

Pengaruh Konsumsi Cairan Isotonik Terhadap Status Hidrasi Atlet Remaja Sepatu Roda

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ABSTRAK

Latar belakang : Salah satu faktor yang mempengaruhi performa seorang atlet adalah status hidrasi. Indikator status hidrasi yang digunakan yaitu berat jenis urin (BJU) dan persentase selisih berat badan sebelum dan setelah latihan.

Tujuan : Mengetahui pengaruh konsumsi cairan isotonik terhadap status hidrasi atlet remaja sepatu roda.

Metode : Jenis penelitian adalah *true experiment design* dengan *randomized pre-posttest control group* pada 24 atlet remaja perempuan dan laki-laki yang tergabung dalam PELATDA DKI Jakarta cabang olahraga sepatu roda. Subjek dibagi menjadi tiga kelompok berdasarkan jenis cairan isotonik, kelompok 1 cairan isotonik komersial, kelompok 2 cairan isotonik alami, dan kelompok 3 air mineral. Subjek diberikan masing-masing total cairan sebanyak 1800 ml dalam periode waktu 120 menit. Analisis statistik menggunakan uji ANOVA Oneway, uji *Wilcoxon*, dan uji *Spaerman*.

Hasil : Subjek kurang mengonsumsi cairan (66,7%) sebelum intervensi dan mengalami dehidrasi ringan (79,2%) pada indikator BJU. Setelah intervensi, terjadi peningkatan jumlah subjek dehidrasi sedang (25%) pada indikator BJU. Tidak ditemukan perbedaan signifikan pada status hidrasi indikator BJU dan selisih persentase berat badan ($p>0,05$). Tidak terdapat hubungan antara konsumsi cairan harian terhadap perubahan status hidrasi setelah intervensi ($p>0,05$).

Simpulan : Tidak ada perbedaan pada status hidrasi atlet remaja sepatu roda (BJU dan persentase selisih berat badan) berdasarkan pemberian cairan isotonik alami dan komersial yang diberikan kepada masing-masing kelompok perlakuan. Namun, terdapat penurunan nilai BJU pada kelompok P1.

Kata kunci : atlet, remaja, status hidrasi, cairan isotonik

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The Effect of Isotonic Fluid Consumption On The Hydration Status of Adolescent Roller Skate Athletes.

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ABSTRACT

Background : Hydration status can be one of the influence to athlete's performance. Urine density (UD) and weight change percentage are the indicators of hydration status that had been used in this study.

Objective : The purpose was to know the effect of isotonic fluid consumption on the hydration status of adolescent roller skate athletes.

Methods : True experiment design with randomized pre-posttest control group in 24 female and male adolescent roller skate athletes who were part of the PELATDA DKI Jakarta team. Subjects were divided into 3 groups based on variations of isotonic fluids, group 1 for commercial isotonic fluid, group 2 for nature isotonic fluid, and group 3 for mineral water. Each subjects were given 1800 ml rehydration over of 120 minutes. Statistical analysis used the ANOVA Oneway test, *Wilcoxon* test, dan *Spaerman* test.

Results : Most of the subjects were in the category of not consuming enough fluids (66,7%) and had mild dehydration (79,2%) on the UD indicator. After the intervention, on the UD indicator, number of subjects with moderate dehydration had increased (25%). There were no significant differences were found in the hydration status of the UD and weight change percentage ($p>0,05$). There were no correlation between daily fluid consumption and changes in hydration status after the intervention.

Conclusion : There were no difference in the hydration status of adolescent roller skate athletes (UD and weight change percentage) based on nature isotonic fluid and commercial isotonic fluid given to each treatment group. However, there was an decrease in the UD value on the P1 group.

Key Word : athletes, adolescent, hydration status, isotonic fluid.

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