GIZI PASIEN ANAK SELAMA DIRAWAT DI RSUP Dr. KARIADI SEMARANG

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## ABSTRAK

**Latar Belakang :** Asupan energi dan protein yang adekuat bagi anak yang dirawat inap sangat diperlukan dalam upaya mencegah penurunan status gizi yang terjadi selama masa perawatan. Dukungan gizi adalah bagian dari terapi yang berperan bagi kesembuhan pasien anak.

**Tujuan :** Menganalisis pengaruh asupan energi dan protein terhadap perubahan status gizi pasien anak selama dirawat.

**Metode :** Penelitian observasional dengan rancangan kohort prospektif, dari bulan Maret – April 2014. Subjek sebanyak 52 anak, usia 2-14 tahun dari ruang anak RSUP Dr. Kariadi Semarang, diperoleh secara *consecutive sampling*. yang dirawat inap  $\geq 7$  hari dan memenuhi kriteria inklusi. Data berat badan diukur pada awal masuk dan pada saat pulang. Status gizi dinilai dengan skor Z BB/TB dengan program WHO Anthro 2005. Data asupan makanan diperoleh dengan metode *comstock* untuk makanan rumah sakit dan *recall* 24 jam untuk makanan luar rumah sakit. Data dianalisis dengan uji *chi-square* dan uji *fisher's exact*.

**Hasil :** Sebanyak 48,1% subjek mempunyai asupan energi yang tidak cukup dan 53,9% subjek mempunyai asupan protein yang tidak cukup. Sebanyak 48,1% subjek menurun status gizinya setelah dirawat di rumah sakit. Ada hubungan antara asupan energi ( $p=0,003$ ) dan asupan protein ( $p=0,003$ ) terhadap perubahan status gizi selama dirawat di rumah sakit. Subjek dengan asupan energi yang tidak cukup mempunyai risiko 26 kali (95% CI 3,31-291,09) untuk mengalami penurunan skor Z BB/TB dibandingkan subjek dengan asupan energi cukup. Subjek dengan asupan protein tidak cukup mempunyai risiko 20 kali (95% CI 4,24-230,52) untuk mengalami penurunan skor Z BB/TB di rumah sakit dibandingkan subjek dengan asupan protein cukup.

**Simpulan :** Asupan energi dan protein yang tidak cukup pada anak selama dirawat di rumah sakit berakibat mengalami penurunan status gizi.

**Kata Kunci :** Asupan energi, asupan protein, anak, rawat inap anak.

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**ABSTRACT**

**Background** : Adequate energy and protein intake for children patients is much required in efforts to prevent declining nutrition status during hospitalization. Nutritional support is a part of therapy which has an important role in the recovery of children patients.

**Objective** : To analyze the effect of energy and protein intake on changes of nutritional status in children patients during hospitalized.

**Method** : This was an observational with prospective cohort study, from Mart to April 2014. Subjects were 52 children, aged 2-14 years from pediatrics unit in General Central Hospital of Dr. Kariadi Semarang, sampling were chosen by consecutive sampling, who were hospitalized for seven days or more and according to criteria of inclusion. Data of body weight and body height were measured at admission and discharge. Nutritional status was determined using weight for height Z Score, according to the WHO 2005 child Growth Standards. Food intake data was collected by Comstock Methode for hospital food and recall 24 hours for non hospital food. Data analyzed by chi-square and fisher test.

**Result** : Arround 48,1% of subjects with insufficient energy intakes and 53,9% of children with insufficient protein intakes. Arround 48,1% subjects to be declining in nutritional status after hospitalization. There was a significant correlation between energy intakes ( $p=0,003$ ) and protein intakes ( $p= 0,003$ ) on changes of nutritional status in children patients during hospitalized. Subjects with insufficient energy intakes were 26 times risk (95% CI 3,31-291,09) of declining of weight for height Z Score than subjects with sufficient energy intakes. Subjects with insufficient protein intake were 20 times risk (95% CI 4,24-230,52) of declining of weight for height Z Score than subjects with sufficient protein intakes.

**Conclusion** : The effect of Insufficient energy and protein intakes can decline of nutritional status in children during hospitalized.

**Key Words** : Energy intake, protein intake, children, pediatrics unit.

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