

Anxiety/Poor Concentration

There were no real red flags in this patient's test results, but several minor problems piled atop one another with big consequences.

In just 2 months-

- ✓ Night Sweats Nearly Gone
- ✓ Increased Energy
- ✓ Excessive Hunger Under Control
- ✓ No Depression Symptoms
- ✓ Sleeping 6 Hours A Night
- ✓ Off All 5 Medications Including Estradiol, Lexapro, Yasmin, Tylenol and Cortisporin

Initial Symptoms-

- ✓ General Anxiety Disorder
- ✓ Insomnia
- ✓ Nightly Nightmares
- ✓ Poor Concentration/Memory Loss
- ✓ Headaches
- ✓ Constipation
- ✓ Weight Gain
- ✓ Adult Acne

“While some people don't consider anxiety, concentration problems, headaches and constipation to be major medical issues, these kinds of symptoms can seriously alter your quality of life and be signs of a more serious underlying problem.”

-Dr. Van D. Merkle

Patient Profile:

01-31-07 – The 33-year old patient presented with General Anxiety Disorder (GAD), concentration problems and memory loss. At the time of the initial visit, she weighed 144 lbs at 5'3" and her blood pressure was 100/70. Almost daily mood swings accompanied by menopausal symptoms, hot and cold flashes, excessive hunger and weight gain (15 lbs in 3 months), a lack of energy, regular headaches, chronic constipation and hemorrhoids left her “feeling somewhat crazy” and “not like herself”. She was drinking at least 1 soda per day for the caffeine and was under considerable emotional stress waking 3-4 times each night often by recurring nightmares or night sweats. She was already taking a basic multi-vitamin and an enzyme therapy supplement as well as 5 different drugs to control her anxiety, depression, headaches, constipation and an infection in her ears.

Patient's tests results:

02-12-07 – Almost all of the blood tests we ran were a little off, being too high or low for optimum health. The Uric Acid, BUN, Calcium and Protein were a little low which can be a sign of fluid retention or edema. The T4 was high and the T3 and GGT low signaling low thyroid function. Alkaline Phosphates, Hematocrit and Hemoglobin which are all measures of the body's immune system also tested low.

Results of Initial Blood Test:

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Uric Acid	02/03/2007	4.00	lo			4.10 - 6.00	2.40 - 8.20
BUN (Blood Urea Nitrogen)		10.00	lo			13.10 - 18.00	5.00 - 26.00
Creatinine		0.70	Opt			0.61 - 0.90	0.50 - 1.50
BUN / Creatinine Ratio		14.00	Opt			13.10 - 20.00	8.00 - 27.00
Magnesium		1.90	lo			2.21 - 2.51	1.60 - 2.60
Calcium		9.30	lo			9.71 - 10.10	8.50 - 10.60
Phosphorus		4.50	HI			3.41 - 4.00	2.50 - 4.50
Calcium/Albumin Ratio		2.20	Opt			2.10 - 2.50	2.03 - 2.71
Total Protein		7.00	lo			7.11 - 7.61	6.00 - 8.50
Total Bilirubin		0.30	lo			0.39 - 0.93	0.10 - 1.20
Alkaline Phosphatase 25-150		51.00	lo			65.00 - 108.00	25.00 - 160.00
Creatine Kinase		143.00	hi			64.00 - 133.00	24.00 - 173.00
LDH		127.00	Opt			120.10 - 160.00	100.00 - 250.00
SGOT (AST) (AST)		25.00	Opt			18.10 - 26.00	6.00 - 40.00
SGPT (ALT) (ALT)		29.00	hi			18.10 - 26.10	6.00 - 40.00
GGT		7.00	lo			22.00 - 39.00	6.00 - 55.00
Total Cholesterol		183.00	hi			140.10 - 170.00	100.00 - 199.00
Triglyceride		67.00	lo			80.10 - 115.00	10.00 - 149.00
HDL Cholesterol		68.00	HI			50.00 - 55.00	40.00 - 59.00
VLDL Cholesterol		13.00	Opt			5.10 - 20.10	4.10 - 40.10
LDL Cholesterol		102.00	HI			50.10 - 75.10	6.00 - 99.10
T4 Thyroxine		11.70	hi			7.10 - 9.00	4.50 - 12.00
T3 Uptake		24.00	LO			29.10 - 35.10	24.00 - 39.00
T7 Free Thyroxine Index (FTI)		2.80	Opt			2.61 - 3.60	1.20 - 4.90
White Blood Count		5.70	Opt			5.10 - 8.00	4.00 - 10.50
Red Blood Count		4.62	Opt			4.51 - 5.50	3.80 - 5.60
Hemoglobin		13.30	lo			13.30 - 15.20	11.50 - 17.00
Hematocrit		39.30	lo			39.51 - 47.00	34.00 - 50.00
Polys/Neutrophils (SEGS-PMNS)		50.00	lo			55.10 - 65.00	40.00 - 74.00
Lymphocytes		43.00	hi			25.10 - 40.00	14.00 - 46.00
Monocytes		5.00	lo			5.10 - 7.10	4.90 - 13.00
Eosinophils		1.00	Opt			0.00 - 4.10	0.00 - 7.00
Basophils		1.00	hi			0.00 - 0.00	0.00 - 3.00

Blue = clinically very high or clinically very low

Red = clinically high or clinically low

Yellow = a little high or a little low; this can be considered a warning sign that the value is not optimal.

Results from the tissue mineral analysis helped show a clearer picture of certain essential element imbalances/deficiencies in the body and showed high levels of toxins being excreted in the hair. These toxins can build up in the body, further slowing the immune system and reducing one's ability to store and use essential elements.

Results of Initial Hair Test

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Toxic Elements							
Aluminum	01/31/2007	4.50	hi			0- 2.20	2.21- 7.00
Antimony		0.05	HI			0- 0.03	0.04- 0.05
Bismuth		0.21	HI			0- 0.05	0.06- 0.10
Cadmium		0.13	HI			0- 0.05	0.06- 0.10
Lead		0.48	hi			0- 0.20	0.21- 1.00
Mercury		1.80	HI			0- 0.50	0.51- 1.10
Platinum		0.01	HI			0- 0.00	0.01- 0.00
Uranium		0.10	HI			0- 0.03	0.04- 0.06
Nickel		2.30	HI			0- 0.20	0.21- 0.40
Silver		0.57	HI			0- 0.07	0.08- 0.15
Tin		0.56	HI			0- 0.15	0.16- 0.30
Titanium		0.47	Opt			0- 0.50	0.51- 1.00
Total Toxic Representation		4.00	HI			0- 2.00	2.01- 3.00
Essential Elements							
Calcium		652.00	lo			663.00- 753.00	300.00- 1200.00
Magnesium		380.00	HI			53.00- 62.00	35.00- 140.00
Sodium		740.00	HI			37.00- 45.00	24.00- 180.00
Potassium		17.00	Opt			14.00- 18.00	8.00- 38.00
Copper		36.00	HI			13.00- 17.00	12.00- 35.00
Zinc		130.00	LO			150.00- 160.00	140.00- 220.00
Manganese		0.07	LO			0.21- 0.32	0.15- 0.65
Phosphorus		158.00	LO			325.00- 350.00	250.00- 400.00
Selenium		1.00	lo			1.10- 1.45	0.95- 1.70
Strontium		12.00	HI			2.00- 2.90	0.50- 7.60
Sulfur		46700.00	hi			45000.00- 45500.00	42000.00- 49000.00
Barium		3.20	HI			0.70- 1.20	0.26- 3.00
Cobalt		0.04	hi			0.02- 0.03	0.01- 0.05
Iron		6.90	Opt			6.80- 8.50	5.40- 14.00

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Doctor analysis:

02-26-07 – Nearly every toxic element we tested for came back too high on the tissue mineral analysis and the patient's essential elements were not in optimal ranges, some being way to high and others being too low. This shows the patient was expending her stored essential elements to flush out the excess toxins; essential elements that would normally be used for vital processes like healing and repair. Each of the toxic elements seen on the chart also comes with a long list of side effects which match most of the patient's symptoms. For example, just a few side effects of high Lead are irritability, mental disturbances, constipation, altered sleep, headaches, poor memory and the inability to concentrate. High Nickel levels can lead to insomnia and headaches and high Mercury can cause chronic fatigue, thyroid problems and depression.

Many of the medications this patient was on also have corresponding side effects. My goal was to clear out the toxic elements and get the patient healthy enough for her body to start healing and repairing itself instead of relying on prescriptions which simply mask the problem. Because of the high toxic elements in the hair, I recommended she take Chlorella, a chelating supplement, to help flush the remaining toxins out. She was also placed on a valerian root supplement to help her sleep and several other vitamins and minerals based on deficiencies seen in her hair and blood tests.

Patient assessment:

04-26-07 - After just *two months* under our care, 16 of the patient's blood test results improved including the bad LDL cholesterol which dropped to 77 and the thyroid markers T3 and T4 moved to optimal levels. The patient noted her headaches, constipation, hemorrhoids and menopausal symptoms are gone and she continues to see great improvements with her mood, energy and anxiety problems. Her night sweats and excessive hunger are also 95% better. The hot and cold flashes are gone along with the infection and ringing noise in her ears. She's now able to sleep six hours a night and no longer feels depressed. The patient gave up caffeinated soda, is doing her best to eat healthy and stick to exercising and so far has lost 10 lbs.

Results of 2nd Blood Test

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
	04/20/2007			02/03/2007			
Uric Acid		4.30	Opt	4.00	☺	4.10 - 6.00	2.40 - 8.20
BUN (Blood Urea Nitrogen)		12.00	lo	10.00	☺	13.10 - 18.00	5.00 - 26.00
Creatinine		0.80	Opt	0.70		0.61 - 0.90	0.50 - 1.50
BUN / Creatinine Ratio		15.00	Opt	14.00		13.10 - 20.00	8.00 - 27.00
Magnesium		2.10	lo	1.90	☺	2.21 - 2.51	1.60 - 2.60
Calcium		9.60	lo	9.30	☺	9.71 - 10.10	8.50 - 10.60
Phosphorus		3.70	Opt	4.50	☺	3.41 - 4.00	2.50 - 4.50
Calcium/Albumin Ratio		2.10	Opt	2.20		2.10 - 2.50	2.03 - 2.71
Total Protein		6.90	lo	7.00	☹	7.11 - 7.61	6.00 - 8.50
Total Bilirubin		0.40	Opt	0.30	☺	0.39 - 0.93	0.10 - 1.20
Alkaline Phosphatase 25-150		49.00	lo	51.00	☹	65.00 - 108.00	25.00 - 160.00
Creatine Kinase		108.00	Opt	143.00	☺	64.00 - 133.00	24.00 - 204.00
LDH		151.00	Opt	127.00		120.10 - 160.00	100.00 - 250.00
SGOT (AST) (AST)		24.00	Opt	25.00		15.00 - 26.00	6.00 - 40.00
SGPT (ALT) (ALT)		29.00	hi	29.00	☹	15.00 - 26.10	6.00 - 55.00
GGT		11.00	lo	7.00	☺	22.00 - 39.00	6.00 - 65.00
Total Cholesterol		139.00	lo	183.00	☺	140.10 - 170.00	100.00 - 199.00
Triglyceride		47.00	lo	67.00	☹	80.10 - 115.00	10.00 - 149.00
HDL Cholesterol		53.00	Opt	68.00	☺	50.00 - 55.00	40.00 - 59.00
VLDL Cholesterol		9.00	Opt	13.00		5.10 - 20.10	4.10 - 40.10
LDL Cholesterol		77.00	hi	102.00	☺	50.10 - 75.10	6.00 - 99.10

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2nd Blood Test Results Continued

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
	04/20/2007			02/03/2007			
T4 Thyroxine		8.20	Opt	11.70	☺	7.10 - 9.00	4.50 - 12.00
T3 Uptake		35.00	Opt	24.00	☺	29.10 - 35.10	24.00 - 39.00
T7 Free Thyroxine Index (FTI)		2.90	Opt	2.80		2.61 - 3.60	1.20 - 4.90
White Blood Count		5.40	Opt	5.70		5.10 - 8.00	4.00 - 10.50
Red Blood Count		4.51	lo	4.62	☹	4.51 - 5.50	4.10 - 5.60
Hemoglobin		13.10	lo	13.30	☹	13.30 - 15.20	11.50 - 17.00
Hematocrit		38.90	lo	39.30	☹	39.51 - 47.00	34.00 - 50.00
Polys/Neutrophils (SEGS-PMNS)		55.00	lo	50.00	☺	55.10 - 65.00	40.00 - 74.00
Lymphocytes		38.00	Opt	43.00	☺	25.10 - 40.00	14.00 - 46.00
Monocytes		5.00	lo	5.00	☹	5.10 - 7.10	4.00 - 13.00
Eosinophils		2.00	Opt	1.00		0.00 - 4.10	0.00 - 7.00
Basophils		0.00	Opt	1.00	☺	0.00 - 0.00	0.00 - 3.00

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A few of the above tests got a little worse which may be attributed to the body purging out high levels of toxic elements. We'll be able to see how much of the toxins have cleared out of the body with the next hair test. The patient is definitely headed in the right direction.

Dr. Merkle's Final Thoughts:

This patient went to her doctor around October of 2006 to find an answer for her depression and GAD and was prescribed Lexapro. This is unfortunately a common occurrence. When patients come in with a problem, doctors look for a drug to "cure" it. But drugs are not "cures"; at best they repress symptoms allowing patients to feel better, but with dangerous potential side effects. Lexapro for example, is used to treat and prevent depression and GAD but according to the manufacture's website carries these warnings: May cause bleeding, nausea, insomnia, somnolence, increased sweating, fatigue, decreased libido, frequent urination, headaches, tremors, weight changes and suicidal thoughts.

Even if a doctor did blood tests on this patient, she would have been given the medical "all clear" because none of her test values were outside the clinical range. By looking at the optimal blood level values however, it's clear to see her body is struggling to stay healthy and with the help of the tissue mineral analysis I am able to see why – toxic elements are binding up her system. With this information, I'm able to recommend a supplementation regimen focused on flushing toxins out of her system. This will hopefully fix the problem instead of covering up the symptoms. After being on Lexapro for three months, the patient was still having problems with her GAD and depression and couldn't get a full night's sleep. After two months taking supplements recommended based on results in her blood and hair tests, she

was seeing great results with her depression and anxiety, sleeping thru the night and no longer needed her medication.

-Dr. Van D. Merkle

This case report showcases a real patient's results using the Science Based Nutrition™ system of analysis, which takes into account hundreds of numeric data and their roles, combinations and inter-relationships as related to disease diagnosis. This patient is/was under the care of Dr. Van D. Merkle, creator and founder of Science Based Nutrition™, Inc. and is meant to serve as an example of results achieved using the Science Based Nutrition™ report. Contact your local health professional and ask him/her to provide you with the Science Based Nutrition™ report. Results will vary based on patient ability/willingness to follow the recommended nutritional protocols, among many other factors. Any suggested nutritional advice or dietary advice is not intended as a primary treatment and/or therapy for any disease or particular bodily symptom. Nutritional counseling, vitamin recommendations, nutritional advice, and the adjunctive schedule of nutrition is provided solely to upgrade the quality of foods in the patient's diet in order to supply good nutrition supporting the physiological and biomechanical process of the human body.