H-G model

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The Health Science is not only for healing but also optimizing one's health.

We, human beings, can live comfortably in almost every part of the world if adequate hard and soft wares were available. In other words, our present style of living depends more deeply on those wares rather than one's inborn capacity.

In the present way of daily life people are shielded with tools against the wild environment. The human body and mind have to adapt to the man-made environment which consisted of hard and soft wares.

"H-G model" is a top down model of thinking about health and the relation between man and his tools, which should be mastered by himself.

It has been pointed out that domesticated animals may not be the healthiest members in the same species. Though they are protected from diseases, they are not in the best condition with reference to soundness and vigor.

Atomistic studies on the living system has been quite successful in medical research. However, it seems important to be more holistic when soundness and vitality are the subject for studying.

"Homeostasis" is the tendency of the physiological system to maintain internal stability, owing to the coordinated response of its parts to any disruptive situation or stimulus. These partial mechanisms working involuntarily make an individual possible to act voluntarily.

This voluntary action is the key to survival. Living beings have to act on their own initiative. In the human race, initiativeness has been a driving force for innovating in social and private life.

An individual's life is the interaction between

himself and his environment. At any rate, a healthy person will be the one who can live by himself with no one's assistance. However, no matter how free he feels, his life style has been framed by his own culture, the total sum of ways of living transmitted from one generation to the other.

There are various cultures resulting from vast varieties of environmental conditions. Though they look so different, genetic programs of human beings are substantially the same. Only minor fluctuations in genetic program create one's forte and foible.

Genotype gives an organism preliminary arrangements ready to live on. Survival is a matter of phenotype. Whether an organism is able to live on successfully, healthily, or not depends upon to what extent it can develop its capacity based on genotype.

Present question is that does each individual developed its vital capacity to the level promised by his own genetic program.

According to recent progress made in the fields of genetics and evolution, it seems reasonable to suggest the following hypothesis :

"The innate capacity of man is to be a perfect hunter(H) and gatherer(G)."

The human body has slowly but steadily adapted to the circumstances of a natural way of life through millions of years. Compared to the rate of genetically induced evolutionary change in the physio-psychological function of man, the glorious human history of ten thousands years is only momentary. Under the time scale of evolution, the days of hunter and gatherer were just a moment ago.

A realistic measure of health is needed for im-

proving the conditions of normal daily life. Therefore the problems to be examined are mostly to be found in the present way of daily life.

As mentioned before, adjustment of an environment might degenerate body function. Anyhow, it is mainly a matter of technology, and it seems rational that the readjustment that should be done will not be distinct unless we have a clearer and more extensive knowledge about the innate capacity of human beings. For successful living in future it is essential to clarify the optimum level of load and the optimum amount and quality of nutrition for every individual's health.

It follows that the people living in the present world will be able to contribute equally to the study of human capability, whilst the difference of life style among the various traditional civilizations allows us to experiment upon the above mentioned hypothesis. From this point of view, "advanced" civilization only means "specialized and committed" one, indicating the present situation of "industrialized" civilization.

In order to settle the discussion, comparative studies of the societies of the international community would be fruitful. During the Himalayan expedition in 1970, I found that many cordial Nepalese people had a remarkable capacity to perform hard physical work. I felt that what the Nepalese society possessed was missing in modern Japanese society, though Japanese and Nepalese people have many things in common.

As one of the realistic measures of health, we have planned to investigate the capacity of the cardio-vascular system. How to keep system in the best condition will be one of the central problems in physiology. This is in fact a good example of studying the innate capacity of human beings. During our stay in Nepal 1977, we could identify the very high work capacity and excellent performance of cardio-vascular system of the ordinary Nepalese people.

We also found that ordinary people go and back on foot for more than several hours at a speed of about 90 m/min. both in the morning and in the evening.

To maintain a speed of 90 m/min. for several minutes is easy, because everybody are so programmed genetically. But walking for several hours everyday at that speed is unique in Japan. It is interesting that an ancient unit of length, stadia, was used to measure how far a man could walk during sunrise. Ancient unit varied from 179 m(Egypt) to 192 m(Greek). The time between onset and end of sunrise is almost 2 min.. This fact shows that the study of Nepalese people and their way of life is helpful in comparative Health Science.

How to make the best of one's health is a human problem which deeply concerns the future of the world. The results obtained by comparative study will give everybody a common basis to start with, and help design a new way of life in future.

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