

ABSTRACT

Title : *Differences in the Granting of Orange Juice, Coconut Water, and Isotonic Drinks to the Runner Hydration Status at the Bogor Runner Club*

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Study Program : *Nutrition*

VI CHAPTERS, 101 Pages, 17 Tables

Background: *Many athletes who ignore adequate fluid consumption during physical activity. running sports often experience fatigue that occurs due to the amount of sweat that comes out during training or matches and is not balanced with adequate fluid consumption.*

Aim: *Analyze differences in hydration status before and after consumption of orange juice, coconut water, and isotonic drinks in runners in Bogor Running Club*

Methods: *Experimental comparison group research using pretest and post test designs. Samples using purposive sampling technique obtained the number of samples is 45 people. The sample was divided into 3 treatment groups. Each group consisted of 15 people with each 500ml commercial drink after \pm 15 minutes running.*

Finding: *The age of Bogor runner respondents was 18-40 years old, with an average body weight of 26.76 ± 5.78 kg, height 167.42 ± 6.12 cm, length of time being 10.22 ± 9.20 months, nutritional status 22.49 ± 3.31 kg/m², fat percent 11.45 ± 5.40 %, muscle mass 55.72 ± 7.09 kg, total water in the body 63.98 ± 4.21 %, fluid consumption 1468 ± 399.66 ml. There was a difference in urine specific gravity before $1,020 \pm 0.004$ g / ml and after intervention $1,020 \pm 0.004$ g / ml in commercial drinks of orange juice ($p > 0.05$). There was a difference in urine specific gravity before $1,019 \pm 0.005$ g / ml and after intervention $1,019 \pm 0.005$ g / ml in commercial drinks of coconut water ($p > 0.05$). There were differences in urine specific gravity before $1,018 \pm 0.004$ g / ml and an intervention of $1,018 \pm 0.004$ g / ml in isotonic drinks ($p > 0.05$).*

Conclusion: *Consumption of commercial drinks orange juice, coconut water, and isotonic drinks can prevent dehydration.*

Key Words: *Orange Juice, Coconut Water, Isotonic Drinks, Hydration Status.*