

**International Scientific and Practical  
Conference  
"WORLD SCIENCE"**

*№ 10(14), Vol.3, October 2016*

**Proceedings of the III International Scientific and  
Practical Conference "Topical Problems of Modern  
Science and Possible Solutions  
(September 28 – 29, 2016, Dubai, UAE)"**

Copies may be made only from legally acquired originals.

A single copy of one article per issue may be downloaded for personal use (non-commercial research or private study). Downloading or printing multiple copies is not permitted. Electronic Storage or Usage Permission of the Publisher is required to store or use electronically any material contained in this work, including any chapter or part of a chapter. Permission of the Publisher is required for all other derivative works, including compilations and translations. Except as outlined above, no part of this work may be reproduced, stored in a retrieval system or transmitted in any form or by any means without prior written permission of the Publisher.

**Founder –**  
ROSTranse Trade F Z C  
company,  
Scientific and Educational  
Consulting Group  
"WORLD Science", Ajman,  
United Arab Emirates

<http://ws-conference.com/>

**Publisher Office's address:**  
United Arab Emirates, Ajman

Amberjem Tower (E1)  
SM-Office-E1-1706A

E-mail: [worldscience.uae@gmail.com](mailto:worldscience.uae@gmail.com)

Tel. +971 56 498 67 38

The authors are fully responsible for the facts mentioned in the articles. The opinions of the authors may not always coincide with the editorial boards point of view and impose no obligations on it.

## CHIEF EDITOR

**Ramachandran Nithya** Professor in Finance and Marketing, Oman

## EDITORIAL BOARD:

**Nobanee Haitham** Associate Professor of Finance, United Arab Emirates

**Ovsyanik Olga** Professor, Doctor of Psychological Science, Russian Federation

**Almazari Ahmad** Professor in Financial Management, Saudi Arabia

**Temirbekova Sulukhan** Dr. Sc. of Biology, Professor, Russian Federation

**Lina Anastassova** Full Professor in Marketing, Bulgaria

**Kuzmenkov Sergey** Professor at the Department of Physics and Didactics of Physics, Candidate of Physico-mathematical Sciences, Doctor of Pedagogic Sciences

**Mikiashvili Nino** Professor in Econometrics and Macroeconomics, Georgia

**Safarov Mahmatali** Doctor Technical Science, Professor Academician Academia Science Republic of Tajikistan

**Alkhalwaldeh Abdullah** Professor in Financial Philosophy, Hashemite University, Jordan

**Omarova Vera** Professor, Ph.D., Kazakhstan

**Mendebaev Toktamys** Doctor of Technical Sciences, Professor, Kazakhstan

**Koziar Mykola** Head of the Department, Doctor of Pedagogical Sciences, Ukraine

**Yakovenko Nataliya** Professor, Doctor of Geography, Shuya

**Tatarintseva Nina** Professor, Russia

**Mazbayev Ordenbek** Doctor of Geographical Sciences, Professor of Tourism, Kazakhstan

**Sidorovich Marina** Candidate of Biological Sciences, Doctor of Pedagogical Sciences, Full Professor

**Sentyabrev Nikolay** Professor, Doctor of Sciences, Russia

**Polyakova Victoria** Candidate of Pedagogical Sciences, Russia

**Ustenova Gulbaram** Director of Education Department of the Pharmacy, Doctor of Pharmaceutical Science, Kazakhstan

**Issakova Sabira** Professor, Doctor of Philology,

**Harlamova Julia** Professor, Russia

**Kolesnikova Galina** Professor, Russia

**Kalinina Irina** Professor of Chair of Medicobiological Bases of Physical Culture and Sport, Dr. Sci.Biol., Russia

**Utebaliyeva Gulnara** Doctor of Philological Science, Kazakhstan

**Imangazinov Sagit** Director, Ph.D, Kazakhstan

**Uzilevsky Gennady** Dr. of Science, Ph.D., Russian Federation

**Dukhanina Irina** Professor of Finance and Investment Chair, Doctor of Sciences, Russian Federation

**Crohmal Natalia** Professor, Ph.D. in Philosophy, National Pedagogical Dragomanov University, Ukraine

**Orchowskyi Wadym** Head of the Department of Social and Human Sciences, Economics and Law, Doctor of Historical Sciences, Ukraine

**Chorny Oleksii** D.Sc. (Eng.), Professor, Kremenchuk

**Peshcherov Georgy** Professor, Russia

**Pilipenko Oleg** Head of Machine Design Fundamentals Department, Doctor of Technical Sciences, Ukraine

**Mustafin Muafik** Professor, Doctor of Veterinary Science

**Nyyazbekova Kulanda** Candidate of pedagogical sciences, Kazakhstan

**Cheshmedzhieva Margarita** Public Law and Public Management Department, Bulgaria

## CONTENTS

## BIOLOGY

<i>Гелевера А. С.</i> ВИКОРИСТАННЯ ЕФЕКТИВНИХ МІКРООРГАНІЗМІВ™ ДЛЯ ОЧИСТКИ СТИЧНИХ ВОД.....	5
---	---

## MEDICINE

<i>Пивоварова О. А., Маньковский Б. Н.</i> ПОКАЗАТЕЛИ ЛЕГОЧНОЙ МИТОХОНДРИАЛЬНОЙ ФУНКЦИИ ПРИ АБСОЛЮТНОЙ ИНСУЛИНОВОЙ НЕДОСТАТОЧНОСТИ.....	9
<i>Vitovska O. P., Konakh V. M., Vasyuta V. A.</i> NEURO OPHTHALMOLOGICAL MANIFESTATIONS IN PATIENTS OPERATED FOR CEREBELLOPONTINE ANGLE TUMORS.....	14
<i>Гринберг В. Б.</i> ПРОБЛЕМЫ ОЦЕНКИ КАЧЕСТВА ПАТОЛОГОАНАТОМИЧЕСКОЙ ДИАГНОСТИКИ В РЕСПУБЛИКЕ КАЗАХСТАН.....	18
<i>Antonenko M., Znachkova O., Mayborodina D.</i> THE COPPER-CALCIUM HYDROXIDE DEPORPHORESIS AND SILVER NITRATE INTRACANAL ELECTROPHORESIS IN ENDODONTIC PRACTICE: COMPARISON, REASONABLE CHOICE.....	19
<i>Fudienko G. D., Nikiforova Ya. V.</i> ALGORITHM OF DIAGNOSIS EATING DISORDERS AND NUTRITIONAL STATUS IN PATIENTS WITH NONALCOHOLIC FATTY LIVER DISEASE, OBESITY AND HYPERTENSION.....	23
<i>Дербисбекова У. Б., Датхаев У. М., Журавель И. А.</i> ИЗУЧЕНИЕ ФИЗИКО-ХИМИЧЕСКИХ СВОЙСТВ ГЕЛЯ ПОД УСЛОВНЫМ НАЗВАНИЕМ "АНТИКАНДИД".....	26
<i>Островская С. С., Шаторная В. Ф.</i> МОРФОЛОГИЧЕСКИЕ ИЗМЕНЕНИЯ В ЛЕГКИХ КУРИЛЬЩИКОВ (ОБЗОР ЛИТЕРАТУРЫ).....	30
<i>Пустовойт Г. Л., Ярмола Т. І.</i> ОСОБЛИВОСТІ ГОРМОНАЛЬНОГО СТАТУСУ ТА ЛІПІДНОГО ОБМІНУ У ЧОЛОВІКІВ З ЦУКРОВИМ ДІАБЕТОМ 2 ТИПУ.....	33
<i>Domoratsky A. E., Krylyuk V. O., Sozansky V. V.</i> <i>Rybak K. A., Kryatchenko E. B., Beisiuk O. D.</i> EFFECTS OF SEDATION WITH MODERN A-2 AGONISTS ON PERIOPERATIVE PERIOD IN GENERAL SURGERY PATIENTS.....	37
<i>Kuzminova N. V., Gribenyuk O. V., Romanova V. O., Osovska N. Y., Knyazkova I. I.</i> THE FREQUENCY OF COMORBID CONDITIONS IN PATIENTS WITH HYPERTENSION.....	40
<i>Sherbak S. G., Anisenkova A. Y., Shabalina E. A.</i> ANALYSIS OF RISK FACTORS AND CHARACTERISTICS OF GENETIC PREDISPOSITION AND CLINICAL- ANGIOGRAPHIC MANIFESTATIONS OF ATHEROSCLEROSIS IN PATIENT WITH ISCHEMIC ORGAN DAMAGE WITHOUT STENOTIC VASCULAR DAMAGE.....	44

*Самура Б. А., Корнієнко В. І.*  
*Дученко К. А., Романенко М. І*  
ВПЛИВ ФУРОКСАНУ НА  
ПЕРЕБІГ ГЛІЦЕРОЛОВОЇ НЕФРОПАТІЇ.....45

*Loskutov O. A., Druzhyna A. N.*  
PECULIARITIES OF CEREBRAL BLOOD-GROOVE  
WHILE PROVIDING ANESTHESIA TO  
PATIENTS OF ADVANCED AND SENILE AGE.....48

**PHYSICAL EDUCATION AND SPORT**

*Chernozub A. A., Avramenko A. A.,*  
*Danylchenko S. I., Chaban I. O., Titova A. V.*  
ALGORITHM FOR SAFETY PARAMETERS OF  
PHYSICAL ACTIVITY UNDER POWER FITNESS.....54

*Брызгалов И. В.*  
ЭКОНОМИЧЕСКОЕ ОБРАЗОВАНИЕ СТУДЕНТОВ ФИЗКУЛЬТУРНЫХ  
СПЕЦИАЛЬНОСТЕЙ КАК ФАКТОР РОСТА.....56

## PHYSICAL EDUCATION AND SPORT

ALGORITHM FOR SAFETY PARAMETERS OF PHYSICAL  
ACTIVITY UNDER POWER FITNESS

Ph D. Chernozub A. A.  
d. med. n. Avramenko A. A.  
Ph D. Danylchenko S. I.  
Chaban I. O.  
Titova A. V.

Ukraine, Mykolaiv, Petro Mohyla Black Sea National University

**Abstract.** One of the issues related to adaptation responses during physical activity, long is the determination of the parameters of safe physical activities adequate human capabilities in the directional (specialized) training. Established parameters heart rate variability, the concentration of cortisol, testosterone and LDH in serum can be used as roughly normal levels in comparative assessments of similar functional states in rest and after acute muscle strain. At unexercised young men, change of parameters of a morphofunctional condition of an organism during carrying out researches, were more essential in comparison with similar indicators fixed in group of athletes.

**Keywords:** power fitness, safe power loads parameters, heart rate variability, the concentration of hormones in the blood serum, intensity of loading, power opportunities.

One of the issues related to adaptation responses during physical activity, long is the determination of the parameters of safe physical activities adequate human capabilities in the directional (specialized) training. This problem arises sooner or later almost before every coach, sports doctor and its solution can save both the health athletes and prevent its deterioration among untrained persons [1, 3, 7, 10]. In practice, the power of fitness and other power sports to search for and identification of the starting and workloads used a number of techniques that, in general, are current in nature [2, 5, 8]. The resulting figures are not real evidence reinforcing their safety, and their use is a risk, especially for untrained troops. This situation is almost impossible to improving the safety of participants in training overload that caused the execution of a series of experimental studies, combined logistics and methodical relationship [4, 5, 10]. As the primary object of research was selected group of trained individuals who over the last three years engaged in power fitness [3, 4, 6, 7]. In this group, 20 were trained boys aged 20-21 years who have a sufficient level of adaptation to power loads applied in terms of the standard mode of training. To assess the autonomic regulation of the cardiovascular system and the state of adaptation mechanisms in conditions of intense muscle activity using methods of analysis of heart rate variability (HRV). To address the objective, the differential impact assessments a certain level of physical activity on the body, muscle tension conditions, using a series of biochemical methods aimed at studying the characteristics of changes in the concentration of the enzyme lactate dehydrogenase, and steroid hormones (cortisol and testosterone) in the blood during syrovotssi long power fitness classes. Mathematical processing of the results of research carried out by the software IBM SPSS Statistics 20 on the use of generally accepted methods of statistical data summaries biological nature. Heart rate variability (HRV) was calculated using Kubios HRV. During the research, the most important point is the initial installation, safe reliable indicators of physical activity, adequate compensatory capacity of the organism which confirmed a set of direct indicators. These indicators are suitable for rough and comparative assessments of young organism at any stage of the training process and his absence. Established parameters heart rate variability, the concentration of cortisol, testosterone and LDH in serum can be used as roughly normal levels in comparative assessments of similar functional states in rest and after acute muscle strain.

Regularities and features of adaptation reactions are object of close attention in the sphere of applied realization of physical capacities of the person in the course of physical activity of various orientations. Nature of change the morphofunctional of indicators of a human body in the general plan is reflection of adaptation potential of an organism on an adequate irritant as which loading serves. The purpose of work there was a research of features of change of parameters of autonomous regulation of a warm rhythm and power opportunities of an organism of unexercised people and athletes, and also their morphometric indicators in the conditions of muscular tension. In the course of researches 40 almost healthy young men at the age of 19-20 years are surveyed. From this contingent two research groups

were created the first group included the trained athletes who are systematically engaged in athleticism throughout three years, and the second consisted of unexercised young men of not having contraindications for occupations with burdening's. As model muscular activity, for 3 months of trainings with frequency of 2 occupations in a week, loading of power character in a mode of high intensity was used at the small volume of work. Autonomous regulation was estimated on indicators of the statistical analysis of variability of a rhythm of heart. For this purpose the Polar RS800CX cardio monitor was used. Parameters of autonomous regulation of a rhythm of heart and results of the spectral analysis of a warm rhythm at unexercised young men of both groups were registered. Morphometric parameters of a condition of an organism were estimated on indicators of structure of a body and its sizes using impedansometry and anthropometry methods. Power opportunities of an organism of representatives of both groups were estimated by means of a method of control testing. Control of all studied indicators was made at the beginning of the program of research and in 3 months of systematic occupations by athleticism. Statistical processing of results of research was carried out with use of a package of the statistical IBM programs \* SPSS \* Statistics 20. In work results of pilot studies concerning features of change of parameters of autonomous regulation of a warm rhythm and power opportunities of an organism of unexercised people and athletes, and also their morphometric indicators in the conditions of muscular tension are displayed. It is established that use, for 3 months of occupations by athleticism, power loadings of high intensity at the small volume of work, considerably strengthens influence over a low-frequency range of fluctuations of cardio intervals, with simultaneous decrease in activation of a low-frequency and high-frequency range of fluctuations of cardio intervals isn't dependent on level of a fitness of participants of studied groups. The elicited fact reflects process of considerable prevalence of activation of the central contour of regulation of a rhythm of heart, due to activation neurohumoral metabolic factors. It is revealed that despite high level of tolerance of the trained athletes to power loadings, use in the course of occupations by athleticism of non-standard level of intensity and loading volume, promoted rather essential growth of power opportunities and morphometric indicators of structure of a body. At unexercised young men, change of parameters of a morphofunctional condition of an organism during carrying out researches, were more essential in comparison with similar indicators fixed in group of athletes.

#### REFERENCES

1. Баевский Р.М. Анализ variability сердечного ритма при использовании различных электрокардиографических систем. Методические рекомендации / Р.М. Баевский, Д.Г. Иванов, Л.В. Чирейкин. - М., 2002. - 53 с.
2. Баевский Р.М. Оценка адаптационных возможностей организма и риск развития заболеваний / Р.М. Баевский, А.П. Берсенева. - М.: Медицина. 1997. - 235 с.
3. Волков Н.И. Биохимия мышечной деятельности. / Н.И. Волков, Э.Н. Несен, А.А. Осипенко, С.Н. Корсун. - К.: Олимпийская литература, 2000. - 540 с.
4. Коробейников Г.В. Variability ритма сердца как физиологический механизм адаптации к условиям напряженной мышечной деятельности / Г.В. Коробейников // Анализ variability ритма сердца в клинической практике: материалы I Междунар. науч. конф. - К., 2002. - С. 68-69.
5. Кремер У.Дж. Эндокринная система, спорт и двигательная активность / У.Дж. Кремер, А.Д. Рогол. - Киев: Олимпийская литература, 2008 - 600 с.
6. Меерсон Ф. Адаптация к стрессовым ситуациям к физическим нагрузкам / Ф. Меерсон, М. Пшеничкова. - М.: Медицина, 1988. - 253 с.
7. Михайлов В.М. Variability ритма сердца как метод количественной оценки функционального состояния спортсменов / В.М. Михайлов, Н.В. Харламова, М.Э. Беликова // Медицина и спорт. - 2005. - № 1. - С. 19-21.
8. Пат. UA 76705 U, МПК А61В 5/22 (2006.01) Спосіб визначення індексу тренувального навантаження в атлетизмі / Чернозуб А.А. - № u201208376; Заяв. 07.07.2012; Публ. 10.01.2013, Бюл. №1. - 3 с.
9. Sgrò P. Testosterone responses to standardized short-term sub-maximal and maximal endurance exercises: issues on the dynamic adaptive role of the hypothalamic-pituitary-testicular axis / P. Sgrò, F. Romanelli, F. Felici [et al.] // Journal of Endocrinological Investigation. - 2014. - № 37 (1). - P. 13-24.
10. Tod D. Relationships among muscle dysmorphia characteristics, body image-quality of life, and coping in males / D. Tod, C. Edwards // Journal of Science and Medicine in Sport. - 2014. - Vol. 7. - P. 141-148.
11. Wahl P. Acute metabolic, hormonal, and psychological responses to different endurance training protocols / P. Wahl, S. Mathes, K. Köhler [et al.] // Horm. Metab. Res. - 2013. - № 45 (11). - P. 827-833.