

S-4 Clothing Physiology in Terms of Physiological Anthropology

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How to wear in our daily life have profound influences on seasonal acclimatization of human thermoregulation. The core temperature becomes lower progressively from summer through autumn to winter with the knee-length skirt worn daily, while such seasonal changes do not occur with the full-length trousers. On the contrary, the core temperature increases from spring to summer with the knee-length skirt worn daily, while it does not change systematically with the full-length trousers. Reduced and increased levels of the core temperature in winter and summer, respectively, are accompanied with the improved cold and heat tolerance. Furthermore, the amounts of faeces are strongly suppressed by the soft skin pressure due to the brassiere and girdle, even if their daily amounts of food and water are fed equally. Salivary secretion rate and its amylase concentration are inhibited by the skin pressure due to the clothing. These results suggest that how to wear in our daily life may be responsible at least partly for the formation of physiological characteristic.

S-5 Adaptation to Thermal Environments in the Elderly

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Although much research has been conducted on thermal comfort in the elderly, conflicting results have been reported. Some researchers reported that elderly people preferred warmer conditions because of the decrease in their metabolism. On the other hand, other researchers reported that the thermal environments preferred by the elderly do not differ from those preferred by younger people. There is substantial evidence, however, that the elderly have a lower ability to sense the cold and that they may often be confused about their thermal environments. In this paper, the characteristics of thermal responses in the elderly are reviewed on the basis of our field and experimental studies.

S-6 A Review of Aging from the Aspect of Physiological Anthropology

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Increase of aged population is inevitable situation in Japan by the fact that the tendency of life expectancy is gradually expanding. It seems to have, however, that an increasing population of aged people and extension of life expectancy could be ambivalent in the near future. The contribution of physiological anthropology to extended aged generation is either supporting to old people on the aspect of activities or managed environmental situation.

1) *Physiological Change of Aging*: Although there are many individual difference of physiological change of aging, multi-disability is always associated with progress of aging. Therefore, functional support and adaptation is to be necessary. The developmental effort of man-machine interface is one of the examples for these support and adaptation.

2) *Relationship with Social Environment*: With the progress of aging, disassociation for surrounding environment including human relation with family, friends and neighborhood could be existed because of their physical disturbances. Preparation of acceptable environment to aged people is shared to each specialty of physiological anthropology providing participating system of aged people for other generations and different societies.

3) *Aged People and Diseases*: Prevention and prophylaxis of chronic diseases which are commonly suffering from aged people is limited due to retarded immune mechanism, therefore, all the effort from physiological anthropology should be emphasized that maximally possible coping for comprehensive detection. Also, senile dementia enables us to prepare the establishment of supporting concept and system, which is tender to least behaved aged people with an effort of self-improvement. As an conclusion, we recognize the relative importance of creative framework of physiological anthropology against aging, and, many trials for these objects could be worthwhile for the millennium and following twenty-one century.

S-7 Motor Function among Elderly People

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This report introduces the effect of training on elderly people. Many researches have demonstrated that exercise training benefits the elderly, just as it does younger age groups. Our findings indicated the improved respiratory and cardiovascular function, reduced life style related disease risk, decreased body fat and increased lean body mass, increased work capacity. Exercise training in the elderly would markedly increase functional ability, and thus enhance capacity for independence by decreasing the need for assistance in the activity of daily life.

It would be important for elderly people to have not only exercise but also appropriate diet and rest for promoting their health.

S-8 Okinawan Longevity and Food Culture

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The Okinawan people are one of the longest living peoples in the world, and their longevity is attributed to their foods.

In Okinawa, people take in appropriate amount of meat, and consumption of vegetable, soybean product, such as "Tofu", seaweeds such as kelp is very high. In comparison, consumption of salt is low.

The Okinawan cuisine shows a balanced combination of meat, vegetables and seaweeds which is considered the key to the people's longevity. Their is a belief in Okinawa that all food contain medicinal qualities, which derived from Chinese concept, "Food and medicine are of one source." This Okinawan concept of food has not only influenced the dietary life of the people, but it is also regarded one of the principles upholding the longevity of the people.

S-9 Mental Function among Elderly People

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It is a well-known fact that in Japan the percentage of the elderly population has been increasing in an unprecedented rate. With the rapid increase, the necessity for social welfare measures for the elderly population is increasing, and the medical research on various mental disorders of the elderly and the development of therapeutic guidelines are also being required with urgency.

We have conducted studies on the recognition of senile dementia by family members, the frequency of senile dementia, the features of its psychiatric symptoms and abnormal behavior and the mental health of their caregivers. In Nagasaki, the prevalence of senile dementia among people over the age of 60 years is 6.2% (5.9% in males and 6.8% in females), and most of the patients have some psychiatric problems such as insomnia, wandering about and arguing. These combined psychiatric problems create a severe burden for their caregivers and affect the QOL of the caregivers.

There are two views of the personality of the elderly; one is that it becomes well-integrated with age, and the other is that it becomes extreme. Although few studies have been conducted on personality changes among the elderly and therefore definitive findings have not been established, according to clinical impression, both views seem possible.

The psychiatric problems of the elderly were discussed, focusing on senile dementia and personality changes in the presentation.