

Severe Gout & Poor Memory

An arthritic condition affecting more than one million Americans, even the light brushing of a sheet against their foot can seem unbearable to a patient with Gout.

In just 3 months-

- ✓ **Golfing/Riding Bike**
- ✓ **Lost 21 lbs**
- ✓ **No Pain in Feet!**
- ✓ **Memory/Concentration Improved**

Initial Symptoms-

- ✓ **Gout – Can Barely Walk**
- ✓ **High Blood Pressure**
- ✓ **Overweight**
- ✓ **Poor Concentration & Memory**

“Historically known as a “rich man’s disease” or “disease of kings” Gout has a strong association with the consumption of alcohol, sugar, certain meats and seafood and a sedentary lifestyle.”

-Dr. Van D. Merkle

Patient Profile:

05-06-09 - The 72-year old Patient presented with severe Gout in his feet which appeared 2-3 weeks prior and made it very difficult and painful to even walk. At the time of the initial visit, he weighed 211 lbs at 6'0" and his blood pressure was 142/80. It had been two years since his last visit to a doctor when he went after being exposed to radiation at work. Currently the patient takes no medications and supplements with cinnamon, cherry juice, licorice, celery and flax oil. He occasionally suffers from hives due to a wheat allergy.

Patient's tests results:

05-13-09 – His initial blood test revealed several issues including high cholesterol, diabetes, gout, dehydration and vitamin D deficiency. The high uric acid, ESR and CRP are likely associated with the gout and accompanying inflammation. Dehydration is also seen with the high potassium, protein and calcium.

Results of Initial Blood Test:

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Glucose	05/07/2009	98.00	hi			80.00 - 95.00	65.00 - 99.00
Hemoglobin A1C (Gly-Hgh)		6.00	HI			4.60 - 5.40	4.80 - 5.90
Uric Acid		8.30	HI			4.10 - 6.00	2.40 - 8.20
Sodium		142.00	Opt			139.00 - 143.00	135.00 - 145.00
Potassium		4.70	hi			3.80 - 4.50	3.50 - 5.20
Chloride		101.00	lo			102.00 - 106.00	97.00 - 108.00
Magnesium		2.30	Opt			2.21 - 2.51	1.60 - 2.60
Calcium		10.30	hi			9.70 - 10.00	8.50 - 10.60
Phosphorus		3.30	lo			3.40 - 4.00	2.50 - 4.50
Total Protein		7.80	hi			7.11 - 7.61	6.00 - 8.50
Total Cholesterol		211.00	HI			140.00 - 170.00	100.00 - 199.00
Triglyceride		71.00	lo			80.00 - 115.00	10.00 - 149.00
HDL Cholesterol		52.00	Opt			39.00 - 120.00	36.00 - 140.00
VLDL Cholesterol		14.00	Opt			5.00 - 20.00	4.00 - 40.00
LDL Cholesterol		145.00	HI			50.00 - 75.00	6.00 - 99.00
Total Cholesterol / HDL Ratio		4.10	hi			0.00 - 4.00	0.00 - 5.00
CRP C-Reactive Protein		16.40	HI			0.00 - 1.50	0.00 - 4.90
ESR-Erythrocyte Sed Rate, Westerg		32.00	HI			0.00 - 6.00	0.00 - 20.00
Vitamin D 25-Hydroxy		16.80	LO			50.00 - 90.00	32.00 - 100.00

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.

We are exposed to toxic metals every day in our environment yet a hair analysis revealed minimal levels of every toxin tested. This was especially surprising since the patient worked at a research facility which handled large amounts of radiation, metals, and other toxic elements and was therefore exposed to higher levels than the average person. He also had low levels of nearly every essential element. This shows overall nutrient deficiency and an inability to effectively expel toxins from the body. A urinary toxic element test which draws out hidden/stored metals will be a much better indicator of overall body levels.

Results of Initial Tissue Mineral Analysis:

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Essential Elements							
Calcium	05/06/2009	225.00	lo			400.00- 417.00	200.00- 750.00
Magnesium		41.00	lo			43.00- 48.00	25.00- 75.00
Sodium		27.00	LO			106.00- 154.00	60.00- 200.00
Potassium		6.00	LO			32.00- 57.00	9.00- 80.00
Copper		11.00	LO			17.00- 24.00	11.00- 30.00
Zinc		190.00	hi			140.00- 175.00	115.00- 200.00
Manganese		0.04	LO			0.28- 0.45	0.08- 0.65
Chromium		0.34	LO			0.50- 0.60	0.40- 0.70

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The toxic urinary chelation challenge revealed tremendously elevated lead levels. The pre-column totals what toxins are removed by the body daily. The DMSA column is what levels of toxins were removed with the help of a chelating agent. This allows us to see any hidden stores of toxins not being expelled by the body such as Lead which jumped from 9ug/g to 120ug/g.

Toxic Urinary Chelation Challenge:

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Agent		DMSA		Pre-Chall			
Dose		2000mg					
Interval		6		6			
Toxic Elements							
Lead (UA)		120.00	HI	9.00	⊗	0- 4.00	4.01- 5.00
Mercury (UA)		2.40	hi	1.30	⊗	0- 1.60	1.61- 3.00
Nickel (UA)		5.20	hi	3.50	⊗	0- 5.00	5.01- 10.00

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Doctor analysis:

05-15-09 – To eliminate Gout symptoms and work to ensure no relapses occur this patient had several areas of his health to improve and his vitamin/supplement recommendations were targeted toward these issues:

- ❖ Cleanse the body of built up stores of Lead and other toxins and reduce daily exposure.
- ❖ Lower blood serum levels of uric acid.
- ❖ Reduce inflammation/eliminate Gout pain.
- ❖ Increase activity level and exercise.
- ❖ Improve diet to include whole foods/fruits/vegetables and eliminate purine rich foods (which increase uric acid levels) such as anchovies, herring, kidney, liver, mackerel, meat extracts, mincemeat, mussels, sardines, sweetbreads, brain, gravies, alcohol/beer, bacon, fructose, peanuts, pop and sugar.
- ❖ Increase water intake – at 211 lbs he should drink 4 qts of water daily.
- ❖ Supplement base vitamin & mineral stores

Patient assessment:

08-31-09 - After just *three months* under our care, the patient had no pain in his feet at all and had lost 21 lbs! He noticed marked improvement in both memory issues and concentration ability and his wife stated that she could also see good improvements

in her husband. With his increased mobility he was able to play a few games of golf, take bike rides and do odd jobs around the house.

This patient's test results mirrored his big improvement. The ESR and CRP dropped to optimal levels indicating reduced inflammation while his Hemoglobin A1C, Uric Acid, Vitamin D, hydration and more also improved. Test results like these are a direct result of patient effort.

Results of 2nd Blood Test:

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
	07/29/2009			05/07/2009			
Glucose		90.00	Opt	98.00	☺	80.00 - 95.00	65.00 - 99.00
Hemoglobin A1C (Gly-Hgh)		5.60	hi	6.00	☺	4.60 - 5.40	4.80 - 5.90
Uric Acid		7.50	hi	8.30	☺	4.10 - 6.00	2.40 - 8.20
Sodium		142.00	Opt	142.00		139.00 - 143.00	135.00 - 145.00
Potassium		4.40	Opt	4.70	☺	3.80 - 4.50	3.50 - 5.20
Chloride		103.00	Opt	101.00	☺	102.00 - 106.00	97.00 - 108.00
Magnesium		2.10	lo	2.30	☹	2.21 - 2.51	1.60 - 2.60
Calcium		9.90	Opt	10.30	☺	9.70 - 10.00	8.50 - 10.60
Phosphorus		3.70	Opt	3.30	☺	3.40 - 4.00	2.50 - 4.50
Total Protein		7.50	Opt	7.80	☺	7.11 - 7.61	6.00 - 8.50
Total Cholesterol		204.00	HI	211.00	☺	140.00 - 170.00	100.00 - 199.00
Triglyceride		90.00	Opt	71.00	☺	80.00 - 115.00	10.00 - 149.00
HDL Cholesterol		55.00	Opt	52.00		39.00 - 120.00	36.00 - 140.00
VLDL Cholesterol		18.00	Opt	14.00		5.00 - 20.00	4.00 - 40.00
LDL Cholesterol		131.00	HI	145.00	☺	50.00 - 75.00	6.00 - 99.00
Total Cholesterol / HDL Ratio		3.70	Opt	4.10	☺	0.00 - 4.00	0.00 - 5.00
CRP C-Reactive Protein		0.30	Opt	16.40	☺	0.00 - 1.50	0.00 - 4.90
ESR-Erythrocyte Sed Rate, Westerg		4.00	Opt	32.00	☺	0.00 - 6.00	0.00 - 20.00
Vitamin D 25-Hydroxy		27.80	LO	16.80	☺	50.00 - 90.00	32.00 - 100.00

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09-09-09 – A follow-up toxic urinary challenge showed amazing results with the hidden stores of lead dropping nearly in half!

Results of 2nd Toxic Urinary Challenge:

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
	08/27/2009			05/28/2009			
Agent		DMSA		DMSA			
Dose		2000mg		2000mg			
Interval		6		6			
Toxic Elements							
Lead (UA)		65.00	HI	120.00	☺	0- 4.00	4.01- 5.00
Mercury (UA)		6.70	HI	2.40	☹	0- 1.60	1.61- 3.00
Nickel (UA)		5.80	hi	5.20	☹	0- 5.00	5.01- 10.00

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01-07-10 – We didn't see much improvement with the third blood test, more than likely due to the work on eliminating toxic elements from his body and also because of a lax diet. As toxins exit the body things like cholesterol will climb to protect the heart, but tightening up the diet and reducing purine rich foods again should help. The vitamin D did improve which indicates the patient is complying with his vitamin recommendations.

Results of 3rd Blood Test:

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Glucose	12/22/2009	92.00	Opt	90.00		80.00 - 95.00	65.00 - 99.00
Hemoglobin A1C (Gly-Hgh)		5.70	hi	5.60	☹	5.00 - 5.50	4.80 - 5.90
Uric Acid		7.50	hi	7.50	☺	4.10 - 6.00	2.40 - 8.20
Sodium		140.00	Opt	142.00		139.00 - 143.00	135.00 - 145.00
Potassium		4.20	Opt	4.40		3.80 - 4.50	3.50 - 5.20
Chloride		101.00	lo	103.00	☹	102.00 - 106.00	97.00 - 108.00
Magnesium		2.10	lo	2.10	☺	2.21 - 2.51	1.60 - 2.60
Calcium		10.50	hi	9.90	☹	9.70 - 10.00	8.50 - 10.60
Phosphorus		3.60	Opt	3.70		3.40 - 4.00	2.50 - 4.50
Total Protein		7.90	hi	7.50	☹	7.11 - 7.61	6.00 - 8.50
Total Cholesterol		215.00	HI	204.00	☹	140.00 - 170.00	100.00 - 199.00
Triglyceride		66.00	lo	90.00	☹	80.00 - 115.00	10.00 - 149.00
HDL Cholesterol		55.00	Opt	55.00		39.00 - 120.00	36.00 - 140.00
VLDL Cholesterol		13.00	Opt	18.00		5.00 - 20.00	4.00 - 40.00
LDL Cholesterol		147.00	HI	131.00	☹	50.00 - 75.00	6.00 - 99.00
Total Cholesterol / HDL Ratio		3.90	Opt	3.70		0.00 - 4.00	0.00 - 5.00
CRP C-Reactive Protein		0.40	Opt	0.30		0.00 - 1.50	0.00 - 4.90
ESR-Erythrocyte Sed Rate, Westerg		5.00	Opt	4.00		0.00 - 6.00	0.00 - 20.00
Vitamin D 25-Hydroxy		45.00	lo	27.80	☺	50.00 - 90.00	32.00 - 100.00

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Lead levels are still high with the latest toxic urine challenge, but dropping. The chelators will draw out toxic metals by atomic weight, so as levels of the heavy lead drop lighter toxins should show increased elimination as seen below. We will continue with chelation treatments until these levels drop further.

Results of 2nd Toxic Urinary Challenge:

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta	Healthy	Clinical
Agent	12/26/2009	DMSA		DMSA			
Dose		2000mg		2000mg			
Interval		6		6			
Toxic Elements							
Lead (UA)		51.00	HI	65.00	☺	0- 4.00	4.01- 5.00
Mercury (UA)		16.00	HI	6.70	☹	0- 1.60	1.61- 3.00
Nickel (UA)		11.00	HI	5.80	☹	0- 5.00	5.01- 10.00

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Dr. Merkle's Final Thoughts:

Dubbed one of the most painful forms of arthritis (many say it feels like being on fire), Gout typically effects the joints in the feet oftentimes the one at the base of the big toe. It's caused by a build-up of uric acid in the body which produces sharp needle-like urate crystals to develop in a joint or surrounding tissue. These cause severe pain, inflammation and swelling. It earned the title of "rich man's disease" a century ago because the foods and drinks causing increased uric acid levels were not easily attainable for those earning lower wages.

Those items are foods rich in purines, an organic compound which is found naturally in your body as well as in many foods such as organ meat (brain, kidney, pancreas, liver, etc.), sardines, alcohol, peanuts, pop, etc. As the body metabolizes purines, it creates the waste product uric acid which is dissolved in the blood and sent to the kidneys and liver for excretion. However, if uric acid levels are not properly disposed of or if the body is overwhelmed by excess uric acid from purine rich diets and other lifestyle choices, you may incur the unpleasant sensation of firey Gout.

Linked To Increased Uric Acid Levels:

- ❖ Medical conditions such as diabetes, high cholesterol and untreated high blood pressure
- ❖ Lack of exercise and obesity
- ❖ Dehydration or insufficient water intake
- ❖ Certain medications like Diuretics or low dose Aspirin
- ❖ Alcohol consumption greater than 2/day for men and 1/day for women
- ❖ Elevated Lead levels – studies show that statistically high lead levels are most often accompanied by elevated uric acid levels

Linked To Decreased Uric Acid Levels:

- ❖ Lower intake of meat, seafood and other purine rich foods
- ❖ Increased Vitamin C – studies show that taking 1500mg per day reduced the risk of Gout by 45%
- ❖ Exercise/Adequate Water Intake

Interestingly, research into this subject has found that consuming plant based purines has a drastically different impact that eating animal based purines. Studies determined that consuming purine rich fruits or vegetables like asparagus, cauliflower, spinach, mushrooms, green peas or lentils daily does not increase your risk of developing uric acid buildup or Gout.

-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.