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Muscular strength is associated with metabolic risk in Japanese women but not in men

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We examined whether cardiorespiratory fitness (maximal oxygen uptake, VO₂max) and muscular strength (handgrip strength, HGS) are associated with individual and clustered metabolic risk factors independently of abdominal adiposity in Japanese. Subjects included 110 men and 110 women aged 20-69 years. Waist circumference (WC), blood pressure, triglycerides (TG), HDL cholesterol, and fasting plasma glucose (FPG) were assessed and the sum of z score of each individual risk factor was calculated (zMeS). The cross-sectional area of visceral fat was measured by MRI. Multiple linear regression analysis revealed that VO₂max and HGS were negatively associated with zMeS

independently of BMI in women ($P < 0.05$). VO₂max was inversely associated with TG in men ($P < 0.05$) and HGS was negatively associated with FPG and zMeS^{-WC} (zMeS without WC) in women (FPG: $P < 0.001$, zMeS^{-WC}: $P < 0.05$), independently of WC. Adjusting for visceral fat instead of WC, similar result was obtained in women (FPG: $P < 0.01$, zMeS^{-WC}: $P < 0.05$), but the association between VO₂max and TG in men became nonsignificant. This study indicates that muscular strength is inversely associated with blood glucose levels and clustered metabolic risk factors independently of abdominal adiposity in Japanese women, but not in Japanese men

Thai Massage and Tourism: From medicine to recreation, forming the new context of practice

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The purpose this study is to examine the relationship between Thai Massage and tourism. The study is based

on the literature review with statistical data. The study finds that the development of Thai Massage has been greatly influenced by the development of the country's tourist industry. Since the 1960s, tourist industry in Thailand has developed remarkably with the Thai government's full involvement in the Vietnam War, making the country one of the recreational places for the US military. A large number of resort hotels, nightclubs and spas were built during this time. Since then, a simple form of Thai Massage has been consumed among tourists

who pursue an exotic atmosphere in resort hotels and spas. This might involve some ancient techniques, but more likely oil, a towel, soap and something extra. The Thai massage we see now has peculiar techniques that originate from yoga and philosophical concepts related to Buddhism. Some say Thai massage should be performed in a meditative mood. However, all these qualities, which could be named as 'Thai Massage's identity,' did not come from the old times; these were created rather in the period of developing tourism in Thailand.

***In vivo* measurement of the Achilles tendon moment arm in three-dimensions**

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The purposes of this study were to determine the Achilles tendon moment arm in three-dimensions (3DMA) and to compare it with the corresponding two-dimensional measurements (2DMA). A series of sagittal ankle images were obtained at ankle joint angles of -20°, -10° (dorsiflexed), 0° (neutral), +10°, +20°, +30° (plantarflexed). For every 20° of ankle motion, the talocrural joint axis and center of rotation (COR) were calculated. The 3DMA was calculated as the shortest distance from the talocrural joint axis to the line of action of the Achilles tendon projected to the orthogonal plane of the talocrural joint axis. On the sagittal plane image passing through the mid-point of the medio-lateral width

of the tibia, the talus, and the Achilles tendon, the 2DMA was calculated as the shortest distance from the talocrural joint COR to the line of action of the Achilles tendon. The 3DMA were significantly lower than the 2DMA (On average, 1.1 cm (28 %)). The talocrural joint axis deviated from the sagittal plane by $111.4 \pm 20.7^\circ$ and $75.2 \pm 22.6^\circ$ on the frontal and the coronal plane respectively. Calculation of the 2DMA assumes that the sagittal plane is orthogonal to the talocrural joint axis. These results indicate that the assumption is invalid and the three-dimensional calculation should be required for obtaining the Achilles tendon moment arm accurately.

Morphological and mechanical properties of the Achilles tendon in adolescent boys

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The present study aimed to compare the morphological and mechanical properties of the Achilles tendon between adolescent boys before and after the peak height velocity (PHV) was reached. Twenty-two adolescent boys were separated into two groups (PrePHV : n = 8, Post PHV : n = 14), based on the PHV age estimated from their heights. Length and cross-sectional area of the Achilles tendon were measured using ultrasonography at rest. Achilles tendon elongation was measured using ultrasonography while the subjects performed ramp isometric plantar flexion up to the maximal voluntary contraction within 5 s. Stiffness of the Achilles tendon was determined as the

ratio of the estimated tendon force to tendon elongation and, and the corresponding Young's modulus was determined subsequently. No differences were observed in the length and cross-sectional area of the Achilles tendon between the two groups (PrePHV : 174.8 ± 21.8 mm, 62.9 ± 7.1 mm², Post PHV : 182.4 ± 25.6 mm, 55.6 ± 10.2 mm²). However, significant group differences were found in the stiffness and the Young's modulus (PrePHV : 236.2 ± 79.1 N/mm, 633.9 ± 146.7 MPa, PostPHV : 378.4 ± 174.1 N/mm, 1244.9 ± 575.4 MPa). The present results indicate that the material properties of the Achilles tendon might be altered during puberty.

A study on the discourse analysis about women's physical education in the prewar era.

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The purpose of this study is to consider the relation between the processes of disseminating women's physical education and the acculturation of concept of values in the prewar period. It is considered that the advocates of physical education for women chose a theoretical ground suitable at the time to carry out activities to attain their goal of 'disseminating the notion of female physical education'. Their biggest obstacle in doing so would have been the existing views of women, and they would have required edification activities as well as theoretical

research. This edification was carried out by proactively creating values concerning physical education for women. As the process of the 'edification' is pointed out to have "progressed in the form of seemingly neutral or positive values only, such as enhancement of comfort and welfare", we could imagine that physical education for women became widespread through the rendition of positive values by its advocates. We cannot determine if the diffusion of female physical education brought about changes in women's speech and actions, but we can

suggest that the process to modify the existing practice of women's physical education, which used to be against the social norm at the time, into something more suitable for

women, took place simultaneously with the process of educating people that physical education was valuable to women in many aspects.

The view of body in Bali Island—The present condition of dance teaching in Periatan village—

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In this research, the body is featured as a cultural study. This aims to clear up the way the body is specified in culture, and sets to offer the result as fundamental share recognition of the program of maintenance and management of physical strength and health. As a case study, this research focuses on the posture, “canket” of the female dance of Bali Island, Indonesia, and we examine the present condition of one certain village. Peliatan is widely known as “the village of art” in Bali Island. The

basic posture of the present female dance, “canket” is also said to originate in Peliatan. As a result of this research, the way people teach canket and dance in present Periatan is clarified. It is based on the original and traditional view of body that is different from the idea about western body. However, It is also forced change partly with the change of time. Canket and dance in Periatan are between the traditional style and the new.

Effects of 34 hours of total sleep deprivation on oxygen uptake and heart rate during maximal exercise

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The purpose of this study was to investigate the effects of 34 hours of total sleep deprivation on oxygen uptake and heart rate during maximal exercise. Here we report initial findings from our ongoing study. Six young males completed two, 2-day trials (i.e. control and sleep deprivation trials) separated by more than seven days

each. For the control trial participants were allowed normal sleep from 23:00 to 7:00; for the sleep deprivation trial they did not sleep for 34 hours. On both trials, treadmill exercise was performed until exhaustion by ramp protocol at 17:00. Oxygen uptake and heart rate were measured at rest and during exercise. Oxygen

uptake at rest and peak were not significantly changed by sleep deprivation (rest: control 4.3 ± 0.3 ; sleep deprivation 4.4 ± 0.4 , peak: control 47.3 ± 5.3 ; sleep deprivation 50.4 ± 5.9 ml/kg/min). Moreover, heart rate at rest and peak were not significantly changed by sleep deprivation (rest: control 68.3 ± 8.7 ; sleep deprivation 65.5 ± 8.3 , peak: control 196.6 ± 3.4 ; sleep deprivation

189.6 ± 8.1 beats/min). These initial data suggest that sleep deprivation did not alter oxygen uptake and heart rate during maximal exercise. We are continuing our testing by increasing sample size and performing blood analysis to explore the effects of sleep deprivation on the physiological and biochemical parameters.

Consideration to “Japanese characteristics of sports” The formation of the “Konjo (Spiritualism)” in sport-

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The purpose of this study is to clarify how and when “Konjo theory in sports” approved and took a hold in society. Concretely, the following questions have been considered: (1) How was the concept of “Konjo” formed and transformed? (2) By what process was “Konjo” taken to sports? Moreover, what are its characteristics? In this study, research has been focused on discourse related “Konjo”. Specifically, sections have follows: (1) Content from the National Language Dictionary for to examine the semantic content of “Konjo”. Moreover, analysis of the usage of “Konjo” was retrieved through newspaper articles databases. (2) Articles, documents, and treaties that relate to “Konjo” were analyzed. It was pointed out

that the characteristic of “Konjo” was able to be caught with the characteristic similar to modern “vulgar morality”, “devotion character occupation ethics”, and “ethics to revive and rebuild”. Thus, it is considered that the “Theory of Konjo” was established because it resonated with Japanese peoples’ way of thinking and lifestyle in modern Japanese society. Moreover, high economic growth was supported through the promotion of “Konjo”, and the spirit of the general public projected towards sports and athletes supported the movement to revive and rebuild. In other words, the Tokyo Olympics was created in a background established by the “Theory of Konjo”.

Estimation of percent body fat using a three-dimensional photonic image scanning technique in children

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The percent body fat (%fat) is an extensively used index of body composition. The underwater weighing and air displacement techniques have been widely used to estimate %fat. These techniques require well-trained laboratory staff and considerable effort of the subjects that preclude easy application to the field measurement, especially for children. The three-dimensional photonic image scanning (3DPS) is a recently developed technique to measure the body volume. The purpose of this study was to estimate %fat using 3DPS and to compare it with Dual-energy x-ray absorptiometry (DXA) -based %fat. Twenty children aged 12~15 yr participated in this study. During the scanning process of 3DPS, the subject took a

standing position and remained motionless while holding breath after expiration. The body volume was corrected for the residual lung volume that was determined by a rebreathing method. The body density was calculated by dividing the body mass by the corrected body volume, and %fat was calculated by using the Lohman (1989) equation. The %fat was determined by the transmission of x-ray of the body with DXA. No difference was found in the mean values of %fat between 3DPS and DXA (3DPS: 17.8 ± 8.9 %, DXA: 14.1 ± 4.0 %, n.s.). There was no systematic error between the two techniques ($r=-0.04$, n.s.). Results suggest potential usefulness of 3DPS to estimate %fat in children.

Governor-general of Taiwan's "aborigine's policy" and "aborigines Noko baseball team" during the Japanese ruling period

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Taiwan became the first Japanese colony in 1895. At that time, there were three main ethnic groups in Taiwan, namely Japanese, Chinese (Han) and Taiwanese aborigines. Governor-General of Taiwan regarded Chinese as a more civilized group while Taiwan aborigines as savages, rebellious and uncivilized group. In early periods, Governor-General of Taiwan suppressed

Taiwan aborigines by armed force in one hand, and simultaneously implemented Aborigine's Policy in dimensions of education, production, medication and tourism. The so called Aborigine's Policy also implies the meaning of Japanization policy. According to Fujii(1989), resource exploitation was the primary purpose of Governor-General of Taiwan thus "Aborigine's Policy"

was established to draw forestry resources from Taiwan reasonably. The main purpose of this research is to find how Governor-General of Taiwan implemented Aborigine's Policy to aborigines by way of baseball. Conclusions are as follows: 1.The primary aim of Aborigine's Policy through baseball was to change its

former negative image. 2. Baseball as a field for aborigines to perform their talents for physical activities and corrected brutality at the same time. 3. Competing with Japanese players in one game helped to promote the social status of aborigines.