Pengaruh pemberian susu cokelat dan minuman berkarbohidrat protein terhadap pemulihan dan performa atlet dayung nasional di Pelatnas Dayung Pengalengan tahun 2015 = Effects of chocolate milk and carbohydrate protein replacement drink on recovery and performance among national rowing athletes in national training centre Pengalengan 2015 / Anna Fitriani

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Abstrak

[ABSTRAK
Pasca latihan yang berat dan lama, atlet memerlukan suplemen gizi yang tepat untuk memaksimalkan pemulihan dan performa. Penelitian ini bertujuan untuk membuktikan pengaruh susu cokelat dan minuman berkarbohidrat-protein terhadap pemulihan dan performa atlet dayung nasional cabang rowing putera berusia 18 – 23 tahun. Penelitian ini merupakan penelitian eksperimental murni yang bersifat single-blind dengan crossover design dan dilaksanakan di Pelatnas Dayung Pengalengan, Jawa Barat pada Bulan April 2015. Atlet diberikan susu cokelat atau minuman berkarbohidrat-protein selama 4 jam recovery di antara 2 latihan endurance. Sebelum (pre) dan sesudah latihan (post), sampel darah vena diambil untuk mengukur peningkatan ureum darah dan kreatin kinase darah sebagai indikator pemulihan, masing-masing menggunakan Cobas C111 dan Advia 1650/1800. Performa diukur pada latihan ke-2 menggunakan ergometer dayung. Peningkatan ureum darah, kreatin kinase darah dan performa antara kedua perlakuan dibandingkan menggunakan uji t independen. Hasil analisis membuktikan bahwa peningkatan rata-rata ureum darah setelah pemberian susu cokelat lebih rendah, yakni 9,14 ± 3,39 mg/dl dibandingkan minuman berkarbohidrat-protein, yakni 16,29 ± 4,89 mg/dl (p value = 0,012) yang artinya pemulihan glikogen otot setelah pemberian susu cokelat lebih tinggi dibandingkan minuman berkarbohidrat-protein. Hal ini menunjukkan bahwa susu cokelat merupakan alternatif suplemen pasca latihan yang efektif.
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ABSTRACT
After an intense and long lasting exercise, athletes have sought nutritional supplements to maximize recovery and performance. This study compared the effects of chocolate milk and carbohydrate-protein replacement drink on recovery and performance among national rowing male athletes aged 18 – 23 years. This is a single-blind, true experimental study with crossover design, conducted in National Training Centre, Pengalengan, April 2015. Athletes received milk chocolate or carbohydrate-protein replacement drink during 4 hours recovery between 2 endurance exercises. Before (pre) and after exercise (post), venous

blood sample was collected to measure the increase of blood urea nitrogen (BUN) and creatin kinase (CK) as indicator of recovery, using Cobas C111 and Advia 1650/1800 respectively. Performance was measured in the second exercise using rowing ergometer. The effects of each treatment on BUN, CK and performance was compared by using independent t tests. The result demonstrated that the increase of BUN were significantly lower (muscle glycogen recovery were significantly higher) for chocolate milk trial compared to carbohydrate-protein repleacement drink trial (9,14 ± 3,39 mg/dl vs. 16,29 ± 4,89 mg/dl, P = 0,012). It suggested that chocolate milk is an effective post-workout recovery aid., After an intense and long lasting exercise, athletes have sought nutritional
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