

Diabetes/High Blood Pressure

Despite taking Prandin and Metformin HCL to control his diabetic symptoms, this patient's first Glucose reading was twice the healthy limit!

In just 3 months-

- ✓ Triglycerides Down 129 Points
- ✓ Increased Energy
- ✓ Off All Prescriptions Including Prandin, Metformin HCL, Cozaar, Lisinopril, Lovastatin and Maxzide
- ✓ Glucose Level Dropped From 274 to 120
- ✓ Thyroid Steadily Improving
- ✓ Lost 30 lbs.

Initial Symptoms-

- ✓ High Cholesterol
- ✓ High Blood Pressure
- ✓ Numbness/Swelling
- ✓ Advanced Diabetes In Lower Legs/Feet
- ✓ Type II Diabetes
- ✓ Charcot Neuroarthropathy
- ✓ Muscle Cramps

“Diabetes is becoming a widespread problem across the United States. Many adults and children suffer daily from the effects of this illness without even realizing they have diabetes. That’s why it’s so important to get tested properly, to catch these things before they become problems.”

-Dr. Van D. Merkle

Patient Profile:

01-23-07 - The 65-year old Patient presented with High Blood Pressure and Type II Diabetes. At the time of the initial visit, he weighed 272 lbs at 5'6" and his blood pressure was 130/70. He had peripheral neuropathy in his feet which may have attributed to his feelings of numbness, swelling, muscle cramps and weakness. If left untreated, this condition can damage nerve fibers throughout the body with symptoms gradually progressing up the legs and into the fingers, hands, and arms. If that happens, the patient may have to give up his square dancing hobby which he participates in several times a week. There were also signs of advanced diabetes (Charcot Neuroarthropathy) in the lower legs and feet and a tendency for slow healing which left the patient battling an ulcer on his leg for more than a year. Other symptoms included high

cholesterol, weight and skin problems, a circulatory disorder, watery eyes and mild macular degeneration. The patient spent \$500.00 on a prescription tube to generate skin growth before coming to the Back To Health Center, but didn't see worthy results. When we first saw him, he was taking several vitamins, three prescriptions for high blood pressure or hypertension, one for high cholesterol and two to lower his blood glucose level.

Patient's tests results:

02-12-07 – Despite being on Prandin and Metformin HCL to manage his diabetes, initial blood test results showed a fasting Glucose level of 274 and a Hemoglobin A1C of 11.10, both more than double the limits for a healthy range. Other results of interest were the high Triglycerides and very high Ferritin level.

Results of Initial Blood Test:

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Glucose	01/23/2007	274.00	HI			80.00 - 95.00	65.00 - 99.00
Hemoglobin A1C (Gly-Hgh)		11.10	HI			4.61 - 5.40	4.80 - 5.90
Serum Iron		101.00	Opt			85.10 - 120.00	35.00 - 155.00
Ferritin		548.00	HI			30.10 - 218.30	10.00 - 291.00
Total Cholesterol		176.00	hi			140.10 - 170.00	100.00 - 199.00
Triglyceride		252.00	HI			80.10 - 115.00	10.00 - 149.00
HDL Cholesterol		33.00	LO			50.00 - 55.00	40.00 - 59.00
VLDL Cholesterol		50.00	HI			5.10 - 20.10	4.10 - 40.10
LDL Cholesterol		93.00	hi			50.10 - 75.10	6.00 - 99.10
Total Cholesterol / HDL Ratio		5.30	HI			0.00 - 4.00	0.00 - 5.00
Triglyceride/HDL Ratio		7.60	HI			1.00 - 2.20	0.50 - 4.00
T4 Thyroxine		4.60	lo			7.10 - 9.00	4.50 - 12.00
T3 Uptake		37.00	hi			29.10 - 35.10	24.00 - 39.00
T7 Free Thyroxine Index (FTI)		1.70	lo			2.61 - 3.60	1.20 - 4.90

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.

Several deficiencies/imbbalances showed up in the patient's hair test results suggesting a difficulty for the body to heal and repair. High amounts of the toxic elements arsenic and nickel were also present, which may have partially caused the imbalances of essential elements.

Results of Initial Hair Test

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Toxic Elements							
Aluminum	01/23/2007	5.60	hi			0- 2.20	2.21- 7.00
Antimony		0.05	hi			0- 0.03	0.04- 0.07
Arsenic		0.14	HI			0- 0.05	0.06- 0.08
Nickel		0.52	HI			0- 0.20	0.21- 0.40
Silver		0.04	Opt			0- 0.06	0.07- 0.12

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Initial Hair Test Continued

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Essential Elements							
Calcium	01/23/2007	293.00	LO			400.00- 417.00	375.00- 1100.00
Magnesium		59.00	hi			43.00- 48.00	40.00- 140.00
Sodium		460.00	HI			37.00- 45.00	24.00- 180.00
Potassium		340.00	HI			21.00- 22.00	20.00- 90.00
Copper		12.00	Opt			12.00- 15.00	9.00- 26.00
Zinc		110.00	LO			150.00- 165.00	130.00- 200.00

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Doctor analysis:

02-21-07 – Ferritin is a protein complex that reflects the total amount of iron stored in the body. High levels can cause inflammation, thyroid problems or add to diabetic symptoms. One of the easiest ways to clear excess iron out of the body thereby reducing the Ferritin level is to donate blood, so I recommended the patient do this then have his Ferritin level rechecked. A retest two weeks later showed the patient's Ferritin had dropped 35 points so I suggested he continue donating blood every other month to continue clearing excess iron out of his system. The first round of test results also showed high Uric Acid possibly pointing to Gout and signs of developing kidney disease which we'll be watching closely. I placed the patient on a very specific diabetic diet to bring the Glucose and Hemoglobin A1C levels down and ordered weekly urinary glucose checks to monitor his progress. All this was supported by a personalized supplementation program based on the deficiencies and imbalances seen in his blood work and tissue mineral analysis. The patient really stuck to the diet and supplementation program and by March 14, 2007 the urinary glucose reading was within the normal range and he was off one of his diabetes prescriptions.

Patient assessment:

04-26-07 - After just *three months* under our care, the patient's blood Glucose level was cut by more than half, plunging from 274 points to just 120! His Hemoglobin A1C was also down 4 points, his triglyceride level fell 129 points and the thyroid showed marked improvements. Clearly the patient was consistently taking his supplements and watching his diet. According to the patient, he was "really trying".

Results of 2nd Blood Test

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
	04/20/2007			01/23/2007			
Glucose		120.00	HI	274.00	☺	80.00 - 95.00	65.00 - 99.00
Hemoglobin A1C (Gly-Hgh)		7.10	HI	11.10	☺	4.61 - 5.40	4.80 - 5.90
Serum Iron		58.00	lo	101.00	☹	85.10 - 120.00	40.00 - 155.00
Ferritin		505.00	HI	548.00	☺	30.10 - 218.30	22.00 - 322.00
Total Cholesterol		171.00	hi	176.00	☺	140.10 - 170.00	100.00 - 199.00
Triglyceride		123.00	hi	252.00	☺	80.10 - 115.00	10.00 - 149.00
HDL Cholesterol		38.00	LO	33.00	☺	50.00 - 55.00	40.00 - 59.00
VLDL Cholesterol		25.00	hi	50.00	☺	5.10 - 20.10	4.10 - 40.10
LDL Cholesterol		108.00	HI	93.00	☹	50.10 - 75.10	6.00 - 99.10
Total Cholesterol / HDL Ratio		4.50	hi	5.30	☺	0.00 - 4.00	0.00 - 5.00
Triglyceride/HDL Ratio		3.23	hi	7.60	☺	1.00 - 2.20	0.50 - 4.00
T4 Thyroxine		5.30	lo	4.60	☺	7.10 - 9.00	4.50 - 12.00
T3 Uptake		36.00	hi	37.00	☺	29.10 - 35.10	24.00 - 39.00
T7 Free Thyroxine Index (FTI)		1.90	lo	1.70	☺	2.61 - 3.60	1.20 - 4.90

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The Ferritin also showed continued improvement coming down an additional 8 points, but the Gout actually got a little worse so I added Pantothenic Acid to his supplement list to bring the Uric Acid down. I spoke with the patient on May 18th and he said not only has he seen marked improvements with his diabetes and energy level, but he also lost 30 lbs and is off all six of his prescription medications!

Dr. Merkle's Final Thoughts:

According to the National Institute of Neurological Disorders and Stroke, chronically high blood glucose levels are a leading cause of peripheral neuropathy in the United States. Luckily, peripheral nerves have the ability to regenerate provided the nerve itself hasn't been killed and symptoms often can be controlled in very simple ways: i.e. exercising, eating a balanced diet, limiting alcohol consumption and following a doctor recommended vitamin program.

The same methodology can sometimes be used to control Diabetes. Patients need to be aware of what they eat or their Glucose level can quickly spiral out of control. When this patient came in for his first visit, I reminded him to take his glucose reading a couple of times a day because once you start following a diet regimen, those glucose reading may start to improve within hours, minimizing the need for medication.

Sometimes however, it isn't enough to just change a diabetic's diet. Some patients are still unable to control their sugar levels with the help of a good meal plan. This usually means other factors are holding up the process. Those factors must be identified for the patient to get the best long term

success possible. In this case the high Ferritin, Arsenic and Nickel, which most doctors wouldn't even consider testing for, were making the diabetes worse. I took those test results into consideration when making my recommendations and that, along with the patient's effort, are a big part of the reason he was so successful.

-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.