

PSYCHIATRY

Commonest Insanity Linked To Body's Hormone Trouble

Statistical Study Reveals Symptoms of Schizophrenia Strongly Resemble Those of Thyroid Deficiency

POSSIBILITY that the most common of mental diseases, schizophrenia, is associated with inability of the body to use the secretion of the thyroid gland is suggested by a study of 129 patients just reported by Dr. Joseph C. Rheingold, of the University of Illinois College of Medicine. This inability may, in turn, be due to failure in functioning of the hypothalamus, a part of the brain.

So closely are the symptoms of schizophrenia, as revealed by this statistical study, like those of patients with thyroid deficiency that reading the description of the physical signs of the first is like reading a description of the other, Dr. Rheingold said in reporting his findings. (*Psychosomatic Medicine*).

Most noteworthy is a tendency to low oxygen consumption. Low blood pressure, slightly elevated blood cholesterol content, low normal carbon-dioxide combining power, and secondary anemia all point to a state of general lowered metabolism which is characteristic also of the sufferer from insufficiency of thyroid secretion.

This tie between schizophrenia and hypothyroidism may not be true of all cases, Dr. Rheingold warns, and it may not be responsible for the origin of the mental difficulties of the schizophrenic patient.

"But the suggestion is offered," he said, "that no matter whether the metabolic and the mental characters arise simultaneously or in sequence, the hypothyroid state once established is capable of perpetuating the signs referable to the brain."

Scientists have already found that integrated brain function depends upon the brain's receiving an adequate supply of oxygen. Reduced oxygen tension of the atmosphere such as experienced by flyers at high altitudes or those suffering from mountain sickness produces disorders of behavior resembling those seen in schizophrenic patients.

In addition to this direct effect upon the brain, hypothyroidism would also exert secondary effects through disturbances of water and calcium metabolism

which act as a further damper on brain activity.

But the schizophrenic's symptoms are apparently not due to actual lack of thyroid substance, since feeding of thyroid gland does not cure the disease.

From evidence in the literature provided by study of the brains of schizophrenic patients who have died and the effects of certain drugs, Dr. Rheingold has suggested that it is possible that the difficulty is a failure of the hypothalamus—a part of the brain that appears to control the body's use of the thyroid secretion. Such failure would account not only for the hypothyroid symptoms but for the inefficacy of thyroid feeding.

This report is the first of a series dealing with the integration of bodily mechanisms in schizophrenia. The ultimate aim is to provide the basis for a rational therapy of this common and little understood mental disease.

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PSYCHOLOGY

Work Is Chief of Factors Making Up Successful Life

WORK, love, philosophy and recreation—on these four fundamental cornerstones you can build for yourself a worthwhile life. The recipe is given by Dr. George Ross Wells, psychologist of the Hartford Seminary Foundation, in a new book *The Art of Being a Person* (Appleton-Century).

Work is necessary for more than its opportunities for creative endeavor. To be paid for your work, to earn a living, is proof positive of your value to your fellow men. And this reassurance is essential to that feeling of self-respect and self-confidence that is man's chief need.

It is pleasant to be praised; it is sometimes very difficult to endure criticism; but the appearance of a paycheck at the end of the week or month is immensely more important than either as convincing evidence of the individual's worth in the world of human affairs.

"If work," said Dr. Wells, "proves our value to society and therefore to

ourselves, love proves our value to an individual, and, again, therefore, to ourselves. Love is an irreplaceable cornerstone of the serene life.

Although the major satisfaction of love is in the loving, it does make a difference upon what object we shower our affections. It is pathetic when love is centered upon an inanimate object or an animal incapable of returning the affection. It is also unfortunate, Dr. Wells declares, when men come to love ideas or institutions instead of individuals.

The philosophy or religion of the individual should dignify the individual and accord to him real worth and an essential although proportionately small place in the eternal scheme of things. No one can attain serenity who regards himself as completely worthless.

Finally, recreation plays an important part in building the personality.

"The arts," said Dr. Wells, "are for many persons the most effective as well as the most enjoyable of recreations. Music is for very many people the supreme compensation for the problems and sorrows of life, making contribution of tremendous value but without excessive fatigue or any type of destructive influence."

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MEDICINE

Cancer-Causing Substance Found in Irradiated Fat

NEW LIGHT on the cancer problem is coming from chemical search for cancer-causing substances in fats carried out by Dr. H. Veldstra at the Laboratory of the Anthony van Leeuwenhoek House in Amsterdam. One such substance, Dr. Veldstra reports (*Nature*), may explain skin cancer found in the tropics, also the high percentage of cancer of the stomach in northern regions. Skin cancer in the tropics, according to one theory, is caused by cancer-producing substances formed in the skin under the action of the sun's rays. Cancer of the stomach is ascribed by some investigators to the diet and its preparation, specifically to the heating of fats. Irradiation of the skin may change its fatty cholesterol into a cancer-producing chemical. Heating fat in cooking may produce the same cancer-causing chemical. Dr. Veldstra reports significantly that irradiation of a fatty substance akin to skin's cholesterol does produce a cancer-causing chemical. Further investigations, now under way, may fit the pieces of this puzzle together and may bring scientists nearer to a solution of the cancer problem.

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