

# Successful Recoveries with Orthomolecular Treatment

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## Introduction

A number of patients with psychological/psychiatric diseases considered incurable by Orthodox Medicine and the patients' treating physicians recovered through biochemical rebalancing of Orthomolecular Medicine (OM). After years of experimenting with our theories regarding OM, we have had success with different pathologies whenever patients consistently followed the prescribed program. We have selected a few of those cases to demonstrate the validity of our research and thus making it available to our colleagues worldwide .

## Psychiatric/Psychological Dysfunctions

### Case 1. *Phobia, Asthenia, Anxiety, Aggressiveness*

Mr. F.O., 46 years old at time of his first consultation. After trying with many allopathic and homeopathic physicians for 18 months, the patient presented with acute phobia, asthenia, fear to move by himself, tachycardia with perspiration, constipation, anxiety, aggressiveness, lack of self-esteem, polycythemia, digital paresthesia, lack of wind, nervousness and prostate trouble. He had white spots in his toenails and had applied for disability leave.

All laboratory tests were normal except for hair analysis which showed a slow metabolism. (Table 1,1a, p.53) The levels of lead and aluminum were very high and other abnormal mineral ratios revealed the following tendencies: hypothyroidism, hidden copper, adrenal insufficiency, acute stress, inflammation, possible liver and kidney stress, allergies, fatigue, hypoglycemia, depression, lack of stamina, anxiety and

hormone, lipids and mucosae imbalances.

It was recommended for him to rest take wheat germ, Brewer's yeast and the following supplementation: 1) 450 mg calcium gluconate, 150 mg magnesium gluconate, 15 mg zinc sulphate, 5 mg manganese. 1 tablet t.i.d. between meals. 2) 1 g ascorbic acid, 1 cap t.i.d.. 3) 400 IU vitamin E, 1 cap t.i.d. 4) 40 mg vitamin B<sub>1</sub>, 40 mg B<sub>2</sub>, 50 mg B<sub>6</sub>, 10 mcg. B<sub>12</sub>, 500 mg niacinamide, 2 mg folic acid, 50 mg vitamin B<sub>5</sub>, 50 mg choline, 50 mg inositol, 50 mg PABA. 1 cap t.i.d. 5) digestive enzymes with betaine hydrochloride and pepsin with protein meals.

He began to feel better and was in a better mood despite some headaches and tiredness. Five months later he returned to the clinic looking and feeling much better. A second hair analysis showed a slow metabolism. (Table 1,1b) Lead and aluminum were being eliminated and all the ratios showed improvement.

He was recommended the following supplementation: 1) 400 mg calcium gluconate, 230 mg magnesium gluconate, 10 mg manganese, 15 mg zinc sulphate. 1 cap t.i.d. between meals. 2) 500 mg niacinamide, 1 cap t.i.d. 3) 2 g ascorbic acid, 1 cap t.i.d. 4) 400 IU vitamin E. 5) digestive enzymes with betaine and pepsin.

He maintained this program for the following 6 months, after which he came for a final examination which showed him perfectly well. He said he felt so well he went back to work. His psychiatrist at work agreed this patient had an amazing recovery since he was considered incurable. As of March, 2000, he telephones and sends flowers to his head physician and dietitian stating he has forgotten his past nightmare and is leading a perfectly normal life.

He continues to take some of the supplements as maintenance, showing not

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Table 1. Hair Analysis Results—Cases 1-3

	Case #									
	1a	1b	2a	2b	2c	3a	3b	3c	3d	3e
Ca	940	1000	1200	1800	1110	480	570	840	800	520
Mg	220	280	380	350	310	70	140	360	190	80
Na	180	160	220	240	200	400	330	580	400	310
K	20	100	140	110	120	220	130	20	140	120
Fe	8	12	10	20	11	18	20	20	28	34
Cu	9	10	12	8	12	7	10	10	13	14
Mn	—	0.3	0.2	0.5	0.4	0.4	0.5	0.4	0.5	0.7
Zn	20	50	110	50	120	50	80	150	160	150
P	22	40	181	82	180	86	100	89	120	129
Ni	3.2	3.0	3.0	1.4	1.8	4.0	2.8	0.8	1.0	1.1
Pb	12	15	13	11	13	8	10	1	4	8
Cd	20	10	15	0.4	0.2	0.3	0.2	0.2	0.2	0.2
Al	10	20	28	1	27	12	11	6	8	1

Table 1. Hair Analysis Results—Cases 4-7

	Case #										
	4a	4b	4c	4d	5a	5b	6a	6b	7a	7b	7c
Ca	290	400	460	700	560	680	1250	1040	90	540	110
Mg	300	190	100	110	90	120	300	190	3	20	10
Na	130	140	300	250	140	180	240	220	70	480	40
K	20	80	140	100	20	90	160	90	20	20	40
Fe	19	21	28	24	6	12	20	25	35	45	70
Cu	9.1	10	—	16	4	11	14	20	23	14	15
Mn	0.4	0.7	1.2	1.3	0.3	0.8	0.3	0.5	0.8	0.4	0.3
Zn	204	200	150	160	50	120	100	120	50	186	80
P	143	150	152	158	38	101	177	182	86	127	174
Ni	0.8	0.9	1.0	1.1	0.7	1.5	4.0	2.8	0.8	1.2	0.3
Pb	0.1	5	8	6	6	9	22	—	3.0	0.2	4
Cd	0.2	0.2	0.3	0.4	0.2	0.3	—	0.2	0.4	0.6	0.2
Al	2.5	7	9	1.1	7	12	30	27	13	26	19

only the healing value but also the preventive value of orthomolecular medicine.

*Case 2. Depression*

Mrs. H.S.M., 57 years old at her first consultation. Mrs. M. had been treated first by a psychiatrist for approximately 2 years

and then by a clinical psychologist for 1 year. Referred through a close family member, she came to the office in January, 1998, with a diagnosis of endogenous depression. She had manic-depressive crises beginning at age 20 after she broke up with her boyfriend. She received sleep therapy and electroshock.

She had her menopause at age 52 and was taking hormones. Her cholesterol and triglycerides were high. She had osteoporosis, dyspepsia and took allopathic medications (Nozinan, Clozapine, Dormicrem). As a housewife, she could not do any work at home which therefore caused problems with her husband and adolescent children. After most tests turned out to be negative, she agreed to hair analysis which showed she had a slow metabolism. (Table 1,2a) Her lead and aluminum were very high and mineral ratios were abnormal. She had a tendency to glucose and carbohydrate intolerance, slight hypoglycemia, emotional problems, low tyroxine, depression, fatigue, ulcers, excessive catabolism, digestive and immune problems, allergies, arthritis, lack of stamina, problems with hormones, lipids and mucosae.

She was recommended a protein diet with carbohydrate control and supplementation as follows: 1) 250 mg calcium gluconate, 200 mg magnesium gluconate, 10 mg zinc sulphate, 3 mg manganese. 1 cap t.i.d. 2) B-complex: 30 mg B<sub>1</sub>, 25 mg B<sub>2</sub>, 20 mg B<sub>6</sub>, 8 mcg. B<sub>12</sub>, 10 mg B<sub>5</sub>, 15 mg choline, 15 mg inositol, 20 mg PABA, 1 cap with lunch. 3) 400 IU vitamin E, 4) 1 g ascorbic acid, 5) digestive enzymes with betaine and pepsin.

She returned for a checkup a few months later with a slight improvement. Her new hair test results are shown in Table 1,2b. Lead and cadmium were being eliminated but mineral ratios remained abnormal.

She was prescribed a diet with more protein and limited carbohydrates and the following: 1) 300 mg calcium gluconate, 100 mg magnesium gluconate, 3 mg manganese, 10 mg zinc sulphate. 1 cap t.i.d. 2) 1 gram ascorbic acid, 2 caps per day. 3) B complex as follows: 40 mg B<sub>1</sub>, 40 mg B<sub>2</sub>, 30 mg B<sub>6</sub>, 20 mcg. B<sub>12</sub>, 10 mg folic acid, 20 mg B<sub>5</sub>, 30 mg choline, 30 mg inositol, 40 mg PABA. 1 cap with lunch and dinner. 4) 400 IU vitamin E, 1 cap with lunch. 5) 500 mg niacinamide, 3 tabs per day between meals.

A few months later she returned feeling much improved. Her cholesterol was normal and she had no more crises. She was now 58 years old and had a much better family relationship. She took a new hair test that still showed a slow metabolism. (Table 1,2c) Her lead and aluminum were still high but there was improvement in other mineral ratios.

She was recommended to continue with the same diet and to maintain supplementation. She came back 6 months later with her whole family to show a recovered patient who thanks orthomolecular medicine for her recovery.

### Case 3. *Bipolar Disorder*

Mrs. M.J.I., 48 years old in 1996. After being declared incurable by her psychiatrist, this patient came to the office with bipolar disorder.

She was in the hospital 3 times, the most recent being 7 weeks prior to her visit. She showed hyperkinesia, polyuria, she regarded any conflict as personal, she does not remember what happened during her crises, she cannot sleep without drugs, she had flatulence, burping, visual problems, hair loss and rosacea. Her husband also suffers from phobias. For 2 years she has been prescribed lithium by a psychologist. She stopped on her own 25 days before presenting, she did not want to take any more medication. She takes some vitamins on her own.

Her hair analysis revealed a fast metabolism which slows under stress. (Table 1,3a) Lead, arsenic, cadmium and aluminum were high. Abnormal mineral ratios showed the following trends: glucose intolerance, hypoglycemia, anxiety, nervousness, confusion, fear, irritability, insomnia, defenseless, lack of control, depression, ups-and-downs, digestive and immune problems, allergies, diminished resistance, difficulty to recover, indecisiveness, problems with hormones, lipids and mucosae. She was recommended a diet with some fats and oils, less carbo-

hydrates and the following: 1) 250 mg calcium gluconate, 170 mg magnesium gluconate, 3 mg manganese, 10 mg zinc sulphate. 1 cap b.i.d between meals. 2) 500 mg ascorbic acid, 1 cap per day. 3) B complex: 30 mg B<sub>1</sub>, 30 mg B<sub>2</sub>, 20 mg B<sub>6</sub>, 5 mcg. B<sub>12</sub>, 5 mg folic acid, 10 mg B<sub>5</sub>, 10 mg choline, 10 mg inositol, 10 mg PABA. 1 cap with lunch. 4) 500 mg niacinamide, 3 tabs per day. 5) digestive-colagogue tea after meals. 6) Gingko biloba extract: 1 drop in water t.i.d. She returned to the office 4 months later feeling much better. A new hair analysis showed a slightly slow metabolism. (Table 1,3b) Lead, arsenic and aluminum were being eliminated. Cadmium went down. There was an improvement in her mineral profile and a marked improvement over the first test. We can see that as the mineral patterns change, symptoms come and go. Her recommendations were to eat more protein, less carbs and fats and to take the following: 1) 250 mg calcium gluconate, 100 mg magnesium gluconate, 8 mg manganese, 10 mg zinc sulphate, 1 cap t.i.d. 2) 500 mg ascorbic acid, 1 cap per day. 3) B complex: 30 mg B<sub>1</sub>, 30 mg B<sub>2</sub>, 20 mg B<sub>6</sub>, 5 mcg B<sub>12</sub>, 5 mg folic acid, 10 mg B<sub>5</sub>, 10 mg choline, 10 mg inositol, 10 mg PABA. 1 cap with lunch. 4) 500 mg niacin, 3 tabs per day. 5) Digestive-colagogue tea after meals. 6) Gingko biloba extract: 1 drop in water t.i.d.

She came back a few months later. A third hair analysis showed a slow metabolism. (Table 1,3c) Lead and arsenic were being eliminated. There was a slight worsening of her previous condition, due to the fact that she was eliminating heavy metals and also to the influence of drugs her psychiatrist prescribed.

She was recommended the same diet as before and: 1) 130 mg magnesium chelate, 5 mg manganese chelate, 5 mg zinc chelate, 1 mg copper chelate, 120 mg potassium aspartate, 125 mg magnesium aspartate, 100 mg choline, 100 mg L-methionine. 1 tab b.i.d. 2) B complex: 60 mg

B<sub>1</sub>, 25 mg B<sub>2</sub>, 200 mg B<sub>6</sub>, 25 mcg. biotin, 25 mcg. B<sub>12</sub>, 50 mg niacinamide, 0.4 mg folic acid, 15 mg PABA, 10 mg pantothenic acid, 100 mg inositol. 1 tab with lunch and supper. 3) digestive enzymes with betaine and pepsin.

She returned January, 1998, feeling very well, having lost 25 pounds. A new hair analysis showed the same metabolism as before. (Table 1,3d) The heavy metals that were previously high went down. and other mineral ratios began to normalize Her recommendations were: 1) 130 mg calcium chelate, 130 mg magnesium chelate, 10 mg manganese chelate, 5 mg zinc chelate, 1 mg copper chelate, 100 mg potassium aspartate, 100 mg magnesium aspartate, 100 mg choline, 100 mg L-methionine. 1 cap morning and afternoon. 2) B complex: 60 mg B<sub>1</sub>, 40 mg B<sub>2</sub>, 200 mg B<sub>6</sub>, 15 mcg. biotin, 25 mcg. B<sub>12</sub>, 100 mg niacinamide, 0.4 mg folic acid, 15 mg PABA, 50 mg pantothenic acid, 100 mg inositol. 1 cap with lunch. 3) Digestive enzymes with betaine and pepsin.

She returned a few months later well but with a few isolated episodes. A new hair test was ordered which showed a mixed slow metabolism. (Table 1,3e) Lead and aluminum were still being eliminated. She still had little tyroxine but showed a great improvement with heavy metal elimination. Her supplementation was: 1) 130 mg calcium chelate, 130 mg magnesium chelate, 10 mg manganese chelate, 5 mg zinc chelate, 1 mg copper chelate, 50 mg potassium aspartate, 50 mg choline, 50 mg L-methionine. 1 cap b.i.d between meals. 2) 20 mg B complex: B<sub>1</sub>, 20 mg B<sub>2</sub>, 10 mcg biotin, 20 mcg. B<sub>12</sub>, 500 mg niacinamide, 0.4 mg folic acid, 10 mg PABA, 10 mg pantothenic acid, 30 mg inositol. 1 cap with lunch. 3) 5,000 IU vitamin A, 200 IU vitamin D. 1 cap with lunch. 4) Digestive enzymes with betaine and pepsin. She came back in late 1999 a normal human being. She is maintaining her diet with a modest supplementation and will return for new hair analysis in a few months.

#### Case 4. *Phobias*

Mr. F.C., 42 years old. A Federal Government employee, Mr. F.C. was given leave and put on a disability program. His first hair test evidenced a slow metabolism (Table 1,4a). Lead, mercury, arsenic and aluminum were very high. Trends: glucose and carbohydrate intolerance, slight hypoglycemia, emotional problems, hidden copper, adrenal insufficiency, allergies, fatigue, depression, lack of stamina, acute stress, inflammations, headaches.

He was recommended a protein diet and: 1) 60 mg magnesium chelate, 200 mg potassium, 100 mg phosphorus, 30 mg iron chelate, 10 mg zinc chelate, 2 mg copper chelate, 1 mg chromium chelate, 0.450 mg Fucus Vesiculosus. 1 cap t.i.d. 2) 10,000 IU vitamin A, 400 IU vitamin D, 1 tab with lunch. 3) 1 g ascorbic acid, 1 cap with lunch and supper. 4) 400 IU vitamin E, 1 cap with lunch. 5) B complex: 100 mg B<sub>1</sub>, 20 mg B<sub>2</sub>, 100 mg B<sub>6</sub>, 100 mcg B<sub>12</sub>, 100 mg niacinamide, 100 mg pantothenic acid, 0.4 mg folic acid, 100 mg inositol, 100 mg PABA.

Six months later the patient returned improved. He began to walk, go out and play. His second hair analysis is shown in Table 1,4b. Lead, cadmium, arsenic and Aluminum were being eliminated.

Trends: glucose and carbo intolerance, slight hypoglycemia, emotional problems, allergies, fatigue, depression, lack of stamina.

Recommendations: same diet plus: 1) 60 mg magnesium chelate, 100 mg potassium chelate, 80 mg phosphorus chelate, 30 mg iron chelate, 10 mg zinc chelate, 2 mg Copper chelate, 1 mg chromium chelate. 1 cap t.i.d. 2) 5,000 IU vitamin A, 200 IU vitamin D. 1 tab with lunch. 3) 1 g ascorbic acid, 1 cap with lunch and supper. 4) 400 IU vitamin E, 1 cap with lunch. 5) 100 mg vitamin B<sub>1</sub>, 20 mg B<sub>2</sub>, 100 mg B<sub>6</sub>, 100 mcg B<sub>12</sub>, 100 mg niacinamide, 100 mg pantothenic acid, 0.4 mg folic acid, 100 mg inositol, 100 mg PABA. 1 cap with lunch and supper.

Six months later a new hair text evi-

denced a change: his metabolism was fast mixed (Table 1,4c).

Recommendations: 1) 35 mg calcium, 11 mg magnesium, 4 mg potassium, 0.50 mg iron, 0.10 mg copper, 0.045 mg chromium. 1 tab t.i.d. between meals. 2) 3 mg B<sub>1</sub>, 3 mg B<sub>2</sub>, 3 mg B<sub>6</sub>, 2 mcg B<sub>12</sub>, 4 mcg biotin, 18 mcg folic acid, 48 mg B<sub>5</sub>, 50 mg choline, 400 IU vitamin A, 15 IU vitamin D, 27 IU vitamin E, 136 mg niacinamide.

Seven months later the patient was better, he eliminated allopathic medication altogether and was only taking supplements. A new hair test revealed a slightly slow metabolism. (Table 1,4d) Heavy metals were being eliminated fast and a definite improvement in mineral imbalances was evidenced. Trends: fatigue, constipation, sensibility to cold, still a lot of copper in the tissues, still some trouble with glucose and carbohydrates, mood changes, desire of sweets, emotional instability and insecurity, hidden fears. Recommendations: 1) 100 mg calcium, 50 mg magnesium 7 mg potassium, 0.50 mg Iron, 0.10 mg copper, 0.45 mg chromium. 1 tab with breakfast. 2) 10 mg B<sub>1</sub>, 8 mg B<sub>2</sub>, 3 mcg B<sub>12</sub>, 6 mcg Biotin, 35 mcg folic acid, 48 mg pantothenic acid, 50 mg choline, 800 IU vitamin A, 40 IU vitamin D, 100 IU vitamin E, 300 mg niacinamide. The patient came back 3 months ago and is now healthy and leads a normal life.

#### Case 5. *Marijuana Addiction*

Mr. S.S., 42 years old. A desperate case, this man had depression since he was 15. He twice tried to commit suicide. He could not get up from bed. He was very untidy, he loses things and suffers from constipation. His first hair test is shown in Table 1,5a.

Ratios were: Ca/Mg 6.22, Ca/K 28.00, Na/K 7.00, Na/Mg 1.56, Fe/Cu 1.50, Zn/Cu 12.50. Trends: hypothyroidism, adrenal insufficiency, acute stress, inflammation, headaches, depression, fatigue, allergies, hypoglycemia, lack of stamina.

He was recommended a slow metabo-

lism diet as well as: 1) 300 mg calcium, 150 mg magnesium, 100 mg potassium, 5 mg zinc, 10 mg phosphorus, 0.5mg chromium chelate, 1 mg copper chelate, 10 mg manganese chelate. 1 cap b.i.d. 2) 100 mg vitamin B<sub>1</sub>, 20 mg B<sub>2</sub>, 100 mg B<sub>6</sub>, 100 mcg. B<sub>12</sub>, 100 mg pantothenic acid, 50 mcg biotin, 100 mg niacinamide, 0.4 mg folic acid, 10 mg inositol, 100 mg PABA. 3) 2 g ascorbic acid. 4) 400 IU vitamin E. 5) Digestive tea after eating. He returned 6 months later with new hair test results. (Table 1,5b) As we can see, lead, cadmium, arsenic and aluminum are still quite high, but he showed a good improvement. There was a minimal change in supplementation. He came back late in 1999 and quit marijuana for good. He has remained free of his addiction as of March, 2000.

#### Case 6. *Alcohol Addiction*

Mr. C.G., 39 years old. Mr. G. has been a heavy alcoholic for several years and has attended Alcoholic Anonymous, a psychologist and tried several ways to be rid of his habit. He came to the office, took a hair test and showed a slow metabolism (Table 1,6a). Lead and aluminum are very high. Trends: little thyroxine, fatigue, depression, excessive catabolism, stress, allergies, immune problems, low stamina, hypoglycemia, problems with hormones, lipids, mucosae. He was recommended a diet for the slow metabolizer and: 1) 350 mg calcium, 180 mg magnesium, 8 mg zinc. 1 cap t.i.d. 2) 1 g ascorbic acid, 1 cap t.i.d. 3) 400 IU vitamin E, 1 cap with each meal.

He returned to the office six months later feeling quite well, he had not had alcohol for 2 months. A new hair test still showed a slow metabolism. (Table 1,6b). His lead, cadmium and aluminum were very high. Trends: little thyroxine, lack of decision and adaptation to stress, slight intolerance to glucose, still problems with hormones, lipids and mucosae.

He was recommended to continue with the same diet and: 1) 300 mg calcium, 200 mg magnesium, 10 mg zinc, 3 mg man-

ganese. 1 cap t.i.d., 2) 1 g ascorbic acid, 1 cap t.i.d., 3) 400 IU vitamin E, 1 cap with each meal. 4) 30 mg vitamin B<sub>1</sub>, 30 mg B<sub>2</sub>, 30 mg B<sub>6</sub>, 3 mcg B<sub>12</sub>, 10 mg B<sub>5</sub>, 40 mg choline, 40 mg inositol, 10 mg PABA, 500 mg niacinamide.

He returned early in 2000 to tell us he is permanently free of his habit. He is leading a happier life, he plans to re-marry and start a new family. He thanks orthomolecular medicine for that.

### B. Organic Dysfunctions

#### Case 7. *Leukemia*

J.K.J., 2 1/2 years old was brought to consultation by his father. The boy's oncologist referred the patient for complementary treatment for a lymphoblastic malignant lymphoma with T precursors immuno phenotype (a very aggressive form of the disease). Physician admitted the survival rate for this type of patient and disease is poor. Patient's maternal grandmother had breast cancer, one maternal aunt had bladder cancer, two uncles on both parents' sides had lung cancer and his paternal mother had malignant melanoma. The boy had a node biopsy and astitis. He currently takes chemotherapy and receives blood transfusions.

His first hair test showed a fast metabolism. (Table 1,7a). His mercury, cadmium and aluminum were very high. He was recommended a diet with more fats and oils, less carbohydrates, and 1) 100 mg calcium 50 mg magnesium, 1 mg potassium, 5 mg zinc, 10 mcg selenium. 1 cap t.i.d. 2) coenzyme Q<sub>10</sub>, 1 cap 1-3 times/ per day.

Patient was brought back 6 months later for evaluation. He was 3 years old now. He needed less transfusions and was taking less medication. Results of his new hair test are shown in Table 1,7b. His metabolism changed to slow mixed. His cadmium and aluminum were still very high, otherwise there was an improvement. Trends: emotional problems, possibility of psychosis, glucose intolerance, hypoglycemia, hy-

pothyroidism, hidden copper, adrenal insufficiency, acute stress, inflammation, autoimmune diseases, irritability, kidney stones.

He was recommended to stop eating fats and oils and eat more protein. 1) 225 mg calcium chelate 5 mg magnesium chelate, 50 mg magnesium aspartate, 7 mg elemental magnesium, 50 mg potassium proteinate, 50 mg potassium aspartate, 10 mg elemental potassium, 1 mg manganese chelate, 2 mg zinc, 0.25 mg copper, 0.25 mg manganese, 80 mg nicotinic acid, 220 mg ascorbic acid, 2,500 IU vitamin A. 1 cap morning and afternoon, 2) 30 mg thyroid concentrate, 15 mg adrenal gland, 5 mg pituitary, 5 mg spleen, 80 mg Fucus Vesiculosus. 1 cap morning and afternoon.

Eight months later patient was brought back feeling much better, with no transfusions. The results of his new hair test are shown in Table 1.7c. His metabolism was now mixed fast. He had more calcium than magnesium, more potassium than calcium and sodium, more iron than copper and more copper than zinc. Trends: adrenal exhaustion, fatigue, immune and digestive problems, excessive catabolism, allergies, kidney and liver stress, fears, intolerance to cold weather. His symptoms were quickly changing and patient showed an unexpected improvement. All of his heavy metals but aluminum went down.

He was recommended some fats and oils again and 1) 50 mg calcium, 25 mg magnesium, 30 mg potassium, 3 mg zinc, 5 mg manganese, 0.20 mg copper, 0.3 mg chromium. 1 cap with breakfast and tea. 2) 2 mg vitamin B<sub>1</sub>, 10 mg B<sub>2</sub>, 10 mg B<sub>6</sub>, 10 mcg. B<sub>12</sub>, 10 mg pantothenic acid, 10 mcg biotin, 30 mg niacinamide, 0.1 mg folic acid, 10 mg inositol, 10 mg PABA, 100 mg vitamin A, 25 mg vitamin D, 50 mg ascorbic acid, 20 IU vitamin E. 1 tab with lunch.

As of January, 2000, his oncologist said the patient does not need any more transfusions, his hematocrit is normal and patient stable, he only takes 3 chemotherapy

pills per day and the supplements. He will wait 10 more months before establishing a definite prognosis for patient. With continued testing, metabolic diet and supplementation, the probabilities of a permanent remission of his symptoms are high. Hopefully he will become a normal youth in the next few years.

## Conclusion

These cases show that the body expresses mineral imbalances as symptoms: change the mineral ratios and the symptoms change. This is an advance in the understanding of the origin of disease and it changes the whole concept of medicine. More research is available and physicians should become familiar with it. Perhaps the most important fact is that biochemical rebalancing is essential for effective change with orthomolecular medicine. This is achieved by a hair analysis that has proved to be more accurate than most other lab tests, less expensive and, when properly evaluated by an experienced nutritionist, can render enormous benefit to the patients. It is more important to know the mineral parameters that show the tendencies of symptoms and determine diet and supplement recommendations. Few nutritionists possess this specialized knowledge. We advocate orthomolecular medicine as the medicine of tomorrow, available today, which can contribute to better health and happier lives.