Crohn's Disease

"I feel great, I have lots more energy, no Crohn's flare ups at all and my eyes are no longer red. I'm exercising more/bicycling for a few miles. I've been on the program just a few weeks and now no more Crohn's! By the way, I have never felt better in my life since I have come to see you. YOU ROCK!! Keep up the good work."

In just 3 months-

- ✓ *Digestion Under Control*
- ✓ *No Nausea*
- ✓ *Fingernails Healthy/Strong*
- ✓ *Has Never Felt Better*
- ✓ *Dermatitis Gone*
- ✓ *Increased Energy*

Initial Symptoms-

- ✓ *Indigestion*
- ✓ *Gas*
- ✓ *Soft/Splitting Fingernails*
- ✓ *Drowsiness After Eating*
- ✓ *Nausea*
- ✓ *Dermatitis on Face*

"Seeing a certified nutritionist is essential for anyone with Crohn's because the disease inhibits the body's ability to absorb nutrients. Not only will this increase your risk of developing another disease, but it also makes it very difficult for the body to expel dangerous toxins like Lead and Mercury."

-Dr. Van D. Merkle

Patient Profile:

06-13-07 - The 54-year old Patient presented with Crohn's Disease diagnosed in 2004, but he has suffered from digestive troubles since he was a boy. At the time of the initial visit, he weighed 165 lbs at 5'9" and his blood pressure was 125/68. There are many severity levels of Crohn's Disease but in this case symptoms were "mild". The patient mostly felt sick to the stomach and nauseous in the mornings, but never vomited. He suffered from indigestion and gas that could "peel the paint off of the walls" and an Endoscopy showed multiple lesions in his GI track. His fingernails were soft and splitting, and the beds were very pale which can be signs of nutritional deficiencies. Other symptoms included dermatitis on his face, dry skin, red eyes, and low energy. He often falls asleep within 20 minutes of eating dinner and has low energy. Many people with Crohn's are prescribed a variety of drugs by their medical doctors including anti-inflammatories, Cortisone or Steroids and immune system suppressors, but he refused them all and was on no drugs when he came to our office.

Patient's tests results:

07-17-07 – Initial blood tests showed a lot of values that were a little low or out of balance and nearly every one can be caused by malnutrition, dehydration or inflammation. This was not greatly surprising because with Crohn's Disease the GI track becomes inflamed and can affect the body's ability to digest and absorb food as well as create loose bowels or diarrhea which can cause malnourishment and dehydration. We see the poor digestion in the BUN/Creatine ratio, Calcium, Protein, Globulin, and Phosphorus. We also see signs of dehydration in the Creatinine, SGOT, GGT, and MCHC and inflammation with the Basophils and Polys/Neutrophils.

Results of Initial Blood Test:

Test Description Date:	Current Result 06/26/2007	Current Rating	Prior Result	Delta	Healthy	Clinical
Uric Acid	4.20	Opt			4.10 - 6.00	2.40 - 8.20
BUN (Blood Urea Nitrogen)	14.00	Opt			13.00 - 18.00	5.00 - 26.00
Creatinine	1.10	hi			0.61 - 0.90	0.50 - 1.50
BUN / Creatinine Ratio	13.00	lo			13.00 - 20.00	8.00 - 27.00
Calcium	9.20	lo			9.70 - 10.00	8.50 - 10.60
Phosphorus	3.40	lo			3.40 - 4.00	2.50 - 4.50
Calcium/Albumin Ratio	2.19	Opt			2.10 - 2.50	2.03 - 2.71
Total Protein	6.80	lo			7.11 - 7.61	6.00 - 8.50
Albumin	4.20	Opt			4.10 - 4.50	3.60 - 4.80
Globulin	2.60	lo			2.81 - 3.51	1.50 - 4.50
A/G Ratio	1.60	Opt			1.22 - 1.60	1.10 - 2.50
Total Bilirubin	0.70	Opt			0.39 - 0.93	0.10 - 1.20
Creatine Kinase	43.00	lo			64.00 - 133.00	24.00 - 204.00
LDH	123.00	Opt			120.00 - 160.00	100.00 - 250.00
SGOT (AST) (AST)	13.00	lo			15.00 - 26.00	6.00 - 40.00
SGPT (ALT) (ALT)	19.00	Opt			15.00 - 26.00	6.00 - 55.00
GGT	12.00	lo			22.00 - 39.00	6.00 - 65.00
White Blood Count	6.50	Opt			5.00 - 8.00	4.00 - 10.50
Red Blood Count	4.86	Opt			4.50 - 5.50	4.10 - 5.60
Hemoglobin	15.50	hi			13.30 - 15.20	11.50 - 17.00
Hematocrit	45.40	Opt			39.50 - 47.00	34.00 - 50.00
MCV	93.00	Opt			85.00 - 97.00	80.00 - 98.00
MCH	31.90	Opt			28.10 - 32.00	27.00 - 34.00
MCHC	34.20	hi			33.00 - 34.00	32.00 - 36.00
RDW	13.10	lo			13.50 - 14.50	13.00 - 15.00
Platelets	210.00	Opt			175.00 - 250.00	140.00 - 415.00
Polys/Neutrophils (SEGS-PMNS)	48.00	lo			55.00 - 65.00	40.00 - 74.00
Lymphocytes	40.00	Opt			25.00 - 40.00	14.00 - 46.00
Monocytes	6.00	Opt			5.00 - 7.00	4.00 - 13.00
Eosinophils	5.00	hi			0.00 - 4.10	0.00 - 7.00
Basophils	1.00	hi			0.00 - 0.00	0.00 - 3.00
Neutrophils/Polys (Absolute)	3.10	lo			3.80 - 5.80	1.80 - 7.80
Lymphs (Absolute)	2.60	Opt			2.00 - 3.20	0.70 - 4.50
Monocytes (Absolute)	0.40	lo			0.40 - 0.70	0.10 - 1.00
Eosinophils (Absolute)	0.30	hi			0.00 - 0.20	0.00 - 0.40
Basophils (Absolute)	0.10	Opt			0.00 - 0.10	0.00 - 0.20
ESR-Erythrocyte Sed Rate, Westergr	2.00	Opt			0.00 - 8.00	0.00 - 20.00
CRP C-Reactive Protein	0.30	Opt			0.00 - 1.50	0.00 - 4.90

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We are exposed to toxic elements everyday in our environment, yet very few toxic elements appeared in the patient's tissue mineral analysis indicating they may be getting stuck somewhere in the body. Aluminum did return very high which can displace good minerals and is especially bad in Crohn's patients who already have trouble with malabsorption. Many of the deficiencies in the essential element portion of the test were significantly below even the clinically healthy levels!

Results of Initial Tissue Mineral Analysis:

Test Description Date:	Current Result 06/25/2007	Current Rating	Prior Result	Delta	Healthy		Clinical	
Toxic Elements								
Aluminum	21.00	HI			0-	5.20	5.21-	12.00
Antimony	0.02	Opt			0-	0.03	0.04-	0.06
Arsenic	0.05	hi			0-	0.05	0.06-	0.08
Essential Elements								
Calcium	239.00	LO			400.00-	417.00	375.00-	1100.00
Magnesium	54.00	hi			43.00-	48.00	40.00-	140.00
Sodium	26.00	Opt			25.00-	35.00	12.00-	90.00
Potassium	22.00	hi			21.00-	22.00	20.00-	90.00
Copper	22.00	hi			12.00-	15.00	9.00-	26.00
Zinc	180.00	hi			150.00-	165.00	130.00-	200.00
Manganese	0.07	LO			0.22-	0.31	0.15-	0.65
Chromium	0.31	Opt			0.25-	0.31	0.20-	0.45
Vanadium	0.03	lo			0.04-	0.05	0.02-	0.06
Molybdenum	0.07	Opt			0.06-	0.07	0.04-	0.10
Boron	2.70	hi			0.10-	1.40	0.70-	4.00
Iodine	0.14	LO			0.32-	0.55	0.25-	1.30
Lithium	0.01	LO			0.01-	0.01	0.01-	0.02
Phosphorus	214.00	Opt			190.00-	220.00	160.00-	250.00
Selenium	0.86	LO			1.10-	1.45	0.95-	1.70
Strontium	2.00	hi			1.40-	1.80	1.00-	6.00
Sulfur	41300.00	LO			45000.00-	45500.00	44500.00-	52000.00
Barium	0.55	lo			1.20-	1.45	0.50-	3.00
Cobalt	0.00	LO			0.02-	0.03	0.01-	0.04
Iron	5.00	LO			7.00-	8.50	5.80-	14.00
Germanium	0.02	LO			0.05-	0.05	0.05-	0.06
Rubidium	0.01	LO			0.03-	0.09	0.03-	0.25

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With the lack of toxins being expelled through the hair, it was important to conduct a urinary chelation challenge to see what may be lingering in the body. Not many toxins came out in the pre-challenge, but when we had the patient take a chelator called DMSA to flush everything out, the numbers jumped to very unhealthy levels - specifically Lead and Mercury which can lead to organ dysfunction and cause various problems with the digestive tract including Crohn's Disease and Ulcerative Colitis.

Results of Initial Urinary Chelation Challenge:

Test Description	Date:	Current Result 07/06/2007	Current Rating	Prior Result 07/04/2007	Delta	Healthy		Clinical	
Agent		DMSA		Pre-Chall					
Dose		1500mg							
Interval		6		6					
Toxic Elements									
Lead (UA)		18.00	HI	0.60	☹	0-	4.00	4.01-	5.00
Mercury (UA)		10.00	HI	3.40	☹	0-	2.00	2.01-	3.00
Nickel (UA)		3.80	Opt	5.00	☺	0-	5.00	5.01-	10.00

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Doctor analysis:

02-21-07 – Besides dealing with the main symptoms associated with Crohn's – abdominal pain/cramping and loose stools/diarrhea - many other areas can be affected largely due to the lack of nutrients absorbed by the body. Typically Crohn's patients are more likely to develop rectal bleeding, arthritis, skin conditions, weight loss, sores, ulcers, and colon cancer. To prevent these complications, we need to get the patient as healthy as possible by providing his body with extra nutrients and soothing supplements to help the digestive tract do its job.

Reviewing some of the low findings on his hair test, the Manganese is essential for metabolism of protein and Cobalt stimulates vitamin B12 activity. B12 can be very low in Crohn's cases because inflammation commonly occurs at the ileum which is the final section of small intestine before the large intestine begins. The ileum is responsible for absorbing B12 but when inflamed may not be able to do so. The patient should eat more cobalt rich foods like eggs to help prevent anemia and other B12 deficient problems. Also important is Selenium which is an antioxidant that helps prevent chromosomal damage and promotes cellular function. Selenium deficiencies have also been associated with many types of cancers. Sulfur is vital to the production of bile acids and contributes to the digestion and absorption of fat, and Calcium is vital to the bones.

It's essential that the patient begin taking nutrients and minerals to turn around these deficiencies before another major problem develops. Along with supplements to boost the low numbers, we also started him on a basic whole food diet, avoiding all dairy and other foods which may irritate the digestive track. I spoke with him a few days after he started the diet and supplements and he had a great attitude saying he was sticking to the diet pretty good and motivated to get better. I told him it would take a couple of months to get all

this stuff behind him and he kept that goal in his mind as he faced each new day.

Patient assessment:

10-06-07 - After three months under our care, the patient noticed many fantastic improvements with his energy levels, indigestion, stomach fat, and dermatitis. He no longer falls asleep after meals and his fingernails hardened and no longer split.

Results of 2nd Blood Test:

Test Description	Date:	Current Result 10/03/2007	Current Rating	Prior Result 06/26/2007	Delta	Healthy	Clinical
Uric Acid		4.60	Opt	4.20		4.10 - 6.00	2.40 - 8.20
BUN (Blood Urea Nitrogen)		15.00	Opt	14.00		13.00 - 18.00	5.00 - 26.00
Creatinine		1.20	hi	1.10	☹	0.61 - 0.90	0.50 - 1.50
BUN / Creatinine Ratio		13.00	lo	13.00	😐	13.00 - 20.00	8.00 - 27.00
Calcium		9.60	lo	9.20	☺	9.70 - 10.00	8.50 - 10.60
Phosphorus		3.00	lo	3.40	☹	3.40 - 4.00	2.50 - 4.50
Calcium/Albumin Ratio		2.18	Opt	2.19		2.10 - 2.50	2.03 - 2.71
Total Protein		6.90	lo	6.80	☺	7.11 - 7.61	6.00 - 8.50
Albumin		4.40	Opt	4.20		4.10 - 4.50	3.60 - 4.80
Globulin		2.50	lo	2.60	☹	2.81 - 3.51	1.50 - 4.50
A/G Ratio		1.80	hi	1.60	☹	1.22 - 1.60	1.10 - 2.50
Total Bilirubin		0.50	Opt	0.70		0.39 - 0.93	0.10 - 1.20
Creatine Kinase		42.00	lo	43.00	☹	64.00 - 133.00	24.00 - 173.00
LDH		128.00	Opt	123.00		120.00 - 160.00	100.00 - 250.00
SGOT (AST) (AST)		18.00	Opt	13.00	☺	15.00 - 26.00	6.00 - 40.00
SGPT (ALT) (ALT)		22.00	Opt	19.00		15.00 - 26.00	6.00 - 55.00
GGT		11.00	lo	12.00	☹	22.00 - 39.00	6.00 - 65.00
White Blood Count		5.30	Opt	6.50		5.00 - 8.00	4.00 - 10.50
Red Blood Count		5.03	Opt	4.86		4.50 - 5.50	4.10 - 5.60
Hemoglobin		15.90	hi	15.50	☹	13.30 - 15.20	11.50 - 17.00
Hematocrit		46.70	Opt	45.40		39.50 - 47.00	34.00 - 50.00
MCV		93.00	Opt	93.00		85.00 - 97.00	80.00 - 98.00
MCH		31.60	Opt	31.90		28.10 - 32.00	27.00 - 34.00
MCHC		34.00	Opt	34.20	☺	33.00 - 34.00	32.00 - 36.00
RDW		12.70	LO	13.10	☹	13.50 - 14.50	13.00 - 15.00
Platelets		211.00	Opt	210.00		175.00 - 250.00	140.00 - 415.00
Polys/Neutrophils (SEGS-PMNS)		44.00	lo	48.00	☹	55.00 - 65.00	40.00 - 74.00
Lymphocytes		35.00	Opt	40.00		25.00 - 40.00	14.00 - 46.00
Monocytes		13.00	hi	6.00	☹	5.00 - 7.00	4.00 - 13.00
Eosinophils		7.00	hi	5.00	☹	0.00 - 4.10	0.00 - 7.00
Basophils		1.00	hi	1.00	😐	0.00 - 0.00	0.00 - 3.00
Neutrophils/Polys (Absolute)		2.30	lo	3.10	☹	3.80 - 5.80	1.80 - 7.80
Lymphs (Absolute)		1.90	lo	2.60	☹	2.00 - 3.20	0.70 - 4.50
Monocytes (Absolute)		0.70	Opt	0.40	☺	0.40 - 0.70	0.10 - 1.00
Eosinophils (Absolute)		0.40	hi	0.30	☹	0.00 - 0.20	0.00 - 0.40
Basophils (Absolute)		0.10	Opt	0.10		0.00 - 0.10	0.00 - 0.20
ESR-Erythrocyte Sed Rate, Westergr		2.00	Opt	2.00		0.00 - 6.00	0.00 - 20.00

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Reviewing the tests above you may say, "How can he feel better when the test results got worse?" Most of the values which got worse are the result of his chelation cycles. Because of the high levels of Lead and Mercury, I put the patient on a

very strong chelator to pull the toxins out of his body. As heavy metals come out they can cause some disruptions; however, leaving toxins in the body is very detrimental to long-term health. Since he feels good, we can continue with the chelation until his Lead and Mercury levels show further elimination. Looking at the results below, you can see he is well on his way with the Mercury plummeting from 10 to 1.70.

Results of 2nd Urinary Chelation Challenge:

Test Description	Date:	Current Result 10/06/2007	Current Rating	Prior Result 07/06/2007	Delta	Healthy		Clinical	
Agent		DMSA		DMSA					
Dose		1500 mgs		1500mg					
Interval		6		6					
Toxic Elements									
Lead (UA)		9.70	HI	18.00	☺	0-	4.00	4.01-	5.00
Mercury (UA)		1.70	Opt	10.00	☺	0-	2.00	2.01-	3.00
Nickel (UA)		5.20	hi	3.80	☹	0-	5.00	5.01-	10.00

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The patient called me after hearing the results of his latest tests and had this to say, ***"I feel great, I have lots more energy, no Crohn's flare ups at all and my eyes are no longer red. I'm exercising more/bicycling for a few miles. I've been on the program just a few weeks and now no more Crohn's!"***

01-05-08 – Because of the high levels of Lead and Nickel on the last urinary chelation challenge, I had him do another chelation cycle to rid the body of more toxic elements, then retest his toxic metal levels a few months later. As you can see, the levels are still high showing that his body is doing better at eliminating the hidden stores of toxins. Not only will this allow for better absorption of essential vitamins and minerals, but also take a load off his immune system.

Results of 3rd Urinary Chelation Challenge:

Test Description	Date:	Current Result 01/05/2008	Current Rating	Prior Result 10/06/2007	Delta	Healthy		Clinical	
Agent		DMSA		DMSA					
Dose		1500mg		1500 mgs					
Interval		6		6					
Toxic Elements									
Lead (UA)		9.00	HI	9.70	☺	0-	4.00	4.01-	5.00
Mercury (UA)		0.90	Opt	1.70		0-	1.60	1.61-	3.00
Nickel (UA)		6.40	hi	5.20	☹	0-	5.00	5.01-	10.00

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07-22-08 – With the heavy metals continually decreasing, the blood test values start improving, specifically the differentials in the complete blood count such as Polys/Neutrophils, Monocytes and Eonsinophils. Adding a little extra protein to his diet will help with a few of the other numbers. Based on these results, it appears his Crohn's is under control and the patient agrees sending me an email with these words: ***"By the way, I have never felt better in my life since I have come to see you. YOU ROCK!! Keep up the good work."***

Results of 3rd Blood Test:

Test Description Date:	Current Result 07/09/2008	Current Rating	Prior Result 10/03/2007	Delta	Healthy	Clinical
Uric Acid	4.50	Opt	4.60		4.10 - 6.00	2.40 - 8.20
BUN (Blood Urea Nitrogen)	16.00	Opt	15.00		13.00 - 18.00	5.00 - 26.00
Creatinine	1.20	hi	1.20	😐	0.61 - 0.90	0.50 - 1.50
GFR EST (Glomerular Filtratation R	60.00	Opt			60.00 - 127.00	60.00 - 128.00
BUN / Creatinine Ratio	13.00	lo	13.00	😐	13.00 - 20.00	8.00 - 27.00
Calcium	9.30	lo	9.60	☹	9.70 - 10.00	8.50 - 10.60
Phosphorus	2.70	lo	3.00	☹	3.40 - 4.00	2.50 - 4.50
Calcium/Albumin Ratio			2.18		2.10 - 2.50	2.03 - 2.71
Total Protein	6.70	lo	6.90	☹	7.11 - 7.61	6.00 - 8.50
Albumin	4.20	Opt	4.40		4.10 - 4.50	3.60 - 4.80
Globulin	2.50	lo	2.50	😐	2.81 - 3.51	1.50 - 4.50
A/G Ratio	1.70	hi	1.80	☺	1.22 - 1.60	1.10 - 2.50
Total Bilirubin	0.40	Opt	0.50		0.39 - 0.93	0.10 - 1.20
Creatine Kinase	42.00	lo	42.00	😐	64.00 - 133.00	24.00 - 173.00
LDH	127.00	Opt	128.00		120.00 - 160.00	100.00 - 250.00
SGOT (AST) (AST)	16.00	Opt	18.00		15.00 - 26.00	6.00 - 40.00
SGPT (ALT) (ALT)	26.00	Opt	22.00		15.00 - 26.00	6.00 - 55.00
GGT	12.00	lo	11.00	☺	22.00 - 39.00	6.00 - 65.00
White Blood Count	5.60	Opt	5.30		5.00 - 8.00	4.00 - 10.50
Red Blood Count	4.97	Opt	5.03		4.50 - 5.50	4.10 - 5.60
Hemoglobin	15.30	hi	15.90	☺	13.30 - 15.20	11.50 - 17.00
Hematocrit	45.50	Opt	46.70		39.50 - 47.00	34.00 - 50.00
MCV	92.00	Opt	93.00		85.00 - 97.00	80.00 - 98.00
MCH	30.80	Opt	31.60		28.10 - 32.00	27.00 - 34.00
MCHC	33.60	Opt	34.00		33.00 - 34.00	32.00 - 36.00
RDW	13.60	Opt	12.70	☹	11.10 - 14.50	11.00 - 15.00
Platelets	191.00	Opt	211.00		175.00 - 250.00	140.00 - 415.00
Polys/Neutrophils (SEGS-PMNS)	52.00	lo	44.00	☺	55.00 - 65.00	40.00 - 74.00
Lymphocytes	36.00	Opt	35.00		25.00 - 40.00	14.00 - 46.00
Monocytes	6.00	Opt	13.00	☺	5.00 - 7.00	4.00 - 13.00
Eosinophils	5.00	hi	7.00	☺	0.00 - 4.10	0.00 - 7.00
Basophils	1.00	hi	1.00	😐	0.00 - 0.00	0.00 - 3.00
Neutrophils/Polys (Absolute)	2.90	lo	2.30	☺	3.80 - 5.80	1.80 - 7.80
Lymphs (Absolute)	2.00	lo	1.90	☺	2.00 - 3.20	0.70 - 4.50
Monocytes (Absolute)	0.30	lo	0.70	☹	0.40 - 0.70	0.10 - 1.00
Eosinophils (Absolute)	0.30	hi	0.40	☺	0.00 - 0.20	0.00 - 0.40
Basophils (Absolute)	0.10	Opt	0.10		0.00 - 0.10	0.00 - 0.20
ESR-Erythrocyte Sed Rate, Westergr	2.00	Opt	2.00		0.00 - 6.00	0.00 - 20.00

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Dr. Merkle's Final Thoughts:

Crohn's disease is both an autoimmune disorder and inflammatory bowel disease where white blood cells attack mistaken "foreign invaders" in the GI track. What makes Crohn's different from other inflammatory bowel conditions such as Irritable Bowel Syndrome (IBS) or Ulcerative Colitis is that the inflammation can occur anywhere in the GI track from the mouth, esophagus, stomach, small intestines, large intestines, rectum, all the way down to the anus. It can appear either in one spot, or in various spots with healthy areas in-between. If we look at the small and large intestines alone, that is up to 28 feet of potential for inflammation. In Crohn's, all layers of the intestine may be affected as well. Sometimes, tunnels called fistulas can form from the inflammation, pass through the intestinal wall and enter into surrounding tissues and organs like the bladder allowing food and bile to enter and cause an infection.

The inflammation also forces cells in the intestine to secrete large amounts of water and salt. The colon cannot absorb all the excess fluid and you develop diarrhea which leads to dehydration. As the intestinal walls swell and close or thicken with scar tissue from the chronic inflammation, normal passage is interrupted causing cramping and food trying to travel through these areas can scrape at the wall lining creating blood in the stool. Ulcers may also begin to develop, sometimes penetrating through intestinal walls.

The complications of this disease can be devastating to the body. With the help of a strict diet and supplements, this patient was able to increase his digestive ability allowing for better absorption of essential nutrients and decreased cramping and nausea caused by the Crohn's. It is especially important for patients with this type of disease to get tested, because we know the body is not able to process all the nutrients it needs for day to day activities and can easily become malnourished.

-Dr. Van D. Merkle