

## CHAPTER 114: Mental Illness

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During one of my many excursions throughout the country, a university neurology professor told me a tragic story which exemplifies the need for recognizing the connection between nutrition and mental illness. Jack Turner worked very hard, and as a result suffered from intestinal ulcers. He was a corporate CEO, in charge of many and responsible for much. His daily grind did not afford him the luxury of eating well, and the stress of his work exacerbated his ulcers. When he finally suffered a mental breakdown, nobody was surprised. His doctors, his co-workers and even his wife attributed his collapse to his stressful workaholic lifestyle and his perfectionist point of view.

Jack was admitted to a state hospital, diagnosed with psychosis. **He was there several years** before a new doctor decided to evaluate his nutritional status. He was found to be deficient in the B vitamins and was given shots of B12.

Miraculously, Jack began to recover. After a few months of an aggressive campaign of nutritional therapy, Jack Turner was discharged, his psychosis ended. Tragically, because of irreversible neurological damage, he was confined to a wheelchair. Not complaining left the corporate world to become a schoolteacher. His ulcers healed and he retained excellent mental health well into his 80s.

How many Jack Turners are out there, misdiagnosed and misrepresented, denied the help that could make them better?

### Bowel Reasons for B Vitamin Deficiencies

There are no other nutrients more important to mental health than the B vitamins. The B-complex vitamins provide the body with energy, metabolizing fats and protein, and are necessary for the normal functioning of the nervous system. They are the single most important factor for the health of the nerves. Symptoms of deficiencies include dizziness, hallucinations, irritability, depression, insomnia and even suicidal tendencies.

Mental illness as a physical disease can result from low brain concentrations of vitamins B 1 (thiamine), B6 (pyridoxine), B 12 (cobalamin), niacin, pantothenic acid and folic acid.' Please, always supplement with a good B-complex formula when adding any one B vitamin to your diet. One without the other can cause more harm than good since they are dependent upon each other to work in you- body.

Remember, vitamins aren't properly utilized without mineral and minerals are nearly impossible to absorb in tablet form. That's why I take a mineral in solution formula along with a vitamin/mineral tablet that consists of freeze dried sprouts and vegetables.

A vitamin B 12 deficiency is a real bogey man – especially in the over-60 crowd. It can produce psychosis, severe memory loss, impaired abstract thinking skills, mental confusion, delusions, hallucinations and even brain and spinal cord degeneration (causing numbness). Low blood levels of the vitamin are found in one-third hospitalized psychiatric patients suffering from depression and dementia, according to a Denmark study. In addition, a B 12 deficiency may inhibit the brain's use of glucose (the gasoline which energizes the brain) and hinder production of acetylcholine, which is vital to brain and memory function.

Folic acid, a B vitamin found in leafy greens, prevents irritability and forgetfulness; plus, it partners with B 12 in the brain's synthesis of acetylcholine. In one case, cited in "Nutrition and the Brain." 67 percent of patients admitted to a psychogeriatric ward were deficient in folate. Such a deficiency may arise from poor nutrition, an inability to absorb the nutrient or impaired absorption **caused by pharmaceuticals.**

There are two places in the body where nutrients are absorbed: the stomach and the intestine. If the stomach has too little acid, whether from illness, stress or age, absorption is compromised. If there is something wrong with the

intestines, nutrients, especially the B vitamins, cannot be absorbed properly.

Studies have shown that among those with intestinal problems, their blood levels of B vitamins are low. Irritable bowel syndrome (IBS) is a fancy term to describe a temporarily dysfunctional large intestine, caused by food allergies, stress or too much fat in the diet.

In one study, 20 patients with IBS were compared to a control group of 20 without IBS. Remarkably, but not surprisingly, it was found that 18 out of 20 of the IBS patients had a history of mental illness during their lifetimes compared to only nine out of 20 in the control group. Half of the patients with IBS had regular panic attacks, and another half had social phobias. IBS patients commonly have problems with depression, sleeping problems and substance abuse. The connection sticks. When questioned, most of the IBS patients said their intestinal problems occurred before their mental illness.'

What makes this connection between the bowel and mental disorders? B vitamins. An unhealthy intestine cannot absorb B vitamins. And without the B vitamins, mental disorders result.

*Churchill's Medical Dictionary* defines pernicious anemia (PA) as "anemia resulting from impaired intestinal absorption of vitamin B 12." It is called pernicious because it is fatal if left untreated. It has been estimated that the majority of elderly people with symptoms of senility are actually suffering from pernicious anemia. The symptoms range from early signs of paleness, fatigue, diarrhea, heart palpitations and numbness in fingers and toes, to delusions, senility and schizophrenia in later stages.

A lack of B 12 has been found to cause a type of brain damage resembling schizophrenia. Symptoms of this disorder include sore mouth, numbness or stiffness, shooting pains, needles-and-pins or hot-and-cold sensations. Editors at the *British Medical Journal* stated that a vitamin B 12 deficiency may cause severe psychotic symptoms which may vary in severity from mild mood swings to severe psychotic episodes. If a deficiency is not detected in its early stages, it may result in permanent mental deterioration.'

A number of studies have shown a deficiency of folic acid as a contributing factor in mental illness. Studies have shown that a prolonged deficiency can cause neurological changes and mental deterioration. Because of their close interrelationship, vitamin B 12 should accompany any folic acid supplementation. A deficiency of folic acid in pregnancy encourages birth defects including deformities, brain damage, spina bifida and neural tube defects. Other deficiency symptoms are stunted growth, graying hair, gastrointestinal problems and anemia.'

## Psychosis from a Thiamine Deficiency

Imagine your loved one has been hospitalized with schizophrenia, or is tranquilized with strong drugs. Now imagine there is a possibility that just one missing nutrient could be the cause, but it is being ignored.

Time and time again the signs of nutritional deficiencies are ignored because symptoms are conveniently categorized; programmed into conventional medicine so that doctors do not have to discover the cause, just treat the symptoms. Options are ignored because conventional physicians are not taught to look at the whole picture, instead they evaluate a collection of symptoms with the purpose of signifying one problem.

Such is the case of mental illness. Doctors look at the symptoms, evaluate the problems, then rather than discover the cause, treat the symptoms with pharmaceuticals. B vitamin deficiencies cause such a host of mental symptoms that to ignore this possibility constitutes medical malpractice in my book. Take thiamine, or B 1, for example.

The symptoms of a thiamine deficiency are listed as anorexia, confusion, depression, irritability and memory loss.'

In an experimental study reported in the *American Journal of Clinical Nutrition*, five of nine normal volunteers placed on a thiamine-deficient diet developed depression and irritability.'

Vitamin B 1, or thiamine, is involved in the conversion of blood sugar to caloric energy in the body. During stressful periods it can give a boost to your energy level. Thiamine deficiency, or beriberi, is known to produce psychiatric and neurological symptoms.

## Attacks on the Brain

Today's modern day beriberi is Wernicke's syndrome. It is also called Wernicke's reaction, Wernicke symptom, Wernicke's encephalopathy, Wernicke's disease, and in its advanced stages, Wernicke-Korsakoff psychosis. What happens is a chronic deficiency of thiamine causes brain lesions, swelling and eventually destruction of the brain itself. This condition is most commonly found in chronic alcoholics but has been diagnosed in non-alcoholics as well. The symptoms are similar to those of senile dementia, with memory problems being the first to appear. Classic signs include global (total) confusion, ophthalmoplegia (paralysis of the muscles that move the eyes) or nystagmus (involuntary eye movements), and ataxia (disturbance of gait).<sup>7</sup>

A short note here. You may wonder why I bother with the technical terms. This is for your benefit in dealing with conventional medicine. Let's say your uncle is in a mental hospital and his doctors won't tell you anything, so you insist on seeing his medical records.

But the medical records don't help because physicians use such specific jargon you can't understand a word of it! You may recognize some of the terms here. If you don't, write all the words down you don't understand, then consult a medical dictionary. Don't stop until you fully understand what doctors think is your uncle's problem.

Similar to Wernicke's is something called Korsakoff's psychosis. In keeping with conventional medicine's habit of categorizing, the industry is now lumping the two into a single diagnosis of alcohol amnesic syndrome." Even though alcoholism is not the only cause of a thiamine deficiency, and its subsequent mental symptoms thanks to this new definition, doctors may now discount the possibility of a thiamine deficiency unless a lcolism is present.

Thiamine is needed to produce and use acetylcholine and to avoid emotional excesses. People who indulge in refined sugar and flour, (processed) foods, and who drink alcohol regularly, or are addicted to coffee, literally drain vitamin B1 from their system. We should remember that sugar and fats, which make up a high percentage processed foods and supply over 35 percent of our calories, give no thiamine or other B vitamins. Also, excessive use of tea, alcohol and the eating of raw fish has been linked to thiamine deficiency. In one experiment, rats trained to get through a maze were divided into two groups, one given a nutritionally complete diet and the other a diet totally lacking in B1. When the rats were tested days later, the group on the good diet sped through in an average 22 seconds, while the B1-deprived rats took 55 seconds, almost three times as long. However, putting the deprived rats on a diet rich in B induced a remarkable memory recovery and ability to run through the maze.

Anything that causes malnutrition, from poor eating habits to alcoholism, can cause a thiamine deficiency. I find it interesting that anorexia is a symptom of a thiamine deficiency. If a lack of thiamine causes depression and nervous system disorders, it stands to reason that a young person who diets consistently could first become thiamine deficient, causing the kind of obsessive behavior that leads anorexia.

Even subclinical (moderate) thiamine deficiency can cause anxiety or neuroses. In one study, subjects deprived of thiamine complained of poor mental alertness, fatigue and nervousness.' Since psychiatrists are the least likely to inquire about diet, I have to wonder how many of their anxiety patients are being treated with drugs when they are simply thiamine-deficient.

A diet high in empty calories and junk foods has been linked to neurotic behavior. One study found 20 patients with a thiamine deficiency reported mental symptoms including aggressiveness and hostility. Twelve reported a diet high in carbonated and other sweet beverages, candy, and typical snack foods. Blood tests indicated that all 20 had low thiamine levels. After the patients were given thiamine supplements, all 20 had marked improvement or lost their symptoms completely.<sup>10</sup>

Patients in modern hospitals are probably at risk of a thiamine deficiency because they are sometimes fed intravenously. This is called total parenteral nutrition, or TPN. This is done whenever the patient cannot eat or digest food the usual way. The problem is, this "liquid food" can be deficient in nutrients, most especially the B vitamins.

In 1988, three patients receiving intravenous feedings in a hospital died because the intravenous solution was deficient in thiamine, according to The New York Times. A B1 deficiency can develop within week with these deficient feedings, which are 70 percent glucose, since the vitamin is necessary for metabolizing glucose."

The Food and Drug Administration reported these patients died of refractory lactic acidosis. Autopsies performed on two of the patients revealed brain abnormalities.”

If you are anxious, depressed or suffer from neuroses, consider possibility that you are thiamine deficient and see a physician versed in nutrition.

## Minerals for Mental Health

Some essential elements can act as brain boosters, working as preventive medicine against mental illness.

Of the minerals that can help to protect the nervous system, the most important are zinc and magnesium. Zinc is essential to the synthesis of RNA, DNA and protein, and to the maintenance of vitamin A levels in the blood. A zinc deficiency can cause confusion and difficulties with taste and smell. When older people are not eating properly, zinc deficiency may be at fault since food is less appetizing when the senses of smell and taste are reduced.

In the 1950s, the late Carl Pfeiffer, Ph.D., M.D., former director of the Brain Bio Center in Princeton, New Jersey, found that trace metal imbalances, for example copper and zinc, can contribute to mental disorders. William Walsh, Ph.D., a former research scientist at Argonne National Laboratories and a colleague of Dr. Pfeiffer estimates that 95 percent of violent individuals suffer from mineral imbalances that predispose them to bad behavior.”

Dr. Walsh discovered that violent individuals often had an imbalance of copper to zinc and low levels of sodium, potassium and manganese. He found people who were delinquent, impulsive and irritable were low in all the trace minerals including calcium and magnesium.

An article in Biological Psychiatry reported that of patients hospitalized with major depression or schizophrenia, magnesium was significantly lower in those who made suicide attempts. The authors believe magnesium has a role in regulating serotonin levels of the brain.”

Remember, you're not what you put into your mouth, you're what you absorb and digest and deliver to cells. A vitamin or mineral tablet is only one to five percent absorbable. Since the process of digestion is a process of liquefaction, your body has to take a hard rock tablet and turn it into solution. This may not be possible due to a number of factors, such as inadequate stomach acid, food allergies and intestinal problems. This is why it is so important that when you decide to supplement, you target minerals in solution. Look for a good, easily absorbable, derived-from-nature mineral blend in solution. Formulations in solution help provide the maximum absorption ratios.

(see below for recommendations)

## Mentally-Mighty Nutrients

For maximum absorption, take supplements with meals.

<b>Nutrient</b>	<b>Suggested Dosage</b>	<b>Formulation</b>
Aged garlic extract	1 teaspoon three times daily	Liquid
Amino acids	4-6 capsules daily	Multiple formula from natural sources
Antioxidants	4 capsules daily*	With selenium and grapeseed extract
Borage oil	2 capsules daily	
Coenzyme Q10	2 capsules daily	With vitamin E, phospholipids and selenium
Flaxseed oil-	1 tablespoon daily	
Multi-mineral	3-4 ounces daily	In liquid solution, with vitamin B12, biotin
Multi-vit/mineral	6 caplets daily	Freeze-dried plant sources
Niacin	200 mg three times daily	
Vitamin B6	100 mg daily	
Vitamin C	Individual bowel tolerance**	With bioflavonoids (quercetin, proanthocyanidins)

\* The FDA recommends pregnant women not exceed 10,000 IU of vitamin A daily.

\*\* To determine individual dosage, on the first day take 1,000 mg hourly until diarrhea occurs, then reduce dosage to just below that for individual daily dosage. Vitamin C is not toxic in large doses but must be taken throughout the day to benefit. Divide dosage to three or four times a day.