

Such caution should not be condemned, for "one should not throw pearls before swine". This ordainment had been repeated in many different ways. "There is no prophet in his own country"—this sad truth also was given for the benefit of future humanity not without deep reason.

There will come a time when ignorant self-conceited negation in all walks of life will be replaced by a radiant unprejudiced research. One should especially rejoice at every benevolent study—in it is contained true goodwill.

Guru Charaka\*, the great Ayurvedist, still wanders along the blossoming Himalayan uplands. Wisdom knows in its straight-knowledge how many innumerable precious remedies were given to humanity.

There is no old or new age, there is no antiquity nor modernism for the ever life-giving Panacea.

\*Prof. de Roerich's painting "guru charaka" is in the Roerich Hall in Benares (Bharat kala Bhawan).

*Reprint*

## ANCIENT MEDICINES

(Diary Leaves)

By NICHOLAS de ROERICH

[These Diary Leaves, chronicled in the Himalayas, give an account of Dr. Bernard Read's researches in ancient medicines. Incidentally Prof. Nicholas de Roerich pleads for true goodwill which can only be realised through an appreciation of the continuity of human thought at all ages.

Dr. Bernard Read does highly beneficial work. From yellowish, forgotten and often ridiculed records of ancient Chinese pharmacopoeia, he re-discovers for the scientific world many considerations, which attract the attention of contemporary knowledge. For us the works of this scientist are especially valuable. We have often stressed the necessity of studying ancient pharmacopoeias and various popular home medicines, amidst which one can no doubt find results of experiments of many ages.

Because of such affirmations we have often been scoffed at. Certain scientists of to-day fear that they may be considered out of date and may thus lose a leaf from their laurel of modernism. I was recently accused that my considerations may support old-fashioned scientist instead of refuting together with modernists everything that was accomplished before. And I had to explain that we never asserted that everything contained in ancient pharmacopoeias is fully good and useful. We only affirmed that ancient pharmacopoeias should be studied, as one more source useful for certain conclusions of excellent scientist of to-day.

Of Dr. Bernard Read's researches we have heard long ago. Our friend, the Hon. Charles Crane, has already some



years ago recommended this excellent scientist for cooperation with our institutions, and this took place. And now we follow with increasing interest how even the newspapers dedicate entire columns to the researches of Dr. Read. It sounds paradoxical: the most modern achievements based upon most ancient sources! And yet it cannot be expressed otherwise, because Dr. Read through the knowledge of ancient sources confirms the most modern discoveries of contemporary science. For a historian these strictly scientific deductions are most instructive, since through them it is affirmed once more how carefully one should approach the past of human life, in which so many observations had already been manifested. In such cases we have to deal not only with civilization but with culture in its entire originality.

It may seem to many that the healing use made of donkey skin, sheep's eyes, deer's horn, dog's brain, odd herbs, etc. all interwoven as they are in folklore, is just so much empty Chinese superstition, and that it is unfortunate that such great faith is placed in such absurd remedies.

However, an extensive survey now being undertaken by Dr. Bernard Read, Head of the Division of Physiological Science and his associates at the Henry Lester Institute of Medical Research, may greatly diminish popular scepticism.

It is the attitude of the Lester Institute that before today's medical science of the Western world can be imposed on the Chinese people, due regard must be given to the empirical observations which form the basis of the old Chinese medical practice.

Reason has suggested that when certain therapeutic practices have been in constant use for a great many centuries not only in China but in India and with no apparent relationship to the still more ancient civilizations, as revealed in old

manuscripts, it becomes evident that some real benefit is derived.

The work of Dr. Read with his associates and staff is to put such empirical practices upon a rational basis by employing the highly technical skill of modern workers and a more fundamental knowledge of the principles involved to evaluate them, by new standards which emphasize in proper balances, deficiencies and faulty assimilation, and thereby to find fresh avenues for research, which may yield results of value in modern medicine.

Dr. Read has been working in this field for thirty years in China and has been rewarded by his success in chaulmogra oil and ephedrine... first produced in his laboratories in Peking, among his other important contributions to medical science. Now working under the excellent facilities of the Lester Institute in Shanghai where he came two years ago to head the divisions of physiological science, more valuable data on Chinese Materia Medica are being contributed to modern medicine. There is now in progress an investigation into the chemical composition and vitamin contents of a tremendous variety of local Chinese drugs and foods.

The phenomenally widespread use in China of boiled down donkey skin, called "Ah-Chiao", as a blood regenerator and internal styptic, and a general nutritive for weak people, especially those suffering from tuberculosis, has led to an investigation into its particular character both chemical and physiological. Dr. T. G. Ni finds that it contains a large amount of glycine, cystine, lysine, arginine and histidine. Administered orally it improves the calcium nitrogen absorption and raises the calcium level of the blood. This Ah-Chiao used intravenously was found to be effective in restoring a depressed circulation after hemorrhage

and shock. Further work is proceeding on its beneficial effects in muscular atrophy. In Hangchow last year there was a quarter-million dollars trade of donkey skin in one store alone.

It has been shown by dietary surveys that large numbers of people live on deficient diets such as may lead to latent or subacute scurvy. In old medical practice such symptoms as weakness of the knees and general lassitude were treated with numerous remedies which may depend for their action upon the presence of vitamin C. Hence 120 Chinese foods and drugs, purchased in Shanghai markets as they appeared for sale in ripe condition and also collected in the country close to Shanghai, have been subjected to a chemical study with a view to ascertaining the vitamin C content. The results are given in value of Pumels report written by Yuoh-Fong-Ghi and Dr. Read.

Among the citrus fruits pumelo was found to have the highest vitamin C content, being superior to grapefruit and all of the various types of oranges. Many sorts of leaves, which are eaten regularly and used medicinally such as dandelion, mulberry, nasturtium, poplar, shepherd's purse and amaranth yielded interesting data. Green amaranth, little known by foreigners, grows in great profusion in the country, and has been found to have a very high vitamin C content and to be superior to spinach in its content of iron and calcium. The high vitamin content of willow and poplar leaves and shepherd's purse suggests good reason for their use in ancient medicine.

Dr. Read states that ancient medicine in China needs considerable clarification before forward or backward looking people are able to estimate it in its true worth. As an historical record it is of worth to the anthropologist, the naturalist and the physiologist. Dissected from outside

influences it has a vast amount of honest observation of Chinese fauna and flora, their habitat, preparation and uses as foods and remedies in treatment of disease, suggesting important paths of research.

In China's great classic, the Pen T'sao Kang Mu' common foodstuffs include such extremely toxic seeds as the bastard anise and poisonous terodent fish and drugs include oranges, gelatin and liquorice. Thus for practical purposes no distinction need be made between foods and drugs. The voluminous old Chinese medical literature embraces the whole field of Chinese natural history, a remarkable record of observations for thousands of years.

Dr. Read feels that apart from its applied value, Chinese medicine needs a more intelligent and sympathetic understanding on the part of modern medicine. It is universally believed in. There is need in Asia for a widespread application of scientific methods to enable people to evaluate ancient medicine at its true worth and to heighten appreciation of modern ideas in medicine in all of its relationships.

It is of interest to note, [states Dr. Bernard Read in his report on 'The Newer Pharmacology and Ancient Medicine'] that the modern medicine of the British Pharmacopoeia only included nine substances of animal origin, and those nearly all, quite innocuous things like lard and wax. While modern science is turning to liver, stomach, vitamin A from the eye, adrenalin, etc. it is remarkable to find the use of so many animal tissues in ancient medicine.

In this report Dr. Read presents a table showing 26 parts of six domestic animals used in old Chinese medicine. These animals include the cow, horse, pig, chicken, sheep and dog.

When bitten by a mad dog the brain of the same animal is applied to the wound. This suggests a connexion with

modern Pasteur treatment and is worthy of investigation.

The velvet horn of the Skia deer and other species is taken as a drug in powder form and is very highly regarded by the Chinese. Recent studies by Russian scientists show that the male sex hormone is present.

The iris and the lens of the sheep's eyes were given for dimness of vision and conjunctivitis. The eyes of the hawk, parrot and mackerel, were administered for blindness. Recently Wald has isolated vitamin A from the iris of sheep, pigs, cattle and frogs.

In old Chinese medicine pig's liver was recommended for blindness, beri-beri, emancipation etc. and has fairly recently been found to be rich in vitamin A, B, C, D, and E. A great many instances of this sort are cited. Shepherd's purse is given as an excellent example of a medicinal herb cast aside for its apparent lack of potent principles which has been shown to be moderately rich in three of the vitamins and well justifies the old Chinese use of it for a number of maladies.

Native remedies claiming to have power to increase human fertility are often associated with magical ideas but Dr. Read believes that in view of the increasing volume of recent scientific work in this field there is hope that information may be forthcoming whereby these claims can be properly evaluated.

Some people suffer from a deficiency of iodine. Many centuries ago in China seaweeds were used in the treatment of goitre. It is now believed that these old remedies were often quite efficacious.

Dr. Read says that further extensive reference might be made to a host of other remedies but that enough has been cited to show that science may progress by looking backward as well as forward, that probably the most

suggestive path of progress may be gained by studying the records of old empirical medicine, that the scientists need more than any other to keep an open mind regarding the claims of ancient medicine, so that with the aid of modern knowledge and modern technique an unprejudiced study may be made of the customs of our forefathers, who were engaged in the same life and death struggle against disease.

In China there have been preserved for something between 30 and 50 centuries remarkably accurate records of human experience in the field of medicine. These records are not accumulations of divine intuitions but empirical findings which up to the present have only been sifted with the very coarse sieve of last century science.

Thus without destroying anything, without unjust scoffing, one may find new useful possibilities, accessible to all. Dr. Read's experience of many years but confirms that, when scientists go along the path of honest goodwill, they discover much of that which would remain concealed to the evil doubting eye. Honest investigation and self-conceited scepticism are two entirely opposite things and the way of suspicious disbelief is obscure and crooked.

In all ancient records one can find remedies which merit through investigation. The particles of Truth remain everywhere indisputable. Sometimes the formulae of ancient wisdom remain enigmatic for the superficial student—but yet Truth remains Truth when these hieroglyphs are studied without prejudice.

The path of negation is always branded as the path of ignorance. The latest discoveries but confirm the continuity of human thought at all ages. The obscure formulae often were due to the peculiarity of the language or to a deliberate desire to retain but in certain hands the precious knowledge.