

スポーツ健康医科学研究所 研究業績（2017 年度）

1. Tsuzuki T, Kobayashi H, Yoshihara T, Kakigi R, Ichinoseki-Sekine N, Naito H.
Attenuation of exercise-induced heat shock protein 72 expression blunts improvements in whole-body insulin resistance in rats with type 2 diabetes.
Cell Stress Chaperones. 2017 Mar; 22(2): 263-269.
2. Kawanishi N, Nozaki R, Naito H, Machida S.
TLR4-defective (C3H/HeJ) mice are not protected from cast immobilization-induced muscle atrophy.
Physiol Rep. 2017 Apr; 5(8).
3. Otsu A, Kawasaki H, Tominaga M, Shigenaga A, Matsuda H, Takahashi N, Nakajima T, Naito H, Baba T, Ogawa H, Tomooka Y, Yamakura F, Takamori K.
Accumulation of immunoglobulin G against Dermatophagoides farinae tropomyosin in dorsal root ganglia of NC/Nga mice with atopic dermatitis-like symptoms.
Biochem Biophys Res Commun. 2017 Apr 15; 485(4): 707-712.
4. Maehana H, Miyamoto A, Koshyama K, Yanagiya TT, Yoshimura M.
Profile of match performance and heart rate response in Japanese amputee soccer.
J Sports Med Phys Fitness. 2017 May 5.[Epub ahead of print]
5. Yoshihiko Ishihara, Hisashi Naito, Satoshi Ishizaki, Masafumi Yoshimura
Temporal Change in the Match Performance of Football Referees during Youth Top-level Matches: Influence of Match Technical-tactical Data in Same Matches
International Jounal of Sport and Science. 2017 May; 15 :14-22
6. Someya Y, Tamura Y, Kohmura Y, Aoki K, Kawai S, Daida H
Muscle strength at young age is not associated with future development of type 2 diabetes in Japanese male athletes
The Journal of Physical Fitness and Sports Medicine. 2017 May; 6 (3), 167-173
7. Amano A, Kondo Y, Noda Y, Ohta M, Kawanishi N, Machida S, Mitsuhashi K, Senmaru T, Fukui

- M, Takaoka O, Mori T, Kitawaki J, Ono M, Saibara T, Obayashi H, Ishigami A.
Abnormal lipid/lipoprotein metabolism and high plasma testosterone levels in male but not female aromatase-knockout mice.
Arch Biochem Biophys. 2017 May 15;622:47-58
8. Akin S, Naito H, Ogura Y, Ichinoseki-Sekine N, Kurosaka M, Kakigi R, Demirel HA.
Short-term treadmill exercise in a cold environment does not induce adrenal Hsp72 and Hsp25 expression.
J Physiol Sci. 2017 May;67(3):407-413.
9. Ozaki H, Kitada T, Nakagata T, Naito H.
Combination of body mass-based resistance training and high-intensity walking can improve both muscle size and V' O₂ peak in untrained older women
Geriatr Gerontol Int. 2017 May;17(5):779-784
10. Suzuki M, Shindo D, Suzuki R, Shirataki Y, Waki H.
Combined long-term caffeine intake and exercise inhibits the development of diabetic nephropathy in OLETF rats
Journal of Applied Physiology. 2017 May;122(5):1321-1328
11. Suzuki, Y; Maruyama-Nagao, A; Sakuraba, K; Kawai, S
Level of serum undercarboxylated osteocalcin correlates with bone quality assessed by calcaneal quantitative ultrasound sonometry in young Japanese females
Experimental and Therapeutic Medicine. 2017 May;13(5):1937-1943
12. Kikuchi, N; Zempo, H; Fuku, N; Murakami, H; Sakamaki-Sunaga, M.; Okamoto, T; Nakazato, K ; Miyachi, M
Association between ACTN3 R577X Polymorphism and Trunk Flexibility in 2 Different Cohorts
International Journal of Sports Medicine. 2017 May; 38(5):402-406
13. Nishimori, S ; Ohnuma, T; Takebayashi, Y ; Katsuta, N Takeda, M ; Nakamura, T; Sannohe, T ; Higashiyama, R; Kimoto, A ; Shibata, N
High serum soluble tumor necrosis factor receptor 1 predicts poor treatment response in

acute-stage schizophrenia

Progress In Neuro-Psychopharmacology & Biological Psychiatry. 2017 Jun.2; 76:145-154

14. Sannohe, T ; Ohnuma, T; Takeuchi, M ; Tani, E ; Miki, Y ; Takeda, M ; Katsuta, N ; Takebayashi, Y ; Nakamura, T Nishimon, S

High doses of antipsychotic polypharmacy are related to an increase in serum levels of pentosidine in patients with schizophrenia

Progress in Neuro-Psychopharmacology & Biological Psychiatry. 2017 Jun.2; 76:42-48

15. Suzuki, YS; Sakuraba, K; Shinjo, T; Maruyama-Nagao, A; Nakaniida, A ; Kadoya, H; Shibata, M; Matsukawa, T; Itoh, H; Yokoyama, K

Physical inactivity associated with the risk of non-communicable diseases in Japanese working mothers with young children: A cross-sectional study in Nagano city, Japan

Experimental and Therapeutic Medicine. 2017 Jun; 13(6):3103-3108

16. Hashimoto Y, Matsudaira K, Sawada SS, Gando Y, Kawakami R, Kinugawa C, Okamoto T, Tsukamoto K, Miyachi M, Naito H.

Obesity and low back pain: a retrospective cohort study of Japanese males.

J Phys Ther Sci. 2017 Jun;29(6):978-983.

17. Koltai E, Bori Z, Chabert C, Dubouchaud H, Naito H, Machida S, Davies KJ, Murlasits Z, Fry AC, Boldogh I, Radak Z

SIRT1 may play a crucial role in overload-induced hypertrophy of skeletal muscle.

J Physiol. 2017 Jun 1; 595(11): 3361-3376.

18. Willems, SM; Wright, DJ ; Day, FR ; Trajanoska, K; Joshi, PK; Morris, JA ; Matteini, AM; Garton, FC; Grarup, N ; Oskolkov, N, Fuku N et al.

Large-scale GWAS identifies multiple loci for hand grip strength providing biological insights into muscular fitness

Nature Communications. 2017 Jul.12; 8:16015

19. Ueda, Y ; Yamanaka, K ; Noritake, A; Enomoto, K; Matsumoto, N; Yamada, H; Samejima, K ; Inokawa, H; Hori, Y; Nakamura, K

Distinct Functions of the Primate Putamen Direct and Indirect Pathways in Adaptive

Outcome-Based Action Selection

Frontiers In Neuroanatomy. 2017 Aug 3; 11:66

20. Fukunaka, A; Fukada, T; Bhin, J ; Suzuki, L; Tsuzuki, T; Takamine, Y; Bin, BH ; Yoshihara, T; Ichinoseki-Sekine, N; Naito, H
Zinc transporter ZIP13 suppresses beige adipocyte biogenesis and energy expenditure by regulating C/EBP-beta expression
PLoS Genet. 2017 Aug 30;13(8):e1006950
21. Pajk, M; Cselko, A; Varga, C ; Posa, A; Tokodi, M ; Boldogh, I; Goto, S; Radak, Z
Exogenous nicotinamide supplementation and moderate physical exercise can attenuate the aging process in skeletal muscle of rats
Biogerontology. 2017 Aug; 18(4):593-600
22. Noma, T; Takasugi, S ; Shioyama, M ; Yamaji, T; Itou, H; Suzuki, Y ; Sakuraba, K ; Sawaki, K
Effects of dietary gelatin hydrolysates on bone mineral density in magnesium-efficient rats
BMC Musculoskeletal Disorders. 2017 Sep 5;18:385
23. Matsuo, K; Sato, K; Suemoto, K; Miyamoto-Mikami, E ; Fuku, N ; Higashida, K; Tsuji, K ; Xu, YZ ; Liu, X ; Iemitsu, M
A Mechanism Underlying Preventive Effect of High-Intensity Training on Colon Cancer
Medicine and Science in Sports and Exercise. 2017 Sep;49(9):1805-1816
24. Fuku, N ; Diaz-Pena, R ; Arai, Y; Abe, Y ; Zempo, H ; Naito, H; Murakami, H; Miyachi, M; Spuch, C Serra-Rexach, JA
Epistasis, physical capacity-related genes and exceptional longevity: FNDC5 gene interactions with candidate genes FOXOA3 and APOE
BMC Genomics. 2017 Nov 14;18(Suppl 8):803
25. Wang, G; Durussel, J; Shurlock, J; Mooses, M; Fuku, N; Bruinvels, G; Pedlar, C ; Burden, R ; Murray, A ; Yee, B
Validation of whole-blood transcriptome signature during microdose recombinant human erythropoietin (rHuEpo) administration
BMC Genomics. 2017 Nov 14; 18(Suppl8):817

26. Okamoto T, Machida S.
Changes in FOXO and proinflammatory cytokines in the late stage of immobilized fast and slow muscle atrophy.
Biomed Res. 2017 Dec;38(6):331-342.
27. Funakoshi T, Kanzaki N, Otsuka Y, Izumo T, Shibata H, Machida S.
Quercetin inhibits adipogenesis of muscle progenitor cells in vitro
Biochem Biophys Rep. 2017 Dec 21;13:39-44.
28. Nakao T, Kohsaka A, Otsuka T, Thein ZL, Le HT, Waki H, Gouraud SS, Ihara H, Nakanishi M, Sato F, Muragaki Y, Maeda M.
Impact of heart-specific disruption of the circadian clock on systemic glucose metabolism in mice
Chronobiol Int. 2017 Dec 22. [Epub ahead of print]
29. Fujita, S ; Sakuraba, K ; Kubota, A ; Wakamatsu, K; Koikawa, N
Stress Fracture Influences Bone Resorption marker (u-NTX) in Female Long Distance Runners
International Journal of Sports Medicine. 2017 Dec;38(14):1070-1075
30. Zempo, H; Miyamoto-Mikami, E; Kikuchi, N; Fuku, N; Miyachi, M ; Murakami, H
Heritability estimates of muscle strength-related phenotypes: A systematic review and meta-analysis
Scandinavian Journal of Medicine & Science in Sports. 2017 Dec;27(12):1537-1546
31. Aibast, H ; Okutoyi, P; Sigei, T ; Adero, W; Chemjor, D; Ongaro, N ; Fuku, N ; Konstabel, K ; Clark, C; Lieberman, DE
Foot Structure and Function in Habitually Barefoot and Shod Adolescents in Kenya
Current Sports Medicine Reports. 2017 Dec; 16(6):448-458
32. Takeshita, Y; Shibata, N; Kasanuki, K; Nagata, T; Shinagawa, S; Kobayashi, N ; Ohnuma, T; Suzuki, A; Kawai, E; Takayama, T
Genetic association between RAGE polymorphisms and Alzheimer's disease and Lewy body

dementias in a Japanese cohort: a case-control study

International Journal of Geriatric Psychiatry. 2017 Dec; 32(12):1241-1246

33. S. Hashizume, T. Yanagiya

A Forefoot Strike Requires the Highest Forces Applied to the Foot Among Foot Strike Patterns

Sports Medicine International Open 2017; 1:E37-E42.