Gambaran laju keringat pelari rekreasional terlatih saat berlari selama satu kam di Jakarta = Sweat rate of trained recrational runners when running for one hour in Jakarta

Andhika Raspati, author

Abstrak

Latar Belakang. Masalah kesehatan yang kerap muncul pada olahraga berlari banyak disebabkan oleh dehidrasi. Penelitian ini bertujuan untuk mengetahui laju keringat pelari rekreasional terlatih agar masalah kesehatatan terkait dehidrasi dapat dicegah. Metode. Penelitian eksperimental ini melibatkan 23 pelari rekreasional terlatih yang diminta untuk berlari selama satu jam pada pagi hari di ruang terbuka kota Jakarta. Berat badan subjek ditimbang sebelum dan setelah berlari. Selisih berat badan kemudian dikalkulasikan dengan volume asupan cairan selama latihan untuk memperoleh laju keringat. Hasil. Berdasarkan persentase kehilangan berat badan, 18 dari 23 subjek mengalami dehidrasi setelah berlari selama satu jam, dengan rata-rata mencapai 1.4 (1.4 ± 0,4) %. Selama latihan, rata-rata subjek minum sebanyak 311 mL. Rata-rata laju keringat yang dikeluarkan subjek mencapai 1.2 (1.2 ± 0,3) L/jam. Laju keringat memiliki korelasi positif dengan luas permukaan tubuh (r = 0,71, p < 0,01) dan juga indeks massa tubuh (r= 0,77, p < 0,01) subjek. Tidak ditemukan adanya korelasi signifikan antara laju keringat dengan intensitas dan riwayat latihan subjek. (p > 0,05) Kesimpulan. Tingginya laju keringat subjek masih belum diimbangi oleh asupan minum subjek, sehingga menyebabkan terjadinya dehidrasi. Untuk itu diperlukan edukasi mengenai strategi rehidrasi yang sesuai dengan kebutuhan individual untuk mencegah terjadinya masalah kesehatan akibat dehidrasi

.....Background. Health problems that often appear in running are mostly caused by dehydration. This research aims to know the sweat rate of trained recreational runners so that health problems related to dehydration can be prevented. Method. This experimental study involved 23 trained recreational runners who were asked to run for one hour on the morning day in the open space of the city of Jakarta. Subject was weighed (with precision up to 0,1 kg) before and after running. Body weight that were loss during running is then calculated with the volume of fluid intake to get the sweat rate. Results. Based on the percentage of body weight loss, 18 out of 23 subjects were dehydrated after running for one hour, with the average reaches 1.4 (1.4 ± 0,4)%. During practice, the average subject drinks as much as 311 mL. The average sweat rate of the subject was 1.2 (1.2 ± 0,3) L / hour. Sweat rate has a positive correlation with body surface area (r = 0,71, p <0,01) and also body mass index (r = 0,77, p <0,01). There was no significant correlation found between the sweat rate and the exercise intensity nor training history of the subject. (p> 0,05) Conclusion. The high sweat rate of the subject was still not matched by their fluid intake, causing dehydration. Therefore education is needed regarding the rehydration strategy that suits the individual needs to prevent health problems related to dehydration.