

Department of Sports and Health Sciences

Key words

Exercise Physiology, Health Science, Public Health, Blood Lipids, Body Composition, Fitness, Lifestyle



Doctor of Education
Doctor of Public Health / Professor

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Education

Doctor of Education (Brigham Young University, U.S.A., School of Physical Education, Doctoral Program [Exercise Physiology])

Doctor of Public Health (Aichi Medical University, School of Medicine [Public Health])

Professional Background

Assistant / Lecturer / Associate Professor / Professor (Physiology and Hygiene), University of Fukui
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Consultations, Lectures, and Collaborative Research Themes

(1) Physiology of health and exercise, (2) Children's physical health science, (3) Dietary habits and health of children, (4) Lifestyles and health of modern people, (5) Health maintenance for middle-aged

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Main research themes and their characteristics

[Splitting the distance of endurance running: on cardiovascular endurance and blood lipids]

The purpose of this study is to determine if splitting the distance of endurance running is as effective as continuous endurance running of the same total distance for changing cardiovascular function and blood lipids. Fifty-three untrained male students were divided into four groups. All the subjects in exercise groups ran the same distance each day three days a week. Group A ran the entire distance in one training session daily. Group B ran one-half of the distance in two training sessions daily. Group C ran one-third of the distance in three training sessions daily. Group D was to serve as a control and was instructed to engage in no special physical activity during the study. The 10 weeks endurance training program was supervised. Training intensities were 80% of each subject's maximal heart rate.

This study resulted in the following conclusion: so long as individuals run the same distance with identical intensities and frequencies, assuring the minimum duration of the split session is sufficient to provoke the development in cardiovascular endurance, the effectiveness on cardiovascular function and blood lipids was not statistically different among groups even though the running distance was split.

This study was supported by a research grant from Brigham Young University, U.S.A. and by a Deseret Gym Foundation Grant, U.S.A.

This study is used for much reference as shown on the right table.

Tab.1 List of articles using this article as references

- American Heart Journal, 2006; 151: 1322.e5-1322.e12.
- American Journal of Cardiology, 1990; 65: 1010-1013.
- American Journal of Cardiology, 2001; 87: 942-946.
- American Journal of Lifestyle Medicine, 2009; 3(1): 11S-18S.
- American Journal of Preventive Medicine, 1998; 15: 398-412.
- Archives of Sports Medicine, 2017; 1(1): 15-19.
- British Journal of Sports Medicine, 2002; 36: 276-281.
- Cancer Epidemiology, Biomarker & Prevention, 1990; 8: 201-207.
- Circulation, 2018; 91: 2596-2604. • Circulation, 2018; 102: 981-986.
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- Handbook of Obesity, Clinical Applications, second edition. Marcel Dekker, Inc. 1998.
- International Journal of Medical Research & Health Sciences, 2013; 2: 949-954.
- Journal of the American Medical Association, 1995; 273(5): 402-407.
- Journal of Family Medicine and Primary Care, 2016; 5(2): 349-356.
- Journal of Men's Health & Gender, 2006; 3: 61-70.
- Journal of Physical Activity and Health, 2009; 6: 651-656.
- Medicine and Science in Sports and Exercise, 1998; 30: 6: 975-991.
- Proceedings of the Nutrition Society, 2010; 69: 1: 178-184.
- Treatment News 1999; 1: 203-205. • University of Southampton (PhD Thesis), 2008.

[An experimental study on changes in arteriosclerotic index and various fitness levels due to detraining and retraining]

The purpose of this study is to clarify the changes of arteriosclerotic index and various fitness levels by detraining and retraining. Thirteen healthy male college students volunteered to be subjects in this study. Serum lipids and indicators on body composition and fitness were determined. Arteriosclerotic index (TC-HDL-C/HDL-C), Rohrer index and Ponderal index were also calculated.

The findings about arteriosclerotic index, HDL-C and indices related with physique were not as good as expected due to detraining and retraining. On the other hand, blood phospholipid and body fat increased and flexibility decreased due to the detraining whereas blood phospholipid and body fat decreased and flexibility increased due to one and a half months retraining.

The book shown to the undermentioned column, Physiology and Hygiene of Health, introduced this study in detail. The results of this study are taken up in media and just what to shown part to the photograph of the right note.

This study was published in the J. Aichi Med. Univ. Asso. (1993; 21(3): 329-337), and clarified how lack of exercise produces an unhealthy state.

This study was supported by a research grant from the Ministry of Education in Japan.



Photo1. The one that my study mentioned above was taken up by a TV coverage.

Major academic publications

T. Ebisu, Health Science of Children's Body, Fumaido Publishing Co, 2000.

T. Ebisu and H. Ebisu, Health Science on Lifestyle, Fumaido Publishing Co, 2001.

T. Ebisu, Physiology and Hygiene of Health, Fumaido Publishing Co, 2002.

T. Ebisu, "Splitting the distance of endurance running: on cardiovascular endurance and blood lipids." Jpn J Phys Educ, 1985; 30: 37-43.

T. Ebisu, Y. Sasaki, and S. Miyazaki, "Chronic Effects of Aerobic Exercise upon Blood Lipids in Hyperlipidemia Patients" J. Educ. Health Sci., 2007; 52(3), 155-164.