

INTISARI

Latar Belakang. Terapi gizi yang tepat, berkelanjutan serta monitoring dan evaluasi yang terus menerus akan menjadi kunci keberhasilan manajemen gizi sehingga dapat menghasilkan *outcome* terbaik berupa performa atlet yang terjaga dalam jangka waktu yang relatif panjang.

Tujuan Penelitian. Penelitian ini bertujuan untuk mengetahui efektifitas penerapan penatalaksanaan gizi pada atlet terhadap perbaikan status gizi sebagai penunjang performa pada atlet sepak bola.

Metode Penelitian. Penelitian ini adalah penelitian eksperimental dengan pendekatan *Non Randomize Trial, pre-post control trial design*. Subjek dibagi antara kelompok perlakuan dan kontrol dan selama 3 bulan diamati perubahan status gizi dan performa. Penelitian dilaksanakan di Asrama Atlet Remaja Ragunan, Kemenpora RI Jakarta dan SSB ASIFA Malang pada bulan Januari sampai dengan Juni 2016. Total subjek adalah 131 atlet yang terbagi dalam 77 kontrol dan 54 perlakuan. Variabel terikat dalam penelitian ini adalah status gizi dan performa atlet. Variabel bebas dalam penelitian ini adalah program intervensi gizi. Analisis bivariat menggunakan *paired t-test*, uji *independent t-test* dan uji regresi liner. Penelitian disetujui oleh Komisi Etik Penelitian Kedokteran dan Kesehatan, Fakultas Kedokteran UGM. Ref: KE/FK/102/EC/2016 tertanggal 1 Februari 2016

Hasil Penelitian. Ada perbedaan status gizi secara antropometri (berat tubuh, tinggi tubuh, persen lemak, persen masa otot, endomorf, ektomorf, IMT/U, TB/U), biokimia (glukosa dan kolesterol), asupan makan (energi, karbohidrat, protein, serat pangan), asupan cairan atlet setelah program intervensi gizi ($P < 0.05$). Indikator mesomorf, asam urat, hemoglobin, hematokrit, warna urin, pH, perubahan berat badan latihan dan asupan lemak setelah program intervensi tidak berubah secara signifikan ($P > 0.05$). Ada perubahan performa atlet berupa peningkatan signifikan pada kelompok kontrol ($P = 0.005$) dan perubahan penurunan yang tidak signifikan ($P = 0.284$) pada kelompok perlakuan sesudah intervensi. Ada perbedaan status gizi secara antropometri (tinggi tubuh, endomorf, ektomorf, IMT/U), asupan makanan (karbohidrat, protein, serat) antar kelompok secara signifikan ($P < 0.05$). Tidak ada beda bermakna antar kelompok pada indikator antropometri (berat tubuh, persen lemak, persen masa otot, mesomorf, TB/U), biokimia (glukosa, asam urat, kolesterol, hemoglobin, hematokrit, profil urin), status hidrasi (perubahan berat badan latihan), asupan makanan (energi, lemak) dan asupan cairan ($P > 0.05$). Ada perbedaan performa atlet sepakbola antar kelompok ($P < 0.05$). Program gizi berpengaruh signifikan terhadap performa sebesar 69.8% ($P < 0.005$) dan bersama-sama latihan naik signifikan sebesar 72.5% terhadap performa ($P < 0.005$).

Kesimpulan. Program gizi efektif memperbaiki seluruh aspek antropometri, somatotype, status hidrasi, asupan makan dan asupan cairan, namun belum terlihat efektif memperbaiki biokimia. Program gizi memiliki pengaruh cukup besar (69.8%) terhadap performa atlet.

Keywords: Status Gizi, Performa, Atlet, Sepakbola

ABSTRACT

Background. Proper nutrition therapy and ongoing monitoring and evaluation will be the key to successful nutrition management to produce the best outcomes of athlete performance.

Objective. This study aims to determine the effectiveness of the application of nutrition management at athletes to the improvement of nutritional status to promote athlete's performance.

Methods. This research is an experimental research with Non Randomize Trial approach, pre-post control trial design. Subjects were divided between treatment and control groups and over 3 months observed changes in nutritional status and performance. The study was conducted at the Ragunan Athletes' Dormitory, Kemenpora RI Jakarta and SSB ASIFA Malang from January to June 2016. The total subjects were 131 athletes who were divided into 77 controls and 54 treatments. The dependent variables in this study are nutritional status and athlete performance. The independent variable in this research is nutrition intervention program. Bivariate analysis using paired t-test, independent t-test and linear regression test. The study was approved by the Medical and Health Research Ethics Commission, Faculty of Medicine UGM. Ref: KE / FK / 102 / EC / 2016 dated February 1, 2016.

Result. There are anthropometric differences in nutritional status (body weight, body height, percent fat, percent of muscle mass, endomorph, ectomorph, BMI/Age, Height/Age), biochemistry (glucose and cholesterol), dietary intake (energy, carbohydrate, protein, fiber Food), fluid intake of athletes after nutrition intervention program ($P < 0.05$). Mesomorph component, uric acid, hemoglobin, hematocrit, urine color, pH, exercise weight change and fat intake after intervention program were not change significantly ($P > 0.05$). There was a significant change in athlete performance in the control group ($P = 0.005$) and not significant change ($P = 0.284$) in the treatment group after the intervention. There were differences in anthropometric nutritional status (height, endomorph, ectomorph, BMI/Age), food intake (carbohydrate, protein, fiber) between groups significantly ($P < 0.05$). There were no significant differences between group in anthropometric indicators (body weight, percent fat, percent muscle mass, mesomorph, Height/Age), biochemistry (glucose, uric acid, cholesterol, hemoglobin, hematocrit, urine profile), hydration status (Exercise weight change), food intake (energy, fat) and fluid intake ($P > 0.05$). There is a difference in the performance of football athlete between groups ($P < 0.05$). The nutritional program had a significant effect on the performance of 69.8% ($P < 0.005$) and together with exercise increased significantly by 72.5% on performance ($P < 0.005$).

Conclusion. Nutritional programs effectively improve all aspects of anthropometry, somatotype, hydration status, dietary intake and fluid intake, but have not yet been seen as effective in improving biochemistry. Nutrition program has considerable influence (69.8%) on athlete's performance.

Keywords: Nutrition Status, Performance, Athlete, Football