Pengaruh suplementasi air kelapa kemasan terhadap status hidrasi dan kadar asam urat pada nelayan = Effectiveness of packaged coconut water supplementation on hydration status and blood uric acid levels among fishermen

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Abstrak

Latar Belakang. 10% nelayan mengalami dehidrasi, sehingga berefek pada gangguan sekeresi metabolit seperti asam urat. Nelayan merupakan pekerjaan yang rentan terkena pajanan tekanan panas. Tujuan penelitian ini adalah mengetahui efektifitas suplementasi air kelapa kemasan dalam mengembalikan status hidrasi dan penurunan kadar asam urat pada nelayan. Metode. Desain penelitian ini adalah true experimental, comparison pre intervention-post intervention control group terhadap 2 kelompok perlakuan menggunakan randomisasi. Kelompok suplementasi air kelapa kemasan (n=20) dan kelompok suplementasi air mineral (n=20). Sebelum melaut para subjek dilakukan pemeriksaan berat jenis urin dan kadar asam urat darah. Kemudian setiap subjek diberikan cairan rehidrasi yang terdiri dari cairan intervensi (500 ml) dan cairan dasar (2000 ml). Segera setelah kembali melaut para nelayan kembali diperiksa asam urat, berat jenis urine, aktivitas fisik dan food recall 24 jam. Hasil. Tidak terdapat perbedaan rerata berat jenis urine post intervensi antara kelompok suplementasi air kelapa kemasan (1.009+0.007) dan kelompok air mineral (1.007+0.006) dengan nilai p=0.298. Tidak terdapat perbedaan rerata kadar asam urat post intervensi antara kelompok suplementasi air kelapa kemasan (3.52+1.15) dan kelompok air mineral (3.53+0.82) dengan nilai p=0.991. Simpulan. Tidak terdapat perbedaan bermakna antar suplementasi air kelapa kemasan dan air mineral dalam mengembalikan status hidrasi dan menurunkan kadar asam urat.
.....Background. 10% among fishermen got dehydration and can also cause shifting in uric acid excretion. This study want to know effectiveness of packaged coconut water supplementation in restoring hydration status and decrease blood uric acid levels compared to mineral water at fishermen. Methods. This study design was true experimental, comparison of postintervention for control and intervention group. 40 Fishermen were dividing into 2 treatment groups by randomization. The packaged coconut water group (n=20) and mineral water group (n=20). Before departing to sea, subjects must collect urine & blood sample for urine specific gravity (USG) and blood uric acid (UA), after that each subject was given rehydration fluid which contain supplemental (500ml) and basic needs fluids (2000ml). Immediately after returning from sea the fishermen were re-examined for UA & USG, also physical activity, and 24-hour food recall. Result. There are no significant mean different of urine specific gravity after intervention between packaged coconut water group (1,009+0.007) and mineral water group (1,007+0.006) with p value=0.298. There was no significant mean different of uric acid levels after intervention between packaged coconut water group (3.52+1.15) and mineral water group (3.53+0.82) with p value =0.991. The p value after intervention in both group showed a value of p>0.05. Conclusion. There were no significant differences between groups of packaged coconut water and mineral water to restore hydration status and reduce uric acid levels.