

Title	The effect of prolonged muscular exercise on free fatty acids in plasma
Sub Title	
Author	中村, 毅志夫(Nakamura, Kishio)
Publisher	慶應義塾大学体育研究所
Publication year	1983
Jtitle	体育研究所紀要 (Bulletin of the institute of physical education, Keio university). Vol.23, No.1 (1983. 12) ,p.83- 83
JaLC DOI	
Abstract	
Notes	Abstract
Genre	
URL	<a href="https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00135710-00230001-0083">https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00135710-00230001-0083</a>

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.

# The Effect of Prolonged Muscular Exercise on Free Fatty Acids in Plasma

By *Kishio Nakamura\**

It has been well known that elevated free fatty acids in plasma could be attributed to the development of serious arrhythmia with subsequent death during acute period of myocardial infarction (5). It has been indicated that sudden death during prolonged exercise could be due to cardiac death.

Our colleagues have demonstrated that prolonged muscular exercise gave strenuous stress to cardiac muscle enough to elicit the increase in cardiac enzymes (1, 2).

Twenty five subjects of the varsity track and swimming team were allocated to see the effect of prolonged muscular exercise on free fatty acids in plasma. Free fatty acids increased in proportion to the duration they performed.

- 1) Patients with ischemic heart disease or arrhythmia should not be accepted to apply for prolonged muscular exercise.
- 2) Those who have hyperlipidemia should control their abnormalities before they participated in prolonged exercise.
- 3) Muscle glycogen should be increased prior to prolonged exercise.
- 4) Glucose supplement given during prolonged exercise may delay the increase in free fatty acids in plasma.

---

\* Assistant Professor of the Institute of Physical Education, Keio University. (M.D.)