Title	Serum creatine phosphokinase (CPK) and prolonged exercise
Sub Title	
Author	橋本, 治雄(Hashimoto, Haruo)
Publisher	慶應義塾大学体育研究所
Publication year	1982
Jtitle	体育研究所紀要 (Bulletin of the institute of physical education, Keio
	university). Vol.22, No.1 (1982. 12) ,p.79- 79
JaLC DOI	
Abstract	
Notes	Abstract
Genre	
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00135710-00220001-0079

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって 保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

Serum Creatine Phosphokinase (CPK) and Prolonged Exercise

By Haruo Hashimoto*

Prolonged swimming in the fresh water pool were chosen for the investigation of the influence of prolonged exercise on the changes in the blood Creatine Phosphokinase (CPK) levels.

Fifteen students of the varsity swimming team at KEIO University performed prolonged swimming on July 5, 1982 as one of the preparatory training for channel swimming between Ito and Shimoda (Shizuoka-ken) which was executed on July 27, 1982. Four subjects swam for 6 hours 30 minutes (6:30). Five subjects swam for 7 hours 30 minutes (7:30). Six subjects swam for 9 hours 30 minutes (9:30).

Five students of the varsity track and field team performed 1500 m and/or 5000 m races on July 5, 1982, which were chosen for the comparison of shorter time exercise.

Serum CPK were determined before and after the prolonged exercise (swimming) and track & field events. Serum CPK rose moderately after the race of 1500 m and 5000 m track and field races, while that of prolonged swimming rose remarkably.

CPK isoenzym analysis revealed that CPK-MB fraction which is thought to be originated mainly from cardiac muscle rose significantly only in the subjects of 9:30 hours prolonged swimming.

^{*} Associate Professor of the Institute of Physical Education, Keio University. (M.D.)