THE RELATION OF NUTRITION

to

MENTAL HEALTH

AN ABSTRACT

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Mental illness is a very serious problem today in the United States. It is estimated that at least one person in every ten has some form of mental or emotional illness that requires psychiatric treatment. Those individuals who have psychotic disorders such as schizophrenia and manic-depressive psychosis require long or indefinite care in an institution. Over fifty percent of these patients in mental hospitals are between fifteen and thirty-five years of age, while another large proportion includes children and young people, with serious mental disorders. Additional children and young people are treated as out patients at psychiatric clinics, each year, for less severe mental disorders.

A survey of the facilities available to care for these large numbers of people suffering from mental illness reveals that the problem is threefold. The number of clinics and the facilities within existing clinics are inadequate. Furthermore, the hospitals are slowly becoming filled with the aged. Apparently, care and treatment alone, along present lines, cannot cope with the present and emerging situation. More research along new lines of attack is needed to reduce the problem.

One new approach is with diet and nutrition. Investigators in this field of diet and nutrition have revealed that the diet of the "wealthy" American is deficient. Important causes of this deficiency are the modification, depletion and processing of raw foods, and the addition of chemicals to foods

prior to consumption. Another reason for deficiencies in the American diet is the large proportion of foods containing white sugar and white flour products included in it. A serious depletionary effect on the body's reservoir of B vitamins has been traced to the consumption of excess amounts of these foods. Since the body's requirement for B vitamins is in direct proportion to the intake of white sugar, white flour, and other carbohydrates, and since these foods containing white sugar and white flour have little or no B vitamins to aid in their digestion, large amounts of B vitamins must be provided for this from other sources in the body, including the nerve cells. The result is a very serious deficiency of thiamin, riboflavin, and niacin in the metabolism of many Americans. In addition, nutritional deficiency may be produced even in the presence of an adequate diet by gastro-intestinal disturbances, pregnancy, lactation, radiation therapy, antibiotics, insecticide residues and other factors which impair absorption, increase the requirement, or increase the destruction and excretion of nutrients.

Nutritional deficiencies, particularly vitamin deficiencies, have been found to be related to aberrations in the functioning of the nervous system. In the nerve cells the breakdown of molecules, the energy release mechanisms, the enzyme regeneration cycles, and the waste disposal mechanisms, are all dependent upon the various vitamins which act as enzymes in these processes. The failure of these processes to

be performed in the nerve cells, due to the lack of certain vitamins, leads to the occurrence of many mental symptoms including confusion, irritability, inability to concentrate, paresthesia, lack of coordination, and other symptoms. While many such aberrations in behavior of the nervous system have been treated and may be reversed, serious and prolonged deficiency of nerve cell nutrients may lead to irreversible mental deficiency.

The vitamin B group is a greater factor in maintaining proper functioning of the nervous system than other vitamins. When there is a deficiency of B vitamins, severe changes in the nervous system occur, including demyelination of the nerve fibers and destruction of the axis cylinders of nerve cells. For example, changes in the nervous system due to vitamin B-12 deficiency occur in the spinal cord, peripheral nerves, and the brain, and could result in severe dementia. However, treatment with dosages of B-12 results in a relieving of this condition.

There have been many studies of patients in which both psychoneuroses and psychoses were induced experimentally by dietary restrictions and in which the patients responded to diet therapy. These investigations have demonstrated convincingly that a relationship exists between vitamin-B deficiencies and psychiatric disorders. Restricted intake of B vitamins both singly and in combination has produced varying forms of mental illness including anxiety, irritability,

forgetfulness, headaches, impaired judgment, bodily complaints, hypersensitivity, ease of frustration, and depression. Vitamins other than those of the B-complex group have also been found to affect mental health. Evidence of emotional instability has also been associated with mineral deficiency and with general improper eating habits such as not eating breakfast. The abnormal mental and emotional states caused by nutritional deficiency are not clinically distinguishable from psychologically diagnosed functional mental illness.

Many patients with mental disorders have been the subjects of experiments in nutritional therapy. Several have had their symptoms alleviated by such therapy. Very amazing results have been achieved by using multiple vitamin-mineral therapy in curing such serious mental disturbances as schizophrenia, depression, hysteria, hypomania, psychasthenia, psychopathological deviation, paranoia, and hypochondriasis.

Since a steady diet of white sugar and white flour products results in depleting the body of much of its B vitamins, and since these vitamins are vitally necessary for proper nerve metabolism and function, the consumption of these devitalized foods appears to be a primary factor in altering the chemistry of the nervous system to the extent that disordered behavior may develop. In addition, since many types of emotional disorders have been found to respond to nutritional replacement, it is concluded that many serious forms of mental illness may be relieved by employing nutritional therapy instead of psychological therapy.

Many Americans exhibit symptoms of anxiety, depression and irritability. These symptoms have usually been attributed to the fast pace of modern times. However, since the diet of Americans is frequently deficient in important vitamins, the manifestations of the above symptoms may be related to diet rather than tension. The evidence that many of these symptoms respond to diet therapy supports the latter hypothesis and casts doubt on the popular theory that the fast pace of modern society is the sole cause of mental illness. Finally, since this suggests that disordered chemistry, rather than buried complexes, is at the root of much mental illness, the psycho-nutritional approach should be given the attention it deserves in textbooks in psychology and education.