## PHYSIOLOGY OF HEALTH AND PHYSICAL FITNESS\*

TN the course of his presidential address, Dr. Kalidas Mitra emphasised the importance of health, as a natural asset, contributing to the prosperity of any country either agricultural or industrial. Unfortunately physiological research had received scant attention and had not evolved a satisfactory standard for positive health and fitness. Lack of co-ordinated and active collaboration among workers in physiology, hygiene, clinical medicine and public health has been responsible for this unhappy state of affairs; the clinician being interested in cure and the public health worker in prevention of disease are both in a position to pose a number of problems for the hygienist and the physiologist. Another important cause is the racial and genetic complexity of the human organism. Therefore it is difficult to determine absolutely precise health standards for all men. For all practical purposes, the health and fitness of an individual is the degree of adaptation to rapidly changing environments without appreciable loss in power of performance, or if at all the rate

of recovery. A standard of this order would go a long way.

In the last few decades nutrition has been taken as an important factor in the creation and maintenance of health. From the observations derived from the prisoners of war camp and other sources, during the recent wars the clinical symptoms attributed to mal or undernutrition are not uniform in all cases. The study of physiology of industrial workers and defence personnel of various categories have considerably advanced particularly in America and the results have largely contributed to the welfare and efficiency of the workers and to an improvement in the performance of military personnel. The author bases the criteria of good health on physique, organic efficiency, and motor fitness, i.e., alround body development and height-weight ratio, muscular power, and efficient cardiovascular mechanism, vitai capacity and sound condition of the body fluids, particularly blood and its constituents. These data should be combined with the findings of a thorough clinical examination. The author concludes by offering a few suggestions for future work. The author who is a public health worker has taken some pains to collect data for this address. Dr. K. P. Menon.

## PROBLEMS AND PROSPECTS OF INDIAN ANTHROPOLOGY\*

In the course of his presidential address, Dr. C. von Furer-Haimendorf emphasised the need for the co-ordination of anthropological and archæological research in India. He indicated how certain geographical conditions in this country have made possbile the co-existence of diverse cultures from the semi-nomadic food gatherers to the city dwellers. The earlier civilizations have avoided conflict with advanced civilizations by isolating themselves in refuge areas.

Most of the aboriginal cultures represented to-day by forest tribes who are given to shift-ing cultivation without the use of the plough or wheeled transport could be correlated, according to Dr. Haimendorf, to the early neolithic civilizations of South East Asia exemplified by the Brahmagiri stone axe culture and characterized by the use of partially or wholly polished stone axes with pointed butt and oval cross-ection. Here lies the importance of

Dr. Whealer's excavations at Brammagiri which have enabled us to date not only the megalithic culture of South India but also the preceding neolithic and chaleolithic culture strata. Dr. Haimendorf considers that the Brahmagiri stone axe people had a culture resembling that of the present day aboriginal populations of shifting cultivators. He also considers that the megalithic builders of South India who succeeded them were probably Dravidian-speaking peoples established in South India late in the first millennium B.C.

The latter part of his address considers the value of anthropology for the solution of the socio-economic problems of primitive peoples. Social planning for the development of backward areas should be based on sound anthropological knowledge which has been useful in the rehabilitation and education of the aboriginals of Hyderabad. In conclusion Dr. Haimendorf said that it was gratifying to find that anthropology is being applied to establish better racial relations among peoples and to promote international goodwill.

<sup>\*</sup> Presidential Address by Dr. Kalıdas Mitra, M.B., D.P.H., D.T M. & H., F.N.I., at the Medical and Veterinary Section, Indian Science Congress, 37th Session, Poona, 1950.

<sup>\*</sup> Summary of the Presidential Address to the Section of Anthropology and Archæology, Indian Science Congress (1949), Poona,