Megavitamin Therapy

A. Hoffer
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DEFINITION

The term “megavitamin” refers to the use of some of the vitamins for prevention and treatment of disease in dosages much higher than required to keep most normal people in a relatively good state of health. “Mega” refers to the dose. There are, of course, no megavitamins, lecular therapy.

HISTORY

It was inevitable that soon after pure vitamins became available that they would be used for a variety of diseases. In psychiatry vitamin B3, the anti-pellagra vitamin, was tried by a few enterprising psychiatrists for depression. Some of these conditions quickly responded. With Dr. H. Osmond, I (A. Hoffer) began the first double blind controlled studies ever completed in psychiatry. (In the double-blind method, neither the patient nor the researcher knows whether the active substance or the placebo is administered.) We compared the only known treatment of that time (psychotherapy and electroconvulsive therapy) and placebo against the same treatment plus three-gram doses of vitamin B3 each day. Our method has
since become the standard method of modern clinical trials.

We found that at the end of one year the vitamin B3 group had achieved a 70 percent recovery rate, compared with a 35 percent rate for the placebo group. The placebo rate was comparable to natural recovery for acute and sub-acute schizophrenics. After four double blind controlled experiments and after clinical experience on over fifty thousand patients, my orthomolecular colleagues and I have concluded that vitamin B3 in optimum doses (a better term than megadoses) is an important ingredient of proper treatment for most schizophrenic patients. Osmond and I also used large doses of ascorbic acid for our patients treated outside of these double blind experiments.

Through the research of scientists, including Cott (1967, 1969, 1971), Hawkins (1968), Hawkins and Pauling (1973), Pfeiffer (1975), Rimland (1973), and many others (see Hawkins and Pauling, 1973), other vitamins have been found essential, especially pyridoxine and, to a lesser degree, vitamin B12.

The next major advance was Dr. Linus Pauling’s (1968) conclusion about the relationship between brain function (mental health) and the optimum biochemical environment. He defined orthomolecular psychiatry as “the treatment of mental disease by the provision of the optimum molecular environment for the mind, especially the optimum concentrations of
substances normally present in the body.”

Since then there has been a gratifying advance in the theory and practice of this more advanced form of psychiatry and medicine. A modern orthomolecular therapist pays close attention to nutrition, to supplementation with optimum doses of vitamins and minerals while also using all other chemotherapies that will help and not harm the patient. There are a number of megavitamin pioneers who have, with dedication, advanced knowledge always in confrontation with classical medicine, which has remained ignorant and therefore resistive to nutritional therapy. These include F. Klenner (1971, 1973), I. Stone (1972), and L. Pauling (1968, 1970, 1974), for ascorbic acid. W. Shute and Taub (1969) for vitamin E, and C. Reich (1971) for vitamins A and B3. Recently, medicine seriously examined megadoses of vitamin A as treatment for cancer. There is already available very significant data showing that ascorbic acid should be a very important component of any treatment program for cancer.

The controversy over the use of optimum doses of vitamins is not scientific. Not a single opponent to Megavitamin Therapy has any personal experience as a clinician with this form of treatment. Therefore, they depend entirely on sloppy literature reviews and biased conclusions. All new discoveries in medicine are greeted by similar antagonism, and Megavitamin Therapy is no exception. But the controversy will become scientific when...
critics duplicate the published methods for using Megavitamin Therapy and show it does not work. This has not yet occurred, and Megavitamin Therapy is advancing rapidly. This is the response to a massive demand from thousands of patients and their families who have personally witnessed their failure to recover on orthodox treatment, and the vast improvement when the orthomolecular approach was used.

**TECHNIQUE**

1. **Medical model.** Patients, whether schizophrenic or depressed, are considered to be ill. The pure psychosocial models are not used. Psychotherapy is based upon this model. It includes discussion of diagnosis, treatment, and prognosis and calls upon any psychosocial therapies that can maximize the probability of recovery in conjunction with chemotherapy.

2. **Nutrition.** Patients are placed upon a diet that suits them best. This may depend upon trial and error based upon clinical experience. Generally, all orthomolecular therapists advise against nonfoods such as sugar, dyes, and other additives not shown to enhance the nutritional value of the foods in which they are added. In planning diets, the question of allergic reactions must be examined; food allergies can cause any psychiatric syndrome, including schizophrenia and learning and behavioral disorders in children.

3. **Vitamins.** These are used in optimal dose levels. This is determined by beginning with lower doses and increasing
them, depending upon the rate of response. The best dose is the quantity that brings about steady improvement and causes no side effects. At these doses there is no medication safer than the vitamins. The common ones are vitamin B3, ascorbic acid, and pyridoxine, but any of the others may be required.

**a) Vitamin B3.** Two forms are available; nicotinic acid (medically known as niacin) and nicotinamide (or niacinamide). Nicotinic acid causes facial flushing when it is first used, but in time, in most cases, the flush vanishes or becomes inconsequential. There is no flush with nicotinamide. The dose range is in grams per day. It may require adjustment either way, depending upon the response.

**b) Ascorbic acid.** The optimum dose varies with the patient’s degree of illness or stress. The sicker that person is the more ascorbic acid is required and can be tolerated. If the tolerable level is exceeded, there is diarrhea.

**c) Pyridoxine.** Usually less than 1 gram per day is required.

4. **Minerals.** Attention will be given to optimum amounts of minerals. Usually this means reducing levels of toxic metals, such as lead, when they are elevated, or restoring essential elements, such as zinc, when they are low. Pfeiffer’s recent book details the kind of attention which is essential.

5. **Other chemotherapy.** Drugs are used as required, but only as
adjuncts to orthomolecular therapy; the objective is to reduce the dependence upon drugs, consistent with the patient’s response. The goal of therapy is to have the patient on nutrient therapy alone, or with doses of tranquilizers, anti-depressants, etc., so low that there is no inhibiting effect on the person.

6. **Duration of treatment.** This may vary from a few months to a lifetime. It is determined by withdrawing supplements after the patient has been well for long periods.

**APPLICATIONS**

1. **The schizophrenias.** Megavitamin Therapy works quickest and best for acute and sub-acute illnesses. Progress with treatment is measured clinically and, if necessary, with tests. Osmond and I have developed two very helpful tests: a) the Hoffer-Osmond Diagnostic Test (HOD) (1975) and b) the Experiential World Inventory (EWI).

2. **Children with learning and behavioral disorders.** I use this broad term because none of the nearly one hundred terms have been shown to be helpful in determining treatment. Etiological diagnosis is more relevant. Under the broad group under this heading orthomolecular therapists include three main subgroups: a) the vitamin dependencies, b) cerebral allergies, and c) mineral imbalances.

3. **The neuroses and depression.** A large proportion suffer from psychiatric manifestations of the saccharine disease (see
Cleave, 1975). When tested with a five-hour glucose tolerance test, most show definite abnormalities. Diet correction is a main component of treatment.

4. The addictions. These diseases, which include alcoholism and drug addictions, also yield to orthomolecular treatment. Two important recent contributions come from Smith (1974) and Libby and Stone (1978).

5. Criminal behavior. Many advances are being made here. This, coupled with general acceptance of the view that psychosocial intervention alone is not very useful, will rapidly expand serious examination of orthomolecular views.