



## ABSTRAK

UNIVERSITAS ESA UNGGUL  
FAKULTAS ILMU-ILMU KESEHATAN  
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SKRIPSI, FEBRUARI 2015

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### **HUBUNGAN ANTARA ASUPAN PROTEIN, AKTIVITAS FISIK, Z-SKOR, DAN FREKUENSI LATIHAN TERHADAP KEKUATAN OTOT TUNGKAI PEMAIN BASKET REMAJA LAKI-LAKI DI KLUB BASKET SCORPIO, JAKARTA TIMUR**

**xv, VI BAB, 96 halaman, 6 tabel, 12 grafik, 6 lampiran**

**Latar Belakang:** Salah satu faktor penunjang prestasi dalam olahraga adalah kekuatan otot. Peningkatan kekuatan otot dipengaruhi oleh beberapa faktor dan beberapa di antaranya adalah asupan protein, aktivitas fisik, status gizi, dan frekuensi latihan. Bola basket adalah salah satu olahraga populer yang memerlukan kekuatan otot yang maksimal.

**Tujuan:** Menganalisis hubungan antara asupan protein, aktivitas fisik, z-skor, dan frekuensi latihan terhadap kekuatan otot tungkai pemain basket remaja laki-laki.

**Metode Penelitian:** Menggunakan data primer dengan metode *cross sectional*. Uji statistik yang digunakan adalah Koefisien Korelasi Pearson. Sampel sebanyak 33 orang pemain basket remaja kelompok U16 dan U18 di Klub Basket Scorpio, Jakarta Timur.

**Hasil Penelitian:** Rata-rata z-skor adalah 0,06 SD (normal), rata-rata asupan protein adalah 57,74gr (cukup), rata-rata nilai aktivitas fisik sebesar 1,56 PAL (ringan), rata-rata frekuensi latihan 4 kali seminggu, dan rata rata hasil pengukuran kekuatan otot tungkai adalah 47,12cm (rata-rata). Ada korelasi negatif ( $r = -0,528$ ) dan hubungan yang signifikan antara z-skor dan kekuatan otot tungkai ( $p = 0,002$ ). Tidak ada korelasi dan hubungan yang signifikan antara asupan protein ( $r = 0,113$ ;  $p = 0,529$ ), aktivitas fisik ( $r = 0,117$ ;  $p = 0,516$ ), dan frekuensi latihan ( $r = 0,217$ ;  $p = 0,225$ ) terhadap kekuatan otot tungkai.

**Kesimpulan:** Adanya hubungan yang signifikan antara kekuatan otot tungkai dan indeks massa tubuh tetapi tidak dengan asupan protein, aktivitas fisik, dan frekuensi latihan

Kata Kunci: asupan protein, aktivitas fisik, status gizi, frekuensi latihan, z-skor, kekuatan otot tungkai, pemain basket remaja laki-laki.

Daftar Bacaan: 83 (1984–2014)



## ABSTRACT

ESA UNGGUL UNIVERSITY  
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UNDERGRADUATE THESIS, FEBRUARY 2015

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### **ASSOCIATION OF PROTEIN INTAKE, PHYSICAL ACTIVITY, Z-SCORE, AND TRAINING FREQUENCY ON LEG MUSCLE STRENGTH OF MALE ADOLESCENT BASKETBALL PLAYER AT SCORPIO BASKETBALL CLUB, EAST JAKARTA**

**xv, VI chapters, 96 pages, 6 tables, 12 charts, 6 attachments**

**Background:** One of the factors to support the achievement in sport is muscle strength. Muscle strength enhancement is affected by some factors and some of them are protein intake, physical activity, z-score, and training frequency. Basketball is one of the popular sports that need maximum muscle strength.

**Objective:** To analyze the association between protein intake, physical activity, z-score, and training frequency on leg muscle strength of male adolescent basketball players.

**Design:** Primary data with cross sectional method. Statistical test used Pearson Coefficient Correlation. The sample is 33 male adolescent basketball players from group U16 and U18 at Scorpio Basketball Club, East Jakarta.

**Results:** The mean of the z-score is 0,06 SD (normal), the mean of the protein intake is 57,74gr (normal), the mean of the physical activity 1,56 PAL (sedentary), the mean of the training frequency is 4 times a week, and the mean of the leg muscle strength result is 47,12cm (average). There is a negative correlation ( $r = -0,527$ ) and significant association between z-score and leg muscle strength ( $p = 0,002$ ). There is no correlation and no significant association between protein intake ( $r = 0,113$ ;  $p = 0,529$ ), physical activity ( $r = 0,117$ ;  $p = 0,516$ ), and training frequency ( $r = 0,217$ ;  $p = 0,225$ ) on leg muscle strength.

**Conclusion:** There is a significant association between leg muscle strength and z-score but not with protein intake, physical activity, and training frequency.

Keyword: protein intake, physical activity, z-score, training frequency, leg muscle strength, male adolescent basketball player

Bibliography: 83 (1984–2014)